Strengthening national food control systems

Guidelines to assess capacity building needs

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ABBREVIATIONS

ASEAN	Association of Southeast Asian Nations
AQA	Analytical Quality Assurance
CAC	Codex Alimentarius Commission
COP	Codes of Practice
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FSAI	Food Safety Authority of Ireland
GAP	Good Agricultural Practice
GHP	Good Hygiene Practice
GLP	Good Laboratory Practice
GMO	Genetically Modified Organism
GMP	Good Manufacturing Practice
HACCP	Hazard Analysis and Critical Control Point
IEC	Information, education and communication
ISO	International Organization for Standardization
OECD	Organisation for Economic Co-operation and Development
PCE	Phytosanitary Capacity Evaluation Tool
SME	Small and Medium-sized Enterprise
SPS	Sanitary and Phytosanitary Measures
SOP	Standard Operating Procedure
SWOT	Strengths, weaknesses, opportunities and threats
TBT	Technical Barriers to Trade
UNDP	United Nations Development Programme
USA	United States of America
WHO	World Health Organization
WTO	World Trade Organization

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Foreword

The safety and quality of food is at the centre of FAO's mandate. The Declaration of the World Food Summit, convened in Rome in November 1996, reaffirms the right of everyone to have access to safe and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger. FAO has been working for more than forty years, in collaboration with national governments, the World Health Organization (WHO) and other international and donor organizations, food enterprises, scientific institutions and NGOs, to improve the safety and quality of food.

Food safety and quality have an ever-increasing profile at the international and national level. Growing membership of the World Trade Organization (WTO), and the need to comply with the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) and the Agreement on Technical Barriers to Trade (TBT Agreement), has transformed the global context for trade in agricultural and food products. At the same time, new and established food-borne risks, the emergence of serious transboundary food scares and increased consumer awareness have highlighted the challenges faced. In parallel, UN agencies, international organizations, donors, national governments and others have reiterated the importance of strengthening capacity in food safety and quality as a means to improve public health and/or promote economic development, and the number of associated projects and programmes has risen.

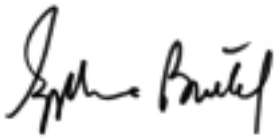
To be successful and sustainable, initiatives to improve capacity in food safety and quality must be based on a careful identification, analysis and prioritization of needs. However, in many countries, experience in needs assessment is limited. Moreover, the identification of needs tends to be a complex process that is often influenced by diverse factors including competing priorities, competition for resources or inadequate information.

FAO has developed these Guidelines, in collaboration with WHO, to assist governments to identify capacity needs in the core components of a national food control system. A condensed version (*Strengthening national food control systems: A quick guide to assess capacity building needs*) is being produced for use in situations that require a faster assessment. Both of these documents build on and complement the FAO/WHO *Guidelines for strengthening national food control systems*[1], which focus on the development of an integrated regulatory system for food control founded on a transparent, risk-based approach and the involvement of all the concerned stakeholders from farm to table. Together, these three publications provide a

[1] FAO/WHO. 2003. *Assuring food safety and quality. Guidelines for strengthening national food control systems.* Food and Nutrition Paper No. 76. Food and Agriculture Organization of the United Nations (FAO). Rome, Italy (available at: ftp://ftp.fao.org/docrep/fao/006/y8705e/y8705e00.pdf).

theoretical guide to the requirements of a national food control system, as well as practical assistance to identify what capacity is needed to develop, implement and/or enhance such a system.

By assisting governments to assess capacity building needs in national food control systems, FAO's goal is to enhance the overall outcomes and effectiveness of capacity building activities, thereby contributing to a reduced risk of food-borne disease for consumers and increased ability to meet sanitary and phytosanitary requirements for international trade in foods.



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SCOPE AND OBJECTIVES OF THESE GUIDELINES

These Guidelines focus on the role of government agencies within a comprehensive system for food safety and quality[2] (subsequently referred to as a national food control system). They have been developed to assist governments to assess their capacity in the core elements of a national food control system and identify their related capacity building needs. In this context, they build on and complement the FAO/WHO *Guidelines for strengthening national food control systems*, which provide advice to develop an integrated regulatory system for food control anchored in a transparent, risk-based approach and the involvement of all the concerned stakeholders from farm to table.

Unlike other assessment and audit methodologies to verify that particular regulations or standards are met by the food industry, these Guidelines focus on government agencies and food control authorities responsible for food safety and quality. They are unique in presenting both a methodology for self-assessment of capacity building needs and internationally accepted benchmarks and principles for each of the core components of a national food control system.

Identifying capacity needs is an essential step in the process to strengthen the capacity of national food control systems. Needs assessment and capacity building are a means to an end. The overall goal is to improve public health and raise living standards, protect consumer interests, stimulate economic development and reduce poverty through increased trade in food products that meet international requirements. Indeed, these benefits have been recognized in Article 9 of the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) and Article 12 of the Agreement on Technical Barriers to Trade (TBT Agreement) of the World Trade Organization (WTO), which call for greater attention to enhancing the capacity of developing and transition countries in SPS-related fields including food safety and quality.

Contents and structure

Following an introduction to the overall process of capacity building and needs assessment, a series of modules is presented to guide officials through the needs assessment process for the five core components of a national food control system: i) food control management; ii) food legislation; iii) food inspection; iv) official food control laboratories; and v) food safety and quality information, education and communication (IEC). The final part of the document provides an introduction to some of the tools and techniques used in the modules.

[2] Food safety is the assurance that food will not cause harm to the consumer when it is prepared and/or eaten according to its intended use. Food quality refers to positive attributes (e.g. nutritional values, origin, colour, flavour, texture and production/processing method) that influence a product's value to the consumer and the absence of negative attributes (e.g. spoilage, contamination with filth, discolouration, off-odours).

The modules offer step-by-step guidance and a participatory methodology for self-assessment. Each module is designed to stand on its own, and the Guidelines do not therefore need to be read from cover to cover. Countries may use different modules depending on their particular needs. Given the multidimensional nature of a food control system and the linkages between its components, efforts are made to draw attention to possible interdependencies between the modules as far as possible.

Target audience

The target audience for these Guidelines is officials in national authorities who are responsible for various aspects of food control systems at the policy and/or operational level. While developed for government agencies in developing and transition countries, they may also be of use to official food control agencies in developed countries, as well as donor organizations and agencies that are supporting food safety capacity building activities in developing and transition countries. In addition, stakeholder organizations (such as food industry associations, consumer organizations, NGOs and academic institutions) and consultants involved in activities to strengthen food control systems may find the Guidelines useful.

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PART 1

CAPACITY BUILDING AND THE PROCESS OF ASSESSING NEEDS

INTRODUCTION

Food safety and quality are essential for food security, public health and economic development. Improving food safety is necessary to increase food security, which exists when *all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food, which meets their dietary needs and cultural preferences to have an active and healthy life* (World Food Summit Declaration, 1996). Increasing the supply of safe and wholesome food reduces the impact of food-borne diseases, which cause many illnesses and deaths, as well as detrimental economic consequences, in both developing and developed countries every year. Ensuring the safety and quality of food exports promotes international trade, which provides a means to generate growth and reduce poverty.

The main objectives of a national food control system are to:

i) protect public health by reducing the risk of food-borne illnesses;
ii) protect consumers from unsanitary, unwholesome, mislabelled or adulterated food; and
iii) contribute to economic development by maintaining consumer confidence in the food supply and providing a sound regulatory system for domestic and international food trade.

Action and cooperation by all stakeholders involved in the food chain from farm to table is essential to achieve these objectives (see Figure 1). To this end, the food industry, consumers and their organizations, universities, scientific institutes, governments and others have a key role to play. The application of risk analysis[3] provides the fundamental foundation for a food safety system. It offers governments a framework to effectively assess, manage and communicate food safety risks in collaboration with the diverse stakeholders involved.

However, in many countries, national food control systems are unable to ensure an adequate supply of safe food for domestic consumers or to meet international sanitary and phytosanitary requirements for food exports. Capacity building is advocated in response to these concerns. Capacity building has a critical role to play in the development of a modern food control system that is based on science and risk analysis, and has the ability to:

- minimise chronic and acute hazards that may make food harmful to consumers (i.e. improve food safety);
- reduce negative attributes of food such as spoilage, contamination with filth, discoloration, etc., and enhance positive aspects of food, such as its colour, flavour or texture, that increase its value to consumers (i.e. improve food quality); and

[3] Risk analysis is a process consisting of three components: risk assessment, risk management and risk communication (FAO/WHO. 2005. *Codex Alimentarius Commission. Procedural Manual*, 15th Edition). For more information, see: FAO/WHO (forthcoming). *Food safety risk analysis: A manual for national food safety authorities.*

Figure 1 Principal stages of the food supply chain[4]

- assure domestic consumers and importing countries that food is safe and meets their expectations.

This chapter introduces key concepts related to capacity building and needs assessment and provides a conceptual framework for the Guidelines. The way in which capacity is understood will have an impact on the approach to capacity building. Therefore, before applying the modules, it is important to introduce and clarify these underlying concepts.

Food safety and quality capacity

The term "capacity" is used in diverse ways. Capacity is sometimes used to refer to technical skills or knowledge of individuals, the availability of sufficient human or financial resources or equipment, the overall capability of an organization, or the way in which an organization uses available inputs to produce results. Sometimes capacity is described in quantitative terms (e.g. number of staff), but often it is expressed in terms of the quality of performance or the results that are being achieved.

[4] Based on: WHO. 1996. *Guidelines for strengthening a national food safety programme*. World Health Organization (WHO). Geneva.

The United Nations Development Programme (UNDP) has defined capacity as the ability of individuals, organizations and systems to perform functions effectively, efficiently and sustainably (UNDP, 1998a). Based on this definition, **food safety and quality capacity** can be considered as the ability of individuals, organizations and systems along the farm-to-table continuum to perform appropriate functions effectively, efficiently and sustainably in order to ensure the safety and quality of food for domestic consumption and export.

Given the multidimensional nature of food safety and quality, and the diversity of those involved, capacity exists at different levels in a wide range of stakeholders. Many kinds of individuals, groups and organizations contribute to this capacity. Farmers and food processors, food handlers, distributors, wholesalers and retailers, food enterprises, consumers and their organizations, academic and research institutions, food inspectorates, food control laboratories and various central and lower-level government agencies (responsible for agriculture, health, trade, commerce, industry, standards, etc.) all play a role in food safety and quality.

The system or context in which these groups operate is an important part of capacity since it defines the framework in which they carry out their roles and interact with each other. Similarly, in any country, this system is itself embedded in the wider political and economic system but these considerations are beyond the scope and purpose of these Guidelines.

Levels and dimensions of capacity

As illustrated in Figure 2, capacity for food safety and quality exists at three different but closely related levels:

i) the system or context in which organizations, groups and individuals operate;
ii) organizations and groups within the system; and
iii) individuals within organizations and groups.

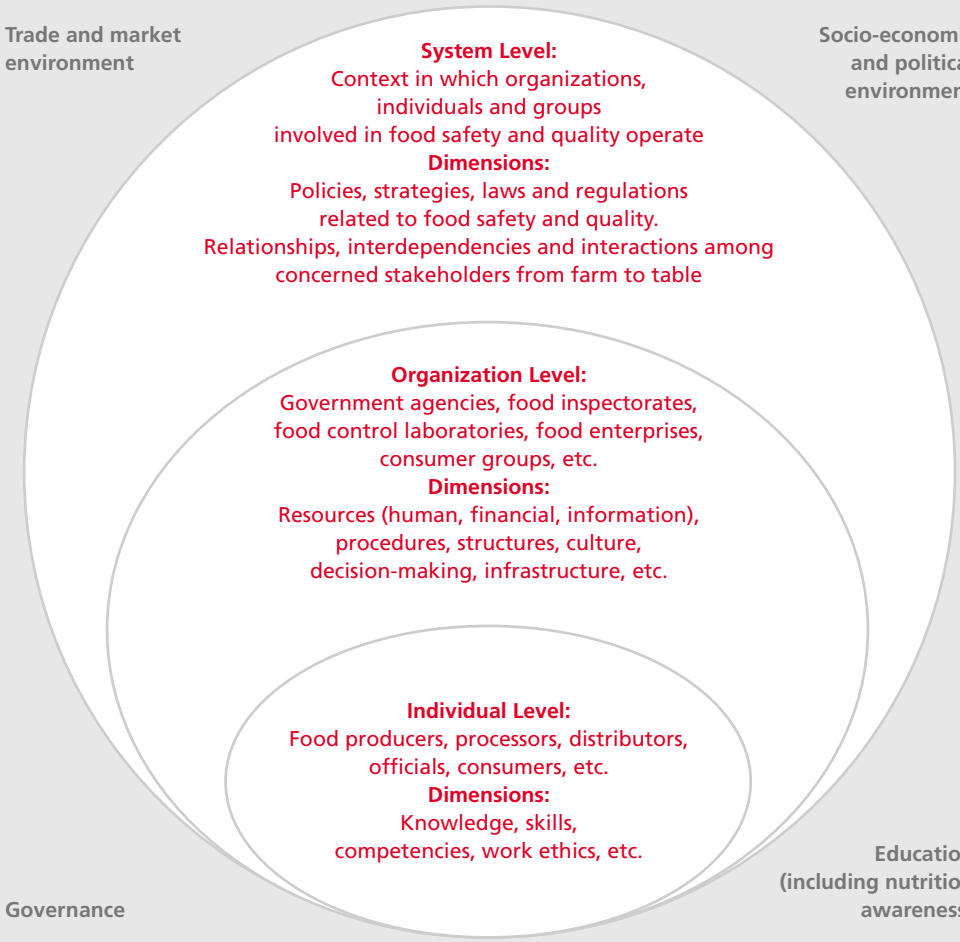
At each of these different levels, there are various dimensions of capacity for food safety and quality:

- At the system level, dimensions of capacity include the policies, laws, regulations and standards that provide a framework for food safety and quality, as well as the mechanisms for management, communication and coordination among the different organizations involved.
- At the organizational level, the mission, structure, operational procedures and culture of organizations involved in food safety and quality are important dimensions of capacity, in addition to their human resources, financial resources, information resources and infrastructure, etc.
- At the individual level, knowledge, skills, competencies, experience and ethics are all part of capacity.

These dimensions are the core characteristics or features of capacity. Some of these dimensions are cross-cutting and exist at each of the levels. For instance, the overall human resource capacity of an organization will obviously depend on the quantity (number) of individuals within the organization, as well as their qualifications and skills, and the external environment in which they operate.

Considering capacity in terms of these different levels and dimensions is useful because it takes account of the relationships between them, and allows for the possibility that the root cause of weak capacity at one level may be found at a different level. For instance, the capacity of a food inspection agency may be shaped as much by dimensions of the system (e.g. the adequacy of laws and regulations) as by dimensions internal to the food inspectorate (such as skills, leadership, resources or the integrity of personnel).

Figure 2 Levels and dimensions of capacity with respect to food safety and quality[5]



Similarly, the capacity of official food control laboratories to effectively monitor and detect contaminants in food may depend as much on the provision of suitable samples (normally the role of food inspectors) as on the qualifications and skills of analysts and their access to appropriate equipment and supplies.

What is capacity building?

Thinking about capacity building has changed significantly over the past decade. Traditionally, activities to build or develop capacity concentrated on improving the capacities of individuals or units within an organization and were led by external agencies. The focus was on the provision of training, funding or equipment to enable individual staff members to increase their knowledge and skills in order to contribute to improved capacity and performance of the organization as a whole. However, gradually it became clear that training by itself often did not produce broader results in the organization beyond the individual who benefited from the new knowledge and skills. Without suitable conditions within the organization to enable trained individuals to make best use of their new competencies, the impact of training was often less than expected. Based on this insight, capacity building gradually came to be recognized as

[5] Figure developed based on the concept of capacity within a systems context. For further information, see: UNDP. 1998a. *Capacity assessment and development in a systems and strategic management context*. Technical Advisory Paper No. 3. January 1998. United Nations Development Programme (UNDP). New York (available at: http://magnet.undp.org/docs/cap/CAPTECH3.htm).

something broader than training since it includes an emphasis on the overall system or environment in which individuals, organizations and societies operate and interact (UNDP, 1998a).

Capacity development has been defined by the Organisation for Economic Co-operation and Development (OECD) as "…the process by which individuals, groups, organizations, institutions and societies increase their abilities to: i) perform core functions, solve problems, define and achieve objectives; and ii) understand and deal with their development needs in a broad context and in a sustainable manner" (UNDP, 1998a). This definition has three important aspects, namely it: i) indicates that capacity is part of a continuing process; ii) ensures that human resources and the way in which they are utilized are central to capacity development; and iii) recognizes the importance of the overall framework (system) within which individuals and organizations undertake their functions.

Following on from this definition, **capacity building in food safety and quality** can be defined as the process through which relevant stakeholders from farm to table (including government agencies, food enterprises and consumers) improve their abilities to perform their core roles and responsibilities, solve problems, define and achieve objectives, understand and address needs, and effectively work together in order to ensure the safety and quality of food for domestic consumption and export.

Capacity building in food safety and quality therefore encompasses a continuous process of improvements that are specific to existing capability and identified needs. It can occur at different levels (individuals, organizations or the system in which they operate) and focus on different dimensions of capacity. Similarly, it can be targeted at different types of stakeholders from farm to table such as government agencies, the food industry, consumers and their organizations, and others. These Guidelines deal with capacity building of national food control systems and are directed at government agencies.

Assessing the capacity building needs of national food control systems

A capacity building needs assessment is an important initial step in the process of developing diverse types of capacities (regulatory, human, operational, scientific, budgetary, etc.) required for an effective food control system. It provides a systematic and participatory process to: i) identify and understand the major strengths and weaknesses of the national food control system; ii) pinpoint areas for improvements; and iii) identify options to address the identified needs and priorities. It helps to ensure that capacity building initiatives and programmes are demand-driven, based on local realities and requirements, and that they build on existing capabilities.

What are the benefits of assessing capacity needs?

Engaging in systematic and ongoing efforts to assess capacity in the components of a national food control system will enhance the ability of governments to plan, implement and monitor programmes and activities in the area of food safety and quality. By assessing needs, governments will be better able to set priorities and organize their work, improve the use of available resources, and raise additional resources for unmet needs. As a result, they will be better positioned to ensure the safety and quality of food for domestic consumers and to meet the sanitary and phytosanitary requirements of importing countries.

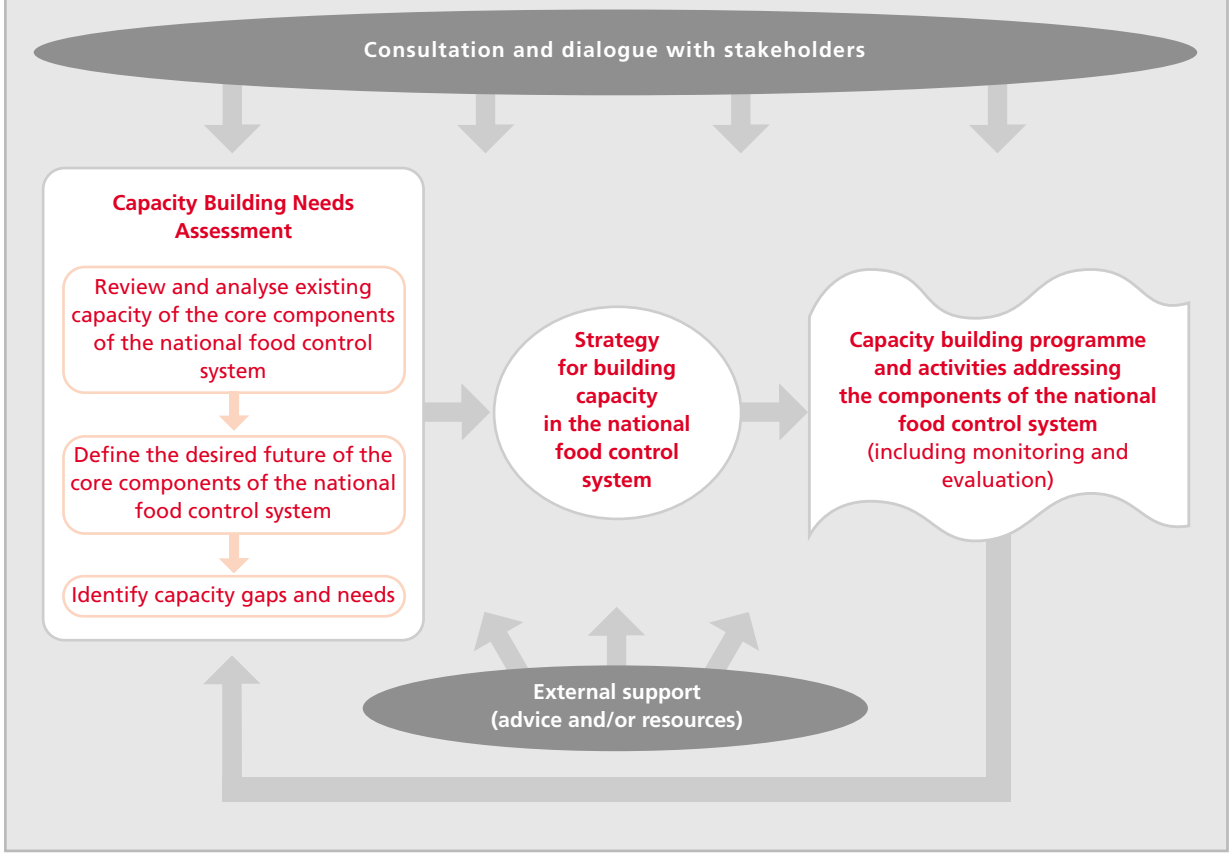
Conducting a capacity building needs assessment provides a way to tailor capacity building activities and programmes to the diverse circumstances and conditions that exist in different countries. Capacity building needs may differ according to the structure of

the agriculture and food sector, its stage of development or the type of food control system. Countries in which food control responsibilities are divided across several different bodies at the central, regional or local level may have different capacity building needs than countries in which the national food control system is centralized. Countries that are members of the WTO and have potential to increase food exports may have different needs than WTO member countries that are heavily dependent on agricultural and food imports. A capacity building needs assessment is therefore an essential initial step in the overall process of developing capacity as illustrated in Figure 3.

The process of assessing capacity building needs will also be beneficial in increasing awareness among different government agencies about the multidimensional nature of food safety and quality, and the complementarities and interdependencies of stakeholders' roles. This process should contribute to enhancing cooperation and coordination, and identifying areas for joint action. By drawing attention to food safety and quality as a national priority for public health and economic development, and identifying priorities for attention, a capacity building needs assessment also supports efforts to attract additional funding and other resources from internal and external sources to address the identified needs.

Lastly, but not least, the capacity needs assessment process enables staff of the organizations involved to obtain new insights and skills, thereby contributing to organizational learning. In this context, it indicates how the content and delivery of education and training programmes focused on food safety and quality should be adapted to meet current needs and challenges.

Figure 3 Capacity building needs assessment as an initial step in the process of strengthening a national food control system



What prompts the decision to assess capacity building needs?

The decision to carry out a capacity building needs assessment of the national food control system will generally be prompted by a recognized problem or a perceived opportunity. The triggers will tend to differ across countries and at different times. They may also be driven by different groups such as consumers and their organizations, the food industry or industry associations, pressure groups or NGOs, politicians or government officials.

In many cases, a crisis – such as consumer concern associated with an outbreak of food-borne disease or economic distress associated with the rejection of food exports by importing countries – provokes or accelerates the decision to carry out a capacity building needs assessment. At other times, politicians or officials may be motivated to assess capacity building needs in order to take advantage of certain opportunities. For instance, some governments may decide to assess the capacity building needs of the national food control system to support their application for membership of the WTO or regional organizations, to demonstrate their ability to comply with Codex standards and requirements of the SPS and TBT Agreements, or to help establish or consolidate a market position as a food exporter.

How can capacity building needs be identified?

A capacity building need is a gap between "what is" (the present) and "what should be" (the desired future). The process of assessing capacity building needs must therefore carefully consider the present situation of the national food control system (or a particular component of it) as well as where it can realistically expect to be in the medium term based on internationally recognized criteria or benchmarks that all effective food control systems should fulfil. The capacity building needs can then be identified based on the difference between the current capacity and the desired future capacity.

Starting with a review and analysis of the present situation is necessary to ensure that the needs assessment fully considers local conditions including the particular strengths and weaknesses of the food control system, and any opportunities or threats facing it. Without a clear understanding of current capabilities and gaps in abilities, activities to strengthen capacity will be less than optimal. Although the symptoms of weak capacity may be similar – in terms of the widespread occurrence of food-borne disease or repeated rejections and detentions of agricultural and food exports – it should not be assumed that the causes of these symptoms are always the same across countries.

Defining the desired future situation permits the concerned government agencies to discuss and reach consensus on where they can realistically expect the food control system to be in the medium term (i.e. approximately five years time or at some other point in time that is consistent with national planning and/or budgetary processes). This provides an opportunity to visualize the future purpose, role and values of the components of the national food control system. While this process involves creativity, ensuring that the desired future situation is based on internationally accepted benchmarks of performance means it reflects international recommendations and good practices, while taking account of the current local situation means it is grounded in reality. Having a shared vision of the desired future situation is important to be able to identify the priorities, options and strategies to reach this goal. Encouraging the participation of relevant organizations and stakeholders in this process helps to commit them to taking the steps required to achieve this improved future situation.

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PART 2

MODULES TO ASSESS CAPACITY BUILDING NEEDS IN THE CORE COMPONENTS OF A NATIONAL FOOD CONTROL SYSTEM

INTRODUCTION TO THE MODULES

The modules provide a tool to identify capacity building needs in the core components of a national food control system as a means to improve the performance of capacity building activities. Step-by-step guidance to assess needs based on a participatory and consultative approach is provided. The nature of the conclusions and recommendations emerging from this process will vary according to national circumstances, constraints and opportunities. The modules are designed to be used by officials involved in various aspects of national food control systems at the policy and/or operational level.

The Guidelines recognize that there are enormous differences in the performance and needs of national food control systems across countries, and that capacity building strategies must be tailored accordingly to take into account, amongst others, existing government capability, local sanitary conditions, cultural habits and other specific needs of consumers and food producers, as well as the legislative framework and national development goals.

Following the process outlined in the modules provides a means to arrive at the following outputs:

- Profiles of the core components of the existing national food control system
- Agreement on the type of improved food control system (or component(s) of it) that is sought in the medium term
- Understanding and consensus on the capacity building needs and requirements to achieve this improved future food control system

Structure and contents of the modules

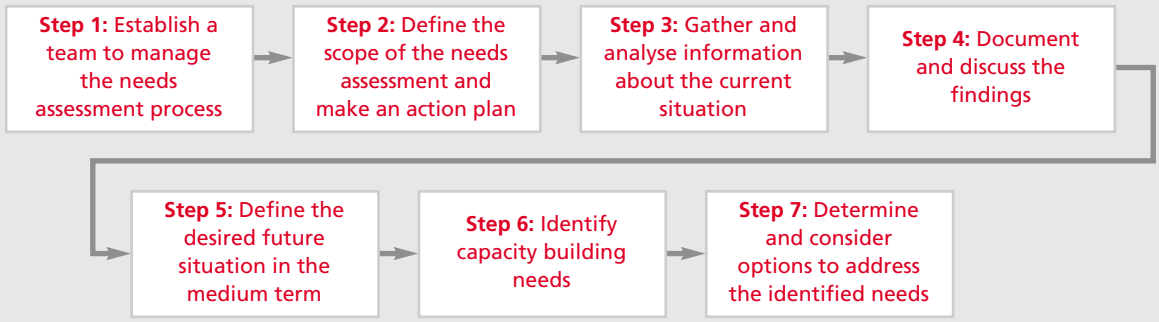
The Guidelines include five modules covering essential components of government activity in a food control system, as presented in the FAO/WHO *Guidelines for strengthening national food control systems*:

1. Food control management
2. Food legislation
3. Food inspection
4. Official food control laboratories
5. Food safety and quality information, education and communication (IEC)

Each module outlines a process for participatory self-assessment. Internationally accepted benchmarks and good practices, as well as suggestions for further reading, are presented.

As illustrated in Figure 4, each module provides guidance on the process to analyse the existing situation of the component in question, consider the desired future "improved" situation taking into account internationally recognized criteria or benchmarks (see Box 1), and identify the capacity building needs to reach this future situation. Various templates, surveys and other tools to guide information collection,

Figure 4 Steps to assess capacity building needs



Box 1 Benchmarks for a national food control system

The modules include a number of benchmarks that provide a descriptive guide of what countries should aim to achieve in each of the core components of a national food control system. These benchmarks are intended to assist those involved in defining the desired future (improved) situation as they set appropriate performance measures and develop realistic targets for improvements. They should not be seen as prescriptive because there is no one model that suits diverse country needs and conditions.

By defining acceptable indicators and performance standards, the benchmarks will enable officials involved in the capacity building needs assessment process to:

- learn from internationally accepted good practices and broad guiding principles;
- pursue continuous improvements in policy making and service delivery; and
- improve efficiency and effectiveness within each of the components of a national food control system.

analysis and needs identification are included, along with suggestions to encourage a participatory and consultative process. These tools should be adapted as needed to fit national circumstances.

Using the modules

Obtaining high-level commitment and agreement on the need for a capacity building needs assessment from the various agencies concerned

Before getting started, it will be essential to ensure there is high-level commitment and support for food safety and quality, and the capacity building needs assessment. The commitment of national leaders and decision makers will be vital to ensure that the needs assessment process and any resulting outcomes or activities have broad sponsorship and legitimacy as well as allocated resources. Support for the capacity building needs assessment should also be sought from the main government agencies involved in different aspects of food safety and quality. Clear commitment from the leaders of these agencies is required to enhance participation, ownership and compliance with any subsequent activities. Obtaining acceptance from all those involved will also help to dispel any suspicion that the effort is a "power play" by a particular group and ensure that the outcomes are seen as objective. Possible ways to help increase awareness about food safety and quality, and obtain support for a capacity building needs assessment, are presented in Box 2.

Deciding where to start

Countries can select and use the modules according to their priorities, needs and/or available resources (see Box 3). As a result, different countries may begin with different

Box 2 Initiating and obtaining support for a capacity building needs assessment

The decision to initiate a capacity building needs assessment can occur in different ways. In some cases, the initiative may come from senior leaders in the country so the only requirement will be to inform and seek the participation of other concerned government institutions. In other cases, for instance when food safety and quality is not a national priority, the initiative may come from an agency involved in a particular aspect of food control. In these cases, it will be necessary to reach out to leaders of other government agencies that also play a role in food control and should therefore be involved. One way to achieve this could be to organize a national forum to highlight the links between food safety and quality, public health, agriculture and economic development.

In some countries, however, there may be a general lack of awareness about the importance of food safety and quality, or the need to strengthen official food control capacity. In such cases, different methods could be used to help obtain commitment and support. For instance, depending on the particular situation and opportunities, it could be useful to:

- Organize a national seminar to inform government leaders about the importance of improving food safety and quality, and the usefulness of conducting a capacity building needs assessment as part of this process.
- Take advantage of national and/or international events that bring together politicians and leaders of different government agencies to lobby and press the case for improvements to capacity in food safety and quality.
- Promote capacity needs assessment and improvements to the official food control system as part of a regional (e.g. the Association of Southeast Asian Nations or ASEAN) initiative or programme.
- Work with the local media to increase awareness about the importance of food safety and quality for public health and economic development, and the possible negative consequences (e.g. food scares, rejection and detention of food exports, politicians forced out of office) of weak food control capacity.
- Take advantage of pressure from external groups (e.g. international organizations, food industry, importers, consumers and their organizations, etc.) calling for improved food safety and quality, as well as possible assistance (financial and technical) available for this purpose.

Box 3 Where to start assessing capacity building needs?

Once the need for capacity building has been recognized, how do officials decide where to begin the assessment process? In fact, there are different entry points, and there is no particular sequence for applying the modules. Depending on the particular situation at the country level, the forces driving the capacity building needs assessment (e.g. trade crisis, public health fears linked to an outbreak of food-borne disease, application for WTO membership, etc.) and the availability of resources, one or more of the modules may be applied independently, or each of the modules may be used simultaneously. For instance:

In Country A, processed fish exports provide an important source of employment and foreign exchange earnings. Unexpectedly, exports are banned by the major importing country due to concerns about veterinary drug residues, which laboratories in the country have been unable to detect. It is decided that the capacity building needs assessment should focus on official food control laboratories. Once the assessment is underway, the importance of related issues and constraints within the wider food control system becomes clear. Although there are internal weaknesses within the country's food laboratories, other external factors (including the absence of suitable regulations, poor coordination between official food control laboratories and other concerned institutions, and inadequacies within food inspection and sampling) within the wider food control system are also identified as a root cause of weak capacity. Therefore, officials decide to broaden the scope of the needs assessment and apply the modules for food control management, food legislation and food inspection.

In Country B, a serious outbreak of food-borne poisoning causes a number of deaths in the capital city, focusing attention on food safety and quality. Different groups are blamed for the incident and there is no consensus as to where responsibility lies. Several government organizations are involved in different aspects of food control but without clarity on their respective responsibilities. The roles and responsibilities of different stakeholders from farm to table have never been defined. The country's leaders recognize that urgent attention must be taken to prevent such a disaster happening again. A decision is made to review the mandates and responsibilities of all the government agencies involved in food control. The capacity building needs assessment process starts with the module for food control management, and then moves on to apply the modules on food legislation and IEC.

In Country C, a significant share of the food consumed domestically is imported. A series of food safety scares in the country from which many food products are imported causes concern about the ability of the government in Country C to guarantee the safety and quality of food imports. The national inspectorate is extremely weak and most food inspectors lack specific training or knowledge about food safety and quality. Regulations that stipulate food safety and quality requirements for food imports have never been developed and laws governing food are outdated. The government decides to begin with the modules on food legislation and food inspection.

Box 4 Guiding principles for a capacity building needs assessment

- Obtain high-level commitment.
- Encourage participation of relevant stakeholders from farm to table.
- Ensure openness and transparency.
- Clearly define the objectives, scope, time frame and organizations involved.
- Be ready to engage in critical analysis and consider change.
- Consider the process as an opportunity for organizational learning.

Box 5 Responsibilities of the team carrying out the needs assessment

- Decide on the objectives and time frame for the capacity building needs assessment.
- Define the scope of the capacity building needs assessment.
- Define the role of, and work with, external facilitators/consultants as appropriate.
- Decide on the use of the tools presented in the modules and adapt them to the national conditions.
- Communicate with staff within the agencies involved and encourage their participation.
- Discuss, identify and recommend options to strengthen capacity based on the findings of the assessment.
- Document the findings of the needs assessment and possible options to strengthen capacity.
- Inform government officials responsible for policy making related to food safety and quality about the needs assessment and its findings.
- Inform government officials responsible for budgeting and resource allocation about the needs assessment and its findings.
- Report to senior management of the agencies concerned on the findings.

modules. Government agencies in some countries may decide to apply each of the modules simultaneously. In other countries, officials may initially select and apply just one or two of the modules in line with national priorities or the availability of (internal or external) funding.

Managing the capacity building needs assessment process

The process of assessing capacity building needs will likely be influenced by the diverse interests, values, preconceptions and agendas of the various organizations and individuals involved. In many cases, managing the interaction between these interests and values, particularly when a number of different agencies are involved, will be challenging. This will be especially true if there are any rivalries among these groups. Following certain basic principles (see Box 4) can help to overcome these challenges and enhance the effectiveness of the process.

It is recommended that small teams are established to lead and manage the capacity building needs assessment for the different modules. These teams should ideally include representatives of each of the government agencies concerned by the subject of the module in question. These individuals should have appropriate knowledge and experience, as well as the authority and resources necessary to conduct the assessment and ensure the participation of relevant groups. When selecting team members, it will be important to ensure that they: i) have relevant expertise and experience with regard to the module in question; ii) are open-minded and willing to listen to, and work with, internal and external stakeholders; and iii) are able to commit the time required. Team members should ideally include a mix of mid- and more senior-level staff with the ability to encourage the participation of staff within their respective organizations.

Box 6 Resources for the capacity building needs assessment

Both internal and external resources can be used for the capacity building needs assessment. To ensure the process serves as a learning experience for the organization(s) concerned, the commitment of internal resources (particularly staff time) will be essential. External agencies can provide an additional and complementary source of financial and/or technical support. For instance, external agencies could help to facilitate the collection and/or analysis of information. Before applying the selected modules, officials in the country should estimate and agree on the type and quantity of resources required, and mobilize the internal and external resources considered necessary.

In some cases, the capacity building needs assessment process may be assisted by external consultants or facilitators. This could be advantageous to help ensure neutrality and objectivity. In addition to experts with specific experience in food safety and quality, it may be useful to involve facilitators with experience in capacity building, needs assessment methodologies and participatory processes. All team members should agree in advance on who these external consultants or facilitators should be.

The teams that are assigned responsibility for the different modules will have a number of common roles (see Box 5). It will be important to agree on the specific responsibilities of each team as well as their work programme including individual roles, the time frame and expected outputs, resources required, available budget, etc. as an initial step in the needs assessment process (this could be written up as an action plan). To enhance transparency and encourage participation, it is also advisable to prepare a short written statement to inform relevant stakeholders about the goals and purpose of the needs assessment, and introduce the team responsible.

Encouraging the participation of relevant internal and external stakeholders

Ensuring an open and transparent process and actively consulting diverse internal and external stakeholders will be important to the success of the capacity building needs assessment. The people, departments and agencies concerned should be directly involved in analysing the current situation, identifying needs and setting priorities. Encouraging participation will help to increase ownership of the process and acceptance of the recommendations that emerge, laying the foundations for more successful and sustainable capacity building activities. This is vital since the capacity building needs assessment might advocate institutional reform or other changes that may encounter resistance.

Adapting methods and tools for data collection and analysis

The modules present a basket of tools and methods for collecting and analysing information, and identifying needs. The tools selected should be adapted and tailored to the particular situation in the country in which the Guidelines are applied.

Ensuring adequate resources

Carrying out a capacity building needs assessment requires human and financial resources, and sufficient time. For each module applied, the availability of capable and motivated staff will be essential to lead and manage the overall process. A core group of staff from the various organizations involved will be required to plan, implement and manage the process presented in the modules. Other staff, including managers and leaders, should be available to share information and opinions.

In addition, financial resources will be necessary for information collection and analysis (including the organization of workshops). Both internal and/or external resources can be used (see Box 6).

MODULE 1. ASSESSING CAPACITY BUILDING NEEDS IN FOOD CONTROL MANAGEMENT

Introduction

Food control encompasses a number of activities to provide consumer protection and ensure that all foods provided for human consumption are safe, wholesome, conform to safety and quality requirements, and are honestly and accurately labelled as prescribed by law. Some of these activities are mandatory involving legislation and regulations related to food safety and quality, food inspection, monitoring and enforcement of decisions. Others involve the promotion of voluntary standards, codes and guidelines such as good agricultural practices (GAPs), good manufacturing practices (GMPs), good hygiene practices (GHPs), Hazard Analysis and Critical Control Points (HACCP), etc.

Food control management is the continuous process of planning, organizing, monitoring, coordinating and communicating, in an integrated way, a broad range of risk-based decisions and actions to ensure the safety and quality of domestically-produced, imported and exported food for national consumers and export markets as appropriate. Food control management covers the various policy and operational responsibilities of competent government authorities responsible for food control. These include the development and implementation of food control policies, strategies and plans that reflect the government's commitment to food safety and quality and provide a sound framework for food control activities.

Food control management should be based on risk analysis and an integrated farm-to-table approach. Definitions and working principles for risk analysis have been developed for use by the Codex Alimentarius Commission[6]. These principles highlight the need for a structured approach for risk analysis comprised of three separate but closely linked and integral components: i) risk assessment; ii) risk management; and iii) risk communication. In particular, risk management provides a process (distinct from risk assessment) for weighing policy alternatives in consultation with all the interested parties, considering risk assessment and other factors relevant for the health protection of consumers and for the promotion of fair trade practices, and, if needed, selecting appropriate prevention and control options. While elaborated for use in the Codex system, these principles are pertinent and applicable to national food control systems; the Codex Alimentarius Commission is in the process of further developing these principles for application by governments.

This module provides a step-by-step process to plan and carry out a capacity building needs assessment of food control management at the country level. Relevant good practices and internationally accepted benchmarks are presented; however, this module is not intended to be a theoretical guide to food control management.

[6] FAO/WHO. 2005. Working Principles for Risk Analysis for Application in the Framework of the Codex Alimentarius. In *Codex Alimentarius Commission. Procedural Manual*. 15th Edition (available at: http://www.codexalimentarius.net/web/procedural_manual.jsp).

Box M1-1 Guiding questions for the capacity building needs assessment of food control management

Keep the following questions in mind while working through this module:
1. What is the existing situation of food control management?
2. What is the desired future situation of food control management?
3. What are the major gaps in the current capacity of food control management?
4. What are the capacity building needs and requirements to create an effective system for food control management?

Box M1-2 Different systems for food control management

Systems for food control management differ significantly across countries, reflecting different historical situations, as well as socio-economic and political circumstances and needs. For instance, responsibilities for food control management may be:
- Spread across a number of different government ministries and agencies dealing with health, agriculture, commerce, trade and industry, environment, tourism, etc. In some cases, a mechanism may have been established to facilitate coordination and information sharing among the agencies involved. However, the actual implementation and impact of such mechanisms, where they exist, can vary considerably. In several countries, there is evidence that different agencies involved in food control management have overlapping roles and mandates, with inconsistencies and gaps in coverage.
- Granted simultaneously to both national and local authorities under food law.
- Divided along geographical lines (city, district, zone, state, province, etc.) or by subject (e.g. pesticide use is regulated by one agency, while pesticide residue levels in food are regulated by another agency).
- Concentrated within one particular agency. Often this agency will rely on other parts of the government for various aspects of day-to-day implementation (e.g. food inspection, food control laboratories, etc.).

The target audience is:
- officials in government agencies responsible for food control management; and
- officials in other government agencies involved in various other aspects of food safety and quality.

Use of this module provides a means to:
- profile the current system for food control management;
- identify capacity gaps and needs in the area of food control management; and
- increase awareness about the purpose and characteristics of food control management.

GETTING STARTED > > > > > > > > > > > > > > > > > > >

STEP 1: Establish a team to manage the capacity building needs assessment process

Once the decision has been made to assess capacity building needs for food control management, a small team should be established to manage and lead the overall process. This team should include representatives from all of the government agencies that play a role in food control management. Since the number and type of agencies involved in food control management differs substantially across countries (see Box M1-2), the shape and composition of this team will also vary.

STEP 2: Define the scope of the capacity building needs assessment

One of the first tasks for the team will be to define the scope and objectives of the capacity building needs assessment. To do this, it will be important to understand what

Box M1-3 What does food control management encompass?

Food control management is the continuous process of planning, organizing, monitoring, coordinating and communicating, in an integrated way, a broad range of risk-based decisions and actions to ensure the safety and quality of domestically-produced and imported food.
It should be based on risk analysis and, in particular, risk management. Food control management establishes leadership and administrative structures with clearly defined accountability for a number of functions.

Depending on the country, these responsibilities can encompass:

- development and administration of food control policy and strategy;
- development of food law, regulations and standards;
- planning, supervision and/or coordination of food inspection and certification programmes;
- monitoring compliance and enforcement;
- preparedness for, and response to, food control emergencies;
- collection of data and surveillance of food-borne illnesses, exposure to hazards (such as contaminants, chemicals, etc.) related to the food chain, etc.;
- IEC with stakeholders from farm to table;
- acquisition, correct utilization and control of sufficient and appropriate human and monetary resources, equipment and provisions;
- participation in international standard-setting bodies and processes; and
- communication and liaison on food safety and quality issues with other countries.

food control management encompasses (see Box M1-3). The scope of the needs assessment should ideally include all the activities that are part of food control management in the country.

Responding to the following questions will help to define the scope of the capacity building needs assessment:

- Is there a document (e.g. policy, administrative circular, etc.) defining the mandate and role of food control management?
- Which agencies are involved in food control management (see Box M1-4)?
- What activities does food control management comprise?

Once the team has agreed on the scope and objectives of the needs assessment, it will be useful to prepare:

- a written statement to inform management and staff about the needs assessment; and
- an action plan for the needs assessment including a time line, responsibilities, expected outputs and budget (specifying the source of funds).

Before moving to the next step, it will also be important to have obtained high-level commitment and support from all government agencies involved in food control management.

ANALYSING THE CURRENT SITUATION > > > > > > > >

STEP 3: Gather and analyse information about food control management

Once the scope of the needs assessment has been defined, the team can start to gather the information needed to build up a picture of the current situation and performance of food control management in the country.

To understand the current state of food control management, it will be necessary to gather and analyse information about the agencies involved, as well as the policy, legal and regulatory environment in which they operate and interact, and the specific characteristics of the food chain from farm to table.

The exact nature of the situation analysis will differ according to the circumstances in the country and agencies involved. For instance, in some countries the analysis will focus on just one agency – the competent authority with the official mandate for food control management. However, more often, several organizations are involved in food control

Box M1-4 Agencies involved in food control management

In Country A, responsibilities for food control are spread across various sectoral agencies covering fisheries, meat and meat products, fruit and vegetables, milk and milk products, etc. and several government agencies are involved in food control management. The situation analysis will need to examine the particular operating principles, roles, responsibilities and resources of each of these agencies, as well as the extent of collaboration and coordination between them.

In Country B, the government has concentrated overall responsibility for food control management within one agency. Although the situation analysis will focus on the operating principles, roles, responsibilities and resources of this agency, it will also consider to what extent (if any) and how other government agencies play a role in food control management.

Table M1-1. Dimensions of capacity for food control management at the organizational level

Mission and strategy	• Clarity and suitability of mandate • Objectives
Organizational structure, competencies and culture	• Roles and responsibilities (including legal mandate) • Functions of different agencies (e.g. research, surveillance, standard setting, food inspection) • Internal culture and values
Operational aspects	• Principles of operation • Processes and procedures (including application of risk analysis principles) • Monitoring and evaluation • Criteria and procedures for approval of official food control laboratories • Criteria and procedures for accreditation of official food control laboratories or certification bodies
Human resources	• Technical skills and knowledge (food-borne disease, food contaminants, food legislation and regulations, food safety policy and strategy, risk analysis and risk management, etc.) • Awareness and understanding of SPS and TBT measures in general, and SPS and TBT Agreements • Management skills
Financial resources	• Budgetary resources available for food control management
Information resources	• Access to information about the food chain from farm to table to support decision-making processes • Access to information on SPS standards and compliance requirements in major export markets (e.g. EU, USA)
Infrastructure	• Technology, communications equipment, etc.

management and their respective roles and performance will have to be considered. In such situations, the analysis will become more complex.

The situation analysis should consider the dimensions of capacity for food control management at the organizational level (see Table M1-1). In cases where several agencies are involved, it will be important to consider the role of each one.

In addition to considering the internal capabilities and characteristics of each of the agencies involved in food control management, it will also be essential to consider the legal, policy and institutional framework in which they operate (see Table M1-2). It will be important to assess the impact of this system on the goals, performance and capacity of agencies responsible for food control management. To what extent is the system enabling or disabling? What are the major opportunities and risks resulting from the system?

Different methods can be used to gather this information depending on the type and source of the information sought (see Table M1-3). During this process of information collection and analysis, it will be important to consult and listen to the opinions of

Table M1-2. Dimensions of capacity for food control management at the system level

Legal and policy framework	• Laws and regulations related to food control management • Operating principles (e.g. principles for the development of standards) • Relevant policies (e.g. policy for import of foods, plants and animals, policies for the effective registration, control, tracing and identification of substances prohibited by trading partners, etc.) *See Module 2: Food Legislation*
Recognition of the importance and multisectoral nature of food safety and quality	• Clear political commitment and support for food safety and quality • Collaboration and coordination of multiple agencies involved in food safety and quality • Existence of a mechanism (e.g. multisectoral committee) to facilitate involvement of stakeholders from different sectors with interests in food safety and quality
Institutional relationships, interdependencies, etc.	• Relationships, linkages, information flows and coordination between the agencies and stakeholders involved in food control management • Interdependence of food safety and quality, and related areas

different groups of stakeholders from farm to table including representatives of the food industry, consumers and their organizations, etc.

Where to obtain this information? The competent authority (or agencies) responsible for food control management will be an important source of information. Other government ministries or agencies with operational responsibility for particular aspects of food safety and quality, as well as agencies in charge of setting national development policies and priorities, may also have relevant information. In addition, it may be useful to consult the opinions of non-government stakeholders that contribute to food safety and quality including the food industry, academic and scientific institutions, and consumers and their organizations.

By consulting the diverse stakeholders involved and using an appropriate mix of methods to gather information, it will be possible to build up a picture of the current situation and performance of food control management. Through this process, the strengths and weaknesses of food control management will become clear.

A number of resources are annexed to this module to guide information collection and analysis. They include assistance and advice to prepare a country profile of the food chain, do a stakeholder analysis, conduct focus group discussions with different stakeholders, organize a self-assessment workshop and prepare a SWOT analysis, etc. They can be modified as needed to fit the particular needs and situation in the country.

STEP 4: Document and discuss the findings of the situation analysis

The situation analysis will reveal important information and insights about the state of food control management in the country. These findings will play a vital role in helping to assess capacity building needs on the basis of current strengths and weaknesses. They will also provide indicators that can be used to help plan and monitor subsequent capacity building activities. Therefore, it will be essential to clearly and comprehensively document the findings.

Although the findings of every situation analysis will be different depending on the specific circumstances at the country level, some kinds of information should always be included in such a report. A template to document the situation analysis for food control management is available in the resources annexed to this module.

Table M1-3. Methods to collect information on food control management

Method	*Purpose*
Literature / document review	• Analyse the nature of the food chain from farm to table (production, processing, marketing, distribution, imports, exports, consumption, etc.) • Review laws and regulations, annual reports, financial reports, programme descriptions, official mandates, organizational charts, etc. to obtain information on the involvement of different agencies in food control management • Examine reports related to rejections and detentions of food imports and exports
Stakeholder analysis	• Identify organizations and groups that influence food control management (both positively or negatively) • Anticipate the kind of influence (positive or negative) they have on food control management
Self-assessment workshops / focus groups	• Enable officials involved in different aspects of food control management to discuss existing strengths, weaknesses, opportunities and threats (SWOT analysis) • Generate awareness and increase consensus about necessary changes
Key person interviews	• Obtain in-depth and comprehensive information from individuals actively involved in food control management
Stakeholder consultations	• Obtain views and opinions from the food industry, consumers and their organizations, etc. • Increase awareness about food control management

Before moving on to the next step, which focuses on the desired future of food control management and the identification of needs, it will be important to verify the following:

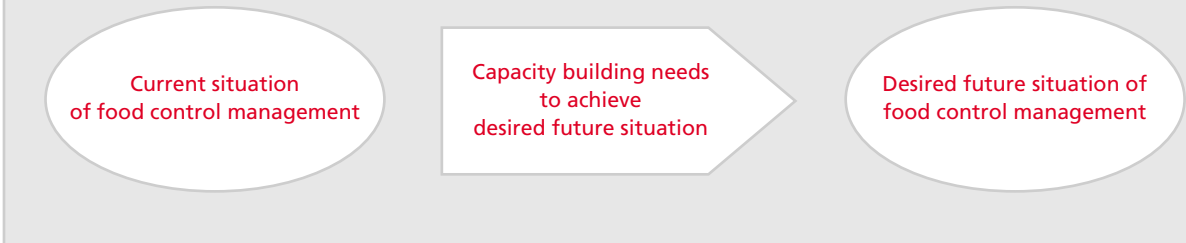
- Information on the current state and performance of food control management has been collected and analysed.
- Relevant stakeholders have been consulted during the process.
- The findings of the situation analysis have been clearly documented and distributed to individuals who participated in the process, as well as leaders and senior managers of the concerned agencies.

CONSIDERING THE FUTURE AND IDENTIFYING CAPACITY BUILDING NEEDS > > > > > >

STEP 5: Define the desired future situation of food control management in the medium term

A capacity building needs assessment asks two main questions: "where are we now?" and "where do we want to be?" This step in the assessment process concentrates on defining the desired future situation of food control management. It will provide a means for relevant officials to envisage where they realistically expect food control management to be in the medium term (approximately five years). Discussing and reaching consensus on the desired future situation is important to be able to determine capacity needs. When

Figure M1-1 Identifying capacity building needs for food control management



the desired future situation is compared to the existing situation, the capacity building needs can be more easily and precisely identified.

A description of the desired future situation of food control management in the medium term can be developed through discussions and brainstorming sessions involving officials from each of the government agencies concerned. This will enable the relevant agencies to visualize the purpose, role, functions, values and operation of food control management in the medium term, based on an understanding of the current situation and broad, internationally accepted criteria or benchmarks of effective food control management (see Box M1-5). Referring to benchmarks of effective food control

Box M1-5 Internationally accepted benchmarks for food control management

Government commitment

- Government commitment to protect consumer's health and interests, and to ensure fair practices in food trade.
- Agreement at the highest level of government on the importance of food safety and quality, and provision of adequate resources (human, financial, other) for this purpose.
- Existence of a government policy that:
  - is based on an integrated food chain approach;
  - is science-based and applies risk analysis principles;
  - is transparent and includes the participation of all the stakeholders from farm to table; and
  - ensures broad consultation in the development and implementation of food legislation.
- Recognition of the importance of the regional and international dimensions of food safety and quality, and agreement to participate in relevant regional and international fora.

Organizational capability and performance

- Operational coordination at the national level across all the agencies involved in food safety and quality.
- Existence of administrative structures (single agency, multi-agency system, integrated system) with clearly defined roles, responsibilities and accountabilities.
- Development and implementation of an integrated national food control strategy and operation of a national food control programme based on risk analysis principles.
- Ability to set regulations and standards based on sound science and in accordance with international recommendations (Codex).
- Existence of strategic and operational plans (that establish priorities, targets and indicators) for food safety and quality and are reviewed regularly.
- System in place to effectively allocate and manage resources available for food control management, including the ability to transfer resources to high priority areas as required.
- System in place for continuous review and evaluation of the overall management structures.
- Existence of a documented food legislation enforcement policy including preventive approaches.
- Existence of a documented procedure for the authorization of officers including food inspectors, analytical personnel, etc.
- Existence of a documented procedure for the authorization of official food control laboratories.
- Existence of a national food control database for the systematic collection, reporting and analysis of food-related data (food inspection, analysis, etc.).
- Existence of an internal programme for information, education (training, continuous upgrading of knowledge and skills) and communication with relevant government agencies that makes use of modern information technology.
- Existence of established procedures for consultation with different stakeholders.
- Ability to respond to and manage food-related crises.

Box M1-6 Institutional options for food control management

Multiple agency system – responsibilities for food control are shared between government ministries (e.g. health, agriculture, commerce, environment, trade and industry, tourisms, etc.) or across government agencies at different levels (central, regional, local).

Single agency system – responsibility for protecting public health and food safety is consolidated into a single food control agency with clearly defined terms of reference.

Integrated system – responsibility for policy, risk assessment and management, the development of standards and regulations, and coordinating functions are consolidated in a food control agency at the national level, while responsibilities for food inspection and enforcement, education and training, etc. remain with existing agencies at the national, regional and local levels.

Source: FAO/WHO. 2003. Assuring food safety and quality. Guidelines for strengthening national food control systems. *Food and Nutrition Paper No. 76.*

management provides a means to learn from good practices and ensure that the objectives set for the future are in line with international recommendations. By ensuring that discussions are grounded on an understanding of the current situation, those involved will be able to produce a scenario for the future that is realistic and achievable, as well as transferable into operational steps.

Organizing a workshop is a useful way to arrive at this vision of the desired future situation. The workshop should be facilitated to ensure that the necessary support and encouragement is available. In some cases, it may be useful to have external facilitators who can provide examples of good practices from other countries. Different tools can be used during this workshop. Small group sessions can be used to discuss fundamental questions. For instance, what should food control management seek to achieve (goal and purpose)? What should food control management encompass (scope)? Which stakeholders should be involved and how? What type of system for food control management would be most effective based on the country's particular circumstances and needs? Thinking about the different types of systems for food control management (see Box M1-6) in relation to the historical, political and institutional factors in the country will be useful during this process. The checklists for food control management and strategy in the resources annexed to this module offer additional guidance.

Brainstorming using key words could also be used at this workshop. Small groups could be asked to describe the future of food control management using key words. The resulting descriptions could be shared in a plenary session. The facilitator could subsequently seek to draw out the similarities and differences between the different scenarios and assist the participants to reach consensus on the vision of the desired future situation of food control management five years from now. This description should characterize the desired purpose and scope of food control management, the institutional set-up, the stakeholders involved and their roles, the values and guiding principles, etc.

A suggested agenda for a workshop to define the desired future situation of food control management and identify capacity building needs is available in the resources attached to this module.

Relevant resource materials

- **FAO/WHO.** 2003. *Assuring food safety and quality. Guidelines for strengthening national food control systems.* Food and Nutrition Paper No. 76 (available at: ftp://ftp.fao.org/docrep/fao/006/y8705e/y8705e00.pdf).

STEP 6: Identify capacity building needs to strengthen food control management

Capacity building needs can be identified by comparing the present situation of food control management with the desired future situation. The matrix in Table M1-4 can provide assistance in this regard. This process should involve all the concerned government agencies together with any other relevant stakeholders, and could take place through a facilitated workshop (see sample agenda in the resources annexed to this module).

The steps already carried out until now will help to complete this matrix. The findings of the situation analysis (including the strengths and weaknesses identified during the SWOT analysis) can be used to complete Column A. The outputs of Step 5 on the desired future situation will help to complete Column B. Once this has been done, it will be possible to brainstorm about capacity building needs based on the differences between the current and desired future situations. Recalling the threats and opportunities identified during the SWOT analysis will help to integrate lessons learned and/or address underlying obstacles. Paying attention to benchmarks of good practice

Table M1-4. Matrix to identify capacity building needs for food control management

Food control management	*Column A* ***Current Situation***	*Column B* ***Desired Future Situation***	*Column C* ***Capacity Building Needs***
Institutional set-up, mandates, roles and responsibilities	• How does food control management currently take place? • What is the role, operating principles and mandate of the various agencies involved? • What are the strengths and weaknesses?	• What should be the desired institutional set-up for food control management five years from now? • How should roles and responsibilities be shared? • What operating principles should guide food control management?	• How can the existing system for food control management be rationalized and redefined in line with the desired future situation?
Human resources	• What skills (quantity and quality) are available for food control management?	• What types of skills should be available for food control management five years from now?	• What is needed to develop the necessary skills?
Financial resources	• How do available resources correspond to current needs? • How are current resources for food control allocated?	• What resources should be available for food control management five years from now? • How should resources be allocated?	• What is needed to mobilize additional resources? • Are new skills needed to improve resource mobilization, allocation, monitoring, etc.?
Information resources	• What information is currently available to support food control management?	• What information should be available to support food control management five years from now?	• What is needed to improve the content, management and distribution of information to enhance food control management?
Legal framework for food control	• What is the legal basis for food control management?	• What legislation should be available five years from now to enhance food control management?	• Does the source of authority for food control management need to be redefined?
Food Control Strategy	• Is there a national strategy for food control? • To what extent does it cover the food chain from farm to table and meet current needs?	• What principles and strategic goals should underpin food control five years from now?	• What is required to develop and implement a food control strategy?
External linkages and inter-dependencies	• How do government agencies involved in food control management communicate with and engage external stakeholders?	• How should government agencies consult and work with external stakeholders five years from now?	• What needs to be changed to enable government agencies to improve communication with external stakeholders?

will help to ensure the capacity building needs identified strengthen food control management in accordance with international recommendations.

Where a number of needs are identified, it will be important to discuss and rank them in terms of priority, sequencing and the resources required. This information could then be used to help raise additional sources of funds from internal or external sources.

STEP 7: Determine options to strengthen food control management based on the identified needs

Once the capacity building needs have been identified, discussed and prioritized, it will be possible to consider practical options to strengthen food control management through appropriate programmes and activities, and to seek resources internally and externally for this purpose.

Identifying and reviewing the available options will help decision-makers to understand the potential range of actions that they may take to achieve the desired future situation and identified objectives. This step involves the preparation of a list of such actions. This list may include several options ranging from where government continues with the current system, makes changes that are limited in scale and scope, or takes more far-reaching actions.

Many different options to improve food control management may exist. For instance, they may include, but not be limited to, one or more of the following:

- Policy or legislative change
- Clarification of the roles and responsibilities of the relevant agencies
- Creation of a new food safety agency
- Implementation of risk analysis principles as a basis for decision making and action
- Better coordination and information sharing among the agencies involved in food control management
- Changes to the way resources are allocated and/or monitored
- Consultation with consumers, the food industry, and other relevant non-government stakeholders to develop a food control strategy
- Use of information technology to manage available data and information
- Better implementation of existing food control management measures or initiatives
- Etc.

The range and choice of possible options will vary according to national circumstances such as the number of government agencies involved in food safety and the nature of the existing organizational arrangements for food control management. Similarly, the various options will have different benefits and costs for different groups. For instance, the creation of a new food safety agency with overall responsibility for policy, regulatory and programming functions will demonstrate high-level commitment to food safety and quality, and provide an integrated approach for risk-based decision making, resource allocation and action along the entire food chain from farm to table (benefits). However, some agencies may be disinclined to see their mandate and responsibilities reduced, and there may be considerable start-up costs or a temporary decline in performance as a result of disruptions related to the new agency's establishment (costs).

Considering the costs and benefits of the main options under consideration can help to inform the decision making process. The Regulatory Impact Assessment and Cost Benefit Tool in Part 3 offers guidance in this regard. To ensure transparency, the various options, as well as their respective costs and benefits, should be documented.

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ANNEX 1-1

Preparing a country profile of the food chain from farm to table

Purpose

Effective systems for food control management should be based on a sound understanding of the food chain from farm to table. Decision-making processes to ensure the safety and quality of food in the country must take into account current characteristics and trends related to food production, processing, marketing, food imports and exports, and food consumption. This profile provides a template to systematically review the food chain.

How to prepare a country profile?

To prepare a country profile of the food chain from farm to table, it will be necessary to collect and document the following kinds of information:

A. Food and agricultural production, processing and distribution

- Primary food production (agriculture, livestock and fisheries) including main foods produced for domestic consumption and export, volume, value, trends, etc.
- Food processing industry including types and number of establishments (formal food enterprises, SMEs, small-scale household units, etc.), main types of products, processing capacity, value, quality assurance, use of good practices (e.g. GAPs, GHPs, GMPs, HACCP), etc.
- Food distribution and marketing including market infrastructure, formal retail channels, informal or street food vendors/traders, information (labelling) for consumers, etc.
- Main types of stakeholders involved in food production, processing, trading, distribution and marketing, etc.

B. Food imports

- Food imports including types, volume, country of origin, etc.
- Detentions or rejections of food imports
- Trends (increase, decrease, trading partners, etc.)

C. Food exports

- Types, quantity, value, destination, etc. of food exports
- Types of producers/food enterprises serving export market, food safety and quality assurance practices, etc.
- Requirements of main importing countries
- Number and types of detentions, rejections, complaints, etc. from importers and types of remedial actions taken
- Trends and opportunities for food exports, etc.

D. Food consumption

- Characteristics of food consumption including main types and quantity of food consumed (domestically produced or imported, fresh or processed), energy/protein intake, place of consumption (home, restaurants, street foods, etc.), per capita income, etc.
- Food habits, customs and preferences including relevant cultural or historical factors.
- Incidence and prevalence of food-borne diseases including main foods concerned, types of contamination (physical, chemical, microbial, physical), trends, etc.
- Consumer awareness of food safety and quality issues, nature and role of consumer associations, etc.

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Conducting a stakeholder analysis for food control management

Purpose

Stakeholders are individuals, groups or institutions that have an interest in, or influence on, food safety and quality. Stakeholder analysis is a technique that can be used to identify and assess the importance of groups of people and institutions that significantly influence food control management.

How to conduct a stakeholder analysis?

1. Organize a brainstorming session to identify all the people, groups and institutions which:
   - Play a direct and leading role in food control management. These groups could include government ministries, departments, agencies, inter-ministerial committees, etc. Identify these groups and describe the nature of their role in column one of the table below.
   - Play a secondary or supportive role in food control management. For instance, such groups may provide information or data that is used by those responsible for food control management. Identify these groups and describe the nature of their role in column two of the table below.
   - Identify stakeholders who are affected by food control management. These stakeholders may include government agencies at different levels, consumers and consumer organizations, the food industry and business groups, academic and scientific institutions, etc. Identify these groups and describe the nature of their role in column three of the table below.
2. Use the Venn diagram tool (see Part 3: Tools and Techniques) to visualize the respective influence of the stakeholders identified in the previous step and the linkages between them.
3. Document the role and influence of each of the identified stakeholders using the template below.

Direct Role in Food Control Management	Secondary/Indirect Role in Food Control Management	Affected by Food Control Management

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ANNEX 1-3

Focus group discussions on food control management with government officials

Objective

To obtain views and insights from government officials involved in food control management.

Participants

Up to twelve officials from a particular government ministry, department or agency responsible for food control management.

Participants at a focus group discussion should have something in common – in this case their knowledge of, or role in, food control management. Where several government agencies (or agencies at different levels) are involved in food control management, it may be advisable to organize separate focus groups for each of them. This would provide an opportunity for staff to discuss their role, responsibilities, strengths, weaknesses, etc. internally, before staff from different agencies meet together at a self-assessment workshop.

Possible questions

1. How is your organization involved in food control management? What is its mandate, role, operating principles and main responsibilities?
2. What resources does your organization have available for food control management (e.g. staff, budget, information, etc.)?
3. In performing your mandate, does your organization collaborate with any other government organizations?
4. If so, with which organizations? What is the purpose and nature of this collaboration (e.g. subject areas, roles of different groups involved, formal or informal collaboration, successes, challenges faced, etc.)?
5. To what extent and how does your organization work with external stakeholders (e.g. food enterprises, consumers and their organizations, etc.) in carrying out activities in the area of food control management?
6. Does your organization collaborate with any foreign governments or international organizations (e.g. Codex Alimentarius Commission, WTO, etc.), and how?
7. What are the major strengths of your organization?
8. What are the major weaknesses of your organization?
9. Which opportunities does your organization have?
10. Which threats does your organization face?

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Focus group discussions on food control management with representatives of the food industry and consumer organizations

Objective

To obtain views and insights about food control management from representatives of the food industry, consumers and their organizations.

Participants

Up to twelve representatives of the food industry, consumers and their organizations.

Possible questions

1. Which issues/concerns do you believe are particularly relevant and important for food safety and quality in your country?
2. To what extent are these issues/concerns currently addressed by the government and agencies involved in food control management?
3. In your opinion, which organizations/groups are responsible for ensuring food safety and quality in your country and how?
4. Are you aware of any past or ongoing government-sponsored programmes to provide information or educate consumers/the food industry about food safety and quality issues?
5. If so: i) what was/is the subject of this programme; ii) what was/is your experience; and iii) how would you rate this programme?
6. Has your food enterprise or organization ever been consulted by the government agencies responsible for food control management? If so, when and why?
7. In what ways do you believe consumers and/or the food industry could contribute more effectively to improving food safety and quality?
8. How could the government agencies responsible for food control take advantage of what consumers and/or the food industry have to contribute to food safety and quality?

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ANNEX 1-5
Key person interviews for food control management

Introduction
Key person interviews can be used to gather information from officials with specific experience or knowledge about various aspects of food control management. The following list provides examples of guiding questions that could be used. The responses obtained should be carefully documented.

Framework for food control management
- Is there political commitment and support for food safety and quality in your country?
- Has your country elaborated a national food safety and quality policy/strategy?
- If so, is this policy/strategy based on sound science and risk analysis, a farm-to-table approach, and a preventive rather than reactive approach?
- Does the food safety strategy clearly identify roles and responsibilities of stakeholders?
- To what extent and how does the legal and policy framework support or constrain food control management?

Appropriateness of systems and processes for food control management
- How is food control management conducted?
- To what extent are food control management activities based on a risk analysis approach? Is risk management used to manage food safety problems?
- Which government agencies play a role in food control management?
- What are their respective roles and responsibilities?
- Are these roles complementary, overlapping, in conflict?
- To what extent and how effectively do the agencies concerned work together?
- How well does food control management respond to current and potential food safety and quality challenges facing the country?
- Is food control management adequate?
- Are the actions of food control agencies appropriate and adequate in relation to the national objectives for food safety and quality?

Resources for food control management
- Are the resources (e.g. staff, funds, equipment and facilities, etc.) available for food control management adequate in relation to the objectives set?
- Is there sufficient information about the food chain from farm to table to set appropriate objectives?

Delivery of food control objectives
- How are work programmes / plans implemented?
- Does food control management achieve the objectives set?

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Sample agenda for a self-assessment workshop (using SWOT analysis) for food control management

Purpose

To enable officials from the agencies involved in food control management to jointly discuss current strengths, weaknesses, opportunities and threats.

Before this workshop, a series of focus group discussions may be organized to enable officials in the concerned agencies to examine their particular situation internally.

Participants

- Officials from the various government agencies involved in food control management.

Day one – morning

- Introduction to situation analysis and needs assessment process
- Brainstorming on the stakeholders involved in or affected by food control management, their roles, responsibilities and influence (using the stakeholder analysis template, see Annex 1-2)
- Presentation of findings of focus group discussions

Day one – afternoon

- Brainstorming on the strengths and weaknesses of food control management
- Brainstorming on the opportunities and threats facing food control management
- Reach consensus on the major strengths, weaknesses, opportunities and threats (SWOT analysis) relevant for food control management

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ANNEX 1-7
SWOT analysis scenario for food control management

The following table gives an example of strengths, weaknesses, opportunities and threats relevant for food control management in a hypothetical country.

	Positive	*Negative*
Internal factors	**Strengths** • Recent decision to formulate a policy for food safety and quality • Managers of organizations involved in food control management have new knowledge about effective food control systems following overseas study trips	**Weaknesses** • Lack of coordination and transparency • Confusion and duplication in roles and mandates of the various agencies involved at the central and local level • Unstated or incoherent approach • Decision-making processes for food control management are not based on risk • Difference in levels of expertise, resources and uneven implementation • Limited capacity to integrate science in decision-making processes • Legislation does not create an enabling framework for food control management • Inadequate data collection and analysis • Inability to react quickly to food-borne disease scares
External factors	**Opportunities** • Recent transboundary food scares have increased attention to food safety and quality in the region • Increased interest of local media in food safety and quality issues • Development of consumer associations • Membership of WTO • Membership of the Codex Alimentarius Commission	**Threats** • Internal resistance to change from some government agencies and ministries • Limited confidence of foreign consumers and governments in the safety and quality of food produced domestically • Competing development priorities – limited resources for food safety and quality from central budget

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Template for a situation analysis report for food control management

Introduction

The following template can be used to help structure and document the findings of the various surveys, interviews, focus group discussions, etc. that are carried out to collect information on the existing situation of food control management. It lists the main components of a situation analysis report and provides an example which could be adapted to the particular circumstances in the country.

Terms of Reference: The reasons for conducting the situation analysis.

Acknowledgments: Recognition of people who contributed.

Summary of Findings/Recommendations: What are the key points or issues identified? List any results by order of importance.

Methodology: Explain what was done, how it went, and what was learned in the process. Which agencies were involved directly and/or consulted. Could the information collection or analysis have been improved? These questions may be of assistance later if the situation analysis report needs to be updated or the findings cross-checked.

Findings: Based on the information collection and analysis, describe the current state of food control management, taking care to incorporate the findings of the stakeholder analysis, focus group discussions, key person interviews, SWOT analysis, etc.

Appendices: Present information that does not fit appropriately elsewhere, e.g. main results of surveys, questions asked during focus group interviews. Including this information will be useful if follow-up is required later.

Sources: List the main sources of information including key persons interviewed, participants of focus group discussions, external stakeholders consulted, etc.

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ANNEX 1-9
Checklist for food control management

Introduction
This checklist sums up key points about food control management and is intended to provide guidance to those responsible for defining the desired situation of food control management in the medium term. It should be considered in combination with the benchmarks for food control management (Box M1-5).

What is food control management?
Food control management is the continuous process of planning, organizing, monitoring, coordinating and communicating, in an integrated way, a broad range of decisions and actions to ensure the safety and quality of domestically-produced, imported and exported food for national consumers and export markets as appropriate.

What is the purpose of a system for food control management?
- Prioritize food control interventions and activities
- Provide a coordinating mechanism to ensure the consistent implementation of food control activities
- Consult widely with all the stakeholders involved in the food chain
- Encourage public involvement in policy making processes related to food safety and quality
- Identify legislative and regulatory needs
- Monitor the efficiency and effectiveness of food control enforcement and surveillance activities
- Keep track of events and trends related to food production, processing, marketing, distribution, consumption, etc. that are relevant to food safety and quality, and ensure appropriate action as necessary
- Monitor the safety of food imports and rejection of exported foods, and take appropriate action as necessary

What are the characteristics of an effective system for food control management?
- Independent and objective – is not influenced by the interests of particular sectors or groups (government or industry)
- Strategic view of the whole food chain from farm to table
- Open and transparent decision-making process
- Priorities established based on risk analysis
- Communications on issues related to food safety and quality, public health and food control with external stakeholders
- Avoidance of duplication and overlap in roles, responsibilities and implementation of activities

What basic conditions are necessary for effective food control management?
- National food control strategy that sets clear objectives, identifies priorities for public investment, and defines a plan of action and responsibilities for implementation
- Clear and appropriate legal and regulatory framework for food control
- Suitable institutional arrangements for food control management and mechanism to facilitate coordination between the different agencies involved
- Mechanism to facilitate communication and dialogue between government agencies involved in food control management, and external stakeholders (including the food industry, consumers and their organizations, academic and research institutions, etc.)
- Adequate internal capability (mandate, personnel, financial and other resources, etc.) of the agencies responsible for food control management

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Checklist for a food control strategy

Introduction

This checklist sums up key points about a food control strategy and is intended to provide background information to help discuss and define the desired situation of food control management in the medium term.

What is a national food control strategy?

A food control strategy outlines the means to execute policies related to food safety and quality to deliver the intended results. It describes the way in which food control management will be conducted and provides a framework through which the different government agencies involved can carry out their roles in an integrated and complementary manner.

What is the purpose of a food control strategy?

A food control strategy:

- provides a framework for decision-making related to food safety and quality, and a basis for detailed planning and implementation of activities;
- clearly describes the nature of food control management as a means to inform, motivate and involve stakeholders from farm to table; and
- supports the establishment of benchmarks and the monitoring of performance.

What does a food control strategy include?

- Description of the main operating principles and priorities for food safety and quality based on risk
- Clearly defined objectives to improve food safety and quality, and actions to achieve these objectives
- Clearly defined roles and responsibilities

What are the characteristics of an effective food control strategy?

- Based on science
- Priorities based on risk analysis
- Emphasizes prevention
- Encourages the participation of stakeholders from farm to table
- Is timely and able to respond to changing conditions
- Developed and supported by all concerned stakeholders

What are the benefits of developing a food control strategy?

- Minimises the risk of food-borne illnesses through an improved understanding of risks and adoption of improved production and processing practices
- Lays the foundation for an integrated and coherent system for food control management
- Provides greater coherence in countries where many different agencies are involved in food control management
- Enhances coordination, effectiveness and focus
- Enhances readiness to better respond to food safety emergencies

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ANNEX 1-11

Sample agenda for a needs assessment workshop for food control management[7]

Objective

To review the findings of the situation analysis, discuss the desired future situation of food control management, and identify capacity building needs

Participants

Officials from government agencies involved in food control management

Day one – morning

- Presentation of the findings of the situation analysis and SWOT Analysis (see Annex 1-7 and 1-8)
- Review, discuss and reach consensus on the findings of the situation analysis

Day one – afternoon

- Discuss the desired future situation of food control management and relevant internationally accepted benchmarks and good practices
- Visualize the purpose, role, functions, values, operation, etc.
- Use key words to describe in broad terms how improved food control management would look five years from now – concentrate on describing the characteristics of the desired future situation rather than thinking about how to reach this situation
- Identify trends that will likely affect the future needs and role of food control management

Day two – morning

- Review, discuss and agree on the desired future situation of food control management including the purpose, goals and objectives

Day two – afternoon

- Define capacity building needs and priorities for food control management using the matrix to identify capacity building needs
- Rank needs in order of importance
- Rank needs in order of ease of implementation

Notes

- An external facilitator or resource person could be available during this workshop to provide information on different systems for food control management and good practices from other countries
- This workshop will normally require at least two days. However, the exact amount of time required will depend on the nature and complexity of the existing situation, size of the country, number of stakeholders involved, etc.

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[7] A self-assessment workshop (see Annex 1-6) may first be organized to review and reach consensus on the strengths, weaknesses, opportunities and threats facing food control management. The findings should be incorporated into this needs assessment workshop.

MODULE 2. ASSESSING CAPACITY BUILDING NEEDS IN FOOD LEGISLATION

Introduction

Relevant, up-to-date and enforceable food legislation is an essential part of a modern food control system. Sound laws and regulations are essential to create an enabling and predictable environment in which to develop and enforce food safety measures based on risk analysis. Food legislation protects the rights of consumers and defines the responsibilities of food producers, processors, manufacturers, traders and consumers, helping to ensure that food is safe, wholesome and fit for human consumption. Food laws and regulations establish clear, appropriate and fair rules that facilitate trade in foods, and protect consumers from fraudulent practices.

This module provides a step-by-step process to plan and carry out a capacity building needs assessment of food legislation including food law, regulations and standards (enforced by food control authorities) at the country level. References are made to relevant good practices and internationally accepted benchmarks; however, the purpose is

Box M2-1 Definitions of food legislation, regulations and standards

Food legislation (or food law) is the complete body of legal texts (laws, regulations and standards) that establish broad principles for food control in a country, and that governs all aspects of the production, handling, marketing and trade of food as a means to protect consumers against unsafe food and fraudulent practices.

Food regulations are subsidiary legal instruments (usually issued by a minister rather than by parliament) which prescribe mandatory requirements that apply to various aspects of food production, handling, marketing and trade, and provide supplementary details that are left open in the main parliamentary-level legislation.

Food standards are nationally or internationally accepted procedures and guidelines (voluntary or mandatory) that apply to various aspects of food production, handling, marketing and trade to enhance and/or guarantee the safety and quality of food.

Box M2-2 Guiding questions for a capacity building needs assessment of food legislation

Keep the following questions in mind while working through this module:

1. What is the existing legal and regulatory framework for food control in the country?
2. What benefits should an improved legal and regulatory framework for food control provide in the medium term?
3. What are the major gaps in the current national framework of food law, regulations and standards?
4. What are the requirements to create coherent and up-to-date food legislation that protects public health and discourages unfair and fraudulent practices in food trade?

not to provide a theoretical guide to food legislation. The target audience is officials involved in developing, administering, complying with and/or enforcing food laws and regulations

Use of this module provides a means to:

- profile the current legal and regulatory framework for food control in the country;
- identify gaps in the current national framework of food law, regulations and standards, and capacity building needs to address these gaps; and
- increase awareness about the role of food legislation within a national food control system.

GETTING STARTED > > > > > > > > > > > > > > > > > > >

STEP 1: Establish a team to manage the capacity building needs assessment process

Once the decision has been made to assess capacity building needs for food legislation, a small team should be established to manage and lead the overall process. Given the role of this team, it will be important to ensure that it includes officials (technical experts and legal experts) from the main agencies responsible for developing, implementing and enforcing food laws and regulations. The inclusion of a lawyer, ideally with experience in the food and agricultural sector and international trade agreements, is essential.

Since food laws and regulations cover all aspects of the food chain from farm to table – and involve different sectors like health, agriculture, industry and trade – officials from several different government ministries and agencies (see examples in Table M2-1) may need to be involved. In some cases, the scope and responsibilities of these agencies may overlap.

A decision may also be made to include a representative of the food industry and/or consumer organizations given that legislation should meet their needs and expectations.

STEP 2: Define the scope of the capacity building needs assessment

One of the first tasks for the newly-established team will be to agree on the parameters of the capacity building needs assessment. The purpose of this step is to clearly set out the substantive reach of the assessment and broadly identify the type of laws and regulations

Table M2-1. Examples of the responsibilities of government agencies under food legislation

Ministry/Agency	*Responsibilities (relevance to food legislation)*
Agriculture	Food production, veterinary services, food inspection, agricultural trade, etc.
Health	Human health and safety, food inspection, etc.
Fisheries	Fisheries production and trade, inspection of marine and inland fisheries production
Industry	Product development, food enterprises
Science	Food technology
Trade	Requirements for food exports/imports (including WTO agreements), licensing of food businesses, consumer protection, etc.
Tourism	Licensing restaurants, hotels, etc.
Standards Organization	Adoption of voluntary standards, labelling, weights and measures, product certification
Customs Department	Control of food imports
Environment	Pesticide residues, food inspection
Consumer Affairs	All matters related to consumers

to be included in the subsequent analysis. Different countries will have different types of legal systems and food legislation (see Box M2-3). The first step will be to identify the legislation that is relevant. In this context, it may also be useful to consider relevant policy frameworks that provide the overarching context and guidance for the food legislative system.

In determining the scope, it must be borne in mind that what is commonly regarded as "food" by food legislation is often controlled as something else in terms of other legislation. Animal health legislation controls milk, dairy products, meat and eggs as "animal products". Fruit and vegetables and their products are regarded as "plants" and "plant products" in terms of plant health legislation. Maize and soy beans are controlled as "reproductive material" in terms of legislation that governs genetically modified organisms. There must be clarity as to whether the needs assessment will also take such laws into consideration. Depending on the priorities for the needs assessment and the available resources and time frame, the team may be more interested in focusing on legislation more directly relevant to food such as laws on food production.

The parameters of the needs assessment should normally be wide enough to encompass laws, regulations and standards related to food produced, manufactured and/or marketed in the country. This will include food imports and exports, as well as food produced for domestic consumption. In some countries, a clear priority may be to examine food legislation related to food exports or food imports. In such cases, one of the components of the capacity building needs assessment may focus specifically on the legal and regulatory framework for food exports, imports or both.

Responding to the following questions will help to define the parameters:

- Is there one particular law or act focused on food or several different laws?
- Which legal texts are related to food safety and quality (e.g. addressing aspects of food safety from farm to table including production, pesticide use, marketing, distribution, food serving establishments, etc.)?
- In addition to legislation that has been enacted at the central level, is there food-related legislation at lower administrative levels (e.g. state, province)?
- Which policy frameworks and operating principles (e.g. risk analysis) provide the context for the development of food legislation?

Box M2-3 Differing legal systems and frameworks for food control

Countries have different types of legislative frameworks for food control as well as different types of legal systems such as civil law, common law*, Napoleonic Code** or other system, or some combination of these. A crucial difference between legal systems relates to whether the competent authority can make administrative decisions as part of their enforcement mandate, or whether such decisions must be made in court.

Some governments have enacted a specific "food law". In other countries, food law has developed piecemeal over time and there is no central unifying text setting out the fundamental principles of food law and clearly defining the obligations of those concerned. In some places, food may fall under the scope of a general consumer protection law that broadly covers consumer interests. Sometimes laws focused on food are relatively new. At other times, food acts have been in place for several decades.

In addition to national laws, traditional or community laws and practices that govern food sometimes also exist. In some countries, local authorities supplement (and sometimes complicate) national food laws by producing their own food by-laws.

** Common Law: A system of law that is derived from judges' decisions (which arise from the judicial branch of government), rather than statues or constitutions (which are derived from the legislative branch of government). Source: http://www.ll.georgetown.edu/tutorials/definitions/common_law.html*

*** Napoleonic Code: Based on the primacy of statutes enacted by the legislature. These statutes are integrated into a comprehensive code designed to be applied by the courts with a minimum of judicial interpretation. Source: http://web.utk.edu/~scheb/foundations.html*

Once the parameters of the needs assessment have been agreed upon, it will be useful to:

- prepare a written statement to inform management and staff about the needs assessment; and
- draw up an action plan for the food legislation capacity building needs assessment including a time line, responsibilities, expected outputs and sources of funding (budget).

ANALYSING THE CURRENT SITUATION > > > > > > > > >

STEP 3: Gather and analyse information about food legislation

Access to legal texts directly related to food (including laws, regulations and standards) is essential to be able to critically examine the substance and scope of this legislation. This will often be available in an index of national legislation, which is publicly accessible. In addition to actual legal texts, it will be useful to consider any existing internal and/or external reviews focused on legislation to ensure that any lessons that have been learned are taken into account.

Conducting a situation analysis offers a way to assess the extent to which food legislation: i) provides an enabling framework for food control; ii) meets the needs and expectations of food producers, manufacturers, traders and consumers; and iii) complies with the requirements of international agreements related to trade in food.

Analysing the state of food legislation will require information about the constitution, distribution of powers and rights and obligations of citizens, as well as the nature, scope and substance of laws, regulations and standards related to food. This should include information about how existing laws and regulations (at central, regional and local level) govern the production, processing, handling, distribution and sale of food. It should also address the extent to which they comply with the requirements of relevant international agreements, particularly the SPS and TBT Agreements under the WTO. Besides mandatory provisions, the needs assessment should also consider existing non-legislative measures such as voluntary agreements, GAPs, GMPs, GHPs and codes of conduct where they exist.

Table M2-2. Dimensions of capacity in the legal and regulatory framework for food control at the system level

Policy framework	• Characteristics of any government policy frameworks that provide overarching guidance for the development of food legislation • Operating principles (e.g. risk analysis) for food control
Food law	• Number and scope of food law(s) • Form, definitions and content • Date of approval of food law or most recent amendments • Enforcement responsibilities, mechanisms and penalties for non-compliance • Harmonization with international requirements and recommendations (incl. Codex)
Food regulations	• Number and scope of food regulations • Form, definitions and content • Enforcement responsibilities, mechanisms and penalties for non-compliance • Harmonization with international regulations and recommendations (incl. Codex)
Food standards (mandatory and/or voluntary)	• Number and scope of mandatory food standards • Form, definitions and content • Enforcement responsibilities, mechanisms and penalties for non-compliance (for mandatory standards) • Harmonization with international standards (including Codex) • Certification responsibilities for voluntary standards

Examining the scope and substance of food laws, regulations and standards in the country will help to determine to what extent they provide an enabling (or disabling) framework for food control. Table M2-2 summarizes these dimensions.

Food legislation provides an essential backdrop for all food control activities. The capacity of organizations and individuals involved in different aspects of food safety and quality from farm to table is dependent, in part, on the effectiveness of the national framework of food law, regulations and standards. Therefore, it will also be important to consider how these laws and regulations are understood, interpreted, implemented and enforced in practice. The internal capacity of regulatory agencies – in terms of mandate, operations, number and skills of staff, financial resources, etc. – is obviously a critical part of the overall success of legislation. For instance, the existence of institutional overlaps and gaps, corruption or limited financial resources may sometimes obstruct implementation. In other cases, the existence of unrelated laws, or inadequate knowledge of food legislation on the part of those who are regulated, may undermine implementation. Where such barriers exist, the outcomes will tend to be unsatisfactory regardless of how well legislation has been formulated.

Considering how food laws and regulations are implemented will therefore require the team carrying out the situation analysis to "zoom in" to examine dimensions of capacity in the organizations responsible for the development, implementation and enforcement of food legislation, and compliance (see Table M2-3).

Depending on the type and source of the information sought, the team can use different methods (see Table M2-4) to gather the information required for the situation

Table M2-3. Dimensions of capacity for food legislation at the organizational level

Development and administration of food legislation	• Capacity of organizations responsible for the development and administration of food legislation *See Module 1 on Food Control Management*
Enforcement of food legislation	• Capacity of organizations responsible for enforcement of legislation *See Module 3 on Food Inspection*
Compliance with food laws and regulations	• Capacity of food enterprises required to comply with food legislation (access to information about food legislation, knowledge and ability to implement standards and codes of practice, etc.)
Institutional relationships, interdependencies and cooperation	• Interactions and relationships between agencies concerned • Division of roles, responsibilities, mandates • Mechanisms for consultation of stakeholders from farm to table

Table M2-4. Methods to collect information on food legislation

Method	***Purpose***
Literature review	• Collection, review and analysis (by legal and sector experts) of existing legal documents (including laws, regulations, standards, circulars, orders and decrees) related to food control, veterinary control, fish products, etc. • Broadly indicate to what extent laws, regulations and standards meet or fail to meet current needs, challenges and requirements related to food safety and quality, and trade • Provide an informed basis to identify the desired future legal and regulatory framework for food control (under Step 5)
Focus group discussions	• Enable government officials involved in developing, administering, implementing and/or enforcing food law and regulations to discuss strengths, weaknesses, opportunities, threats (SWOT Analysis) of food legislation
Stakeholder consultations	• Obtain views and opinions from stakeholders responsible for implementing, enforcing and/or complying with food legislation • Increase awareness about the role of food legislation in enhancing food safety and quality

Box M2-4 Checklist for food legislation

Does food legislation:
- provide an enabling framework for the identification and enforcement of food safety measures based on risk analysis?
- adequately protect consumers?
- clearly set out the responsibilities of stakeholders along the entire food chain (food producers, processors, manufacturers and retailers) to supply safe, wholesome food that is fit for human consumption?
- provide for appropriate enforcement and control measures including effective, proportionate and dissuasive sanctions and penalties?
- take account of international recommendations and requirements particularly the Codex Alimentarius as well as relevant regional agreements?
- provide food safety authorities with a clear mandate and authority to prevent food safety and quality problems before they occur?

Is food legislation:
- developed in consultation with all relevant stakeholders from farm to table?
- written in clear, concise language that is easily understood by all parties concerned with compliance and enforcement?
- based on high quality, independent and scientific advice using risk analysis?
- documented in a single publication that is easily available to all concerned stakeholders (government officials, consumers, food producers, processors, manufacturers, traders, retailers, etc.)?

analysis. It is advisable to start with a systematic and detailed review of available literature including those legal texts identified as relevant during Step 2. A thorough review of existing food laws, regulations and standards will indicate to what extent existing legislation provides a sound framework for food control activities from farm to table by indicating where there are gaps, overlaps, inaccuracies, discrepancies and/or outdated content. The findings of this review should be clearly and carefully documented. Guidance on how to carry out a literature review for food legislation is provided in the resources annexed to this module. Other methods for information collection – such as focus group discussions and stakeholder consultations – can complement the findings of the literature review by indicating the level of capacity to implement and enforce legislation.

Responding to the questions in the checklist will help to review and analyse the existing situation of food legislation (see Box M2-4). A number of other resources to support information collection and analysis are available in the resources annexed to this module. They include templates to support information collection and guidance to conduct a literature review for food legislation, carry out a stakeholder analysis and focus group discussions etc. They can be modified and adapted as needed to fit the particular circumstances in the country.

Who should be consulted during the situation analysis? Officials in government ministries and agencies responsible for developing, administering and/or enforcing food legislation will provide important information and insights during the situation analysis. In most cases, it will also be useful to consult those responsible for compliance with existing legislation including food producers, manufacturers and traders. Producers, processors, manufacturers and traders need to be aware of and understand the scope and requirements of food legislation to be able to comply. Consumers need to be confident that food legislation provides adequate protection against food safety hazards and fraudulent practices. Conducting a stakeholder analysis can help to identify the stakeholders that have an interest in food legislation in the country. Guidance to conduct focus group discussions with some of the main stakeholders responsible for enforcing and/or complying with food legislation is available in the resources annexed to this module.

STEP 4: Document and discuss the findings of the situation analysis

The situation analysis will reveal important information and insights about the content of food legislation and how it is implemented. At this stage, the team should document the strengths and weaknesses of existing legislation and its implementation, as well as any

relevant opportunities and threats using SWOT analysis (see the SWOT analysis scenario in the resources annexed to this module). These findings will play a vital role in helping to assess capacity building needs on the basis of current strengths and weaknesses. Therefore, it will be essential to clearly and comprehensively document the findings so that they can subsequently be shared and discussed with the various groups concerned.

Although the findings of every situation analysis will be different, some kinds of information should always be included in such a report. A template for a situation analysis report is available in the resources annexed to this module.

CONSIDERING THE FUTURE AND IDENTIFYING CAPACITY BUILDING NEEDS > > > > > >

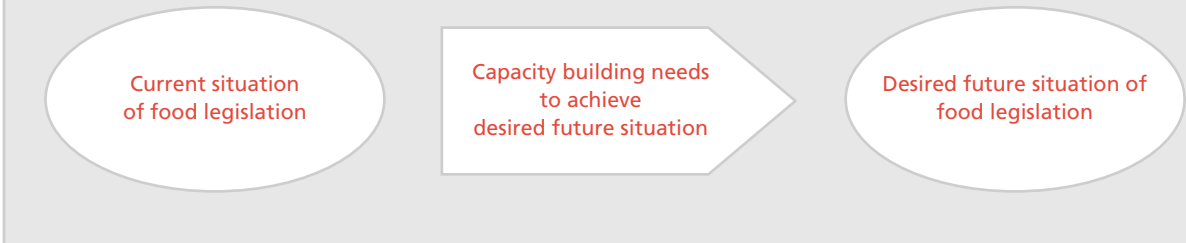
STEP 5: Define the desired legal and regulatory framework for food control in the medium term

A capacity building needs assessment asks two main questions: "where are we now?" and "where do we want to be?" This step in the assessment process enables officials in the concerned government agencies to define the desired situation of food legislation in the medium term (approximately five years). Having a clearer understanding of the future is important to be able to determine capacity gaps. When the desired future situation is compared to the existing situation, the capacity building needs can be more precisely identified and measured.

A description of the desired future situation of food legislation in the medium term can be developed through discussions and brainstorming sessions involving officials from the government agencies concerned, and representatives of other stakeholders such as the food industry, consumers and consumer organizations, academic and research institutions, etc. The aim of these discussions will be to discuss the purpose, role and principles of food legislation based on an understanding of existing legislation related to food, national goals and priorities that may affect the development of food legislation, and internationally accepted criteria or benchmarks of effective food legislation (see Box M2-5).

Although national circumstances and legal systems differ widely across countries, some guiding principles and benchmarks characterize effective food control legislation. Referring to such benchmarks provides a means to learn from good practices and ensure that the objectives set for the future are in line with international recommendations. It may also be useful to look at food legislation enacted by other countries to get an understanding of different approaches to, and types of, food legislation (for instance in the definition of food, the scope of legislation, enforcements powers, etc.), as well as other guidelines and resource materials (see below). In particular, the FAO Legislative Study No. 87 offers recommendations for the preparation of a basic national food law, including three variants of a new model food law (for a single agency system, multiple

Figure M2-1 Identifying capacity building needs for food legislation



Box M2-5 Internationally accepted benchmarks for food legislation

Within the overall context of the country's constitution, food legislation:

i. protects consumer health and consumers interests;
ii. clearly defines the roles and responsibilities of government agencies responsible for food control, and mechanism for interactions between them;
iii. provides an enabling framework for rules and regulations needed for the effective operation of a science-based food control system;
iv. includes clear definitions to ensure consistency and legal security;
v. is based on risk analysis governed by high quality, transparent and independent scientific advice;
vi. ensures transparency in the development of food regulations and standards, and access to information;
vii. incorporates checks and balances to avoid abuse of powers;
viii. clearly defines enforcement powers and procedures (e.g. prohibition orders, improvement notices, closure and other orders, etc.);
ix. provides for appropriate enforcement and control measures including effective, proportionate and dissuasive sanctions and penalties;
x. includes clear provisions that indicate that primary responsibility for food safety and quality rests with producers and processors;
xi. includes obligations to ensure that only safe and fairly presented foods is placed on the market;
xii. includes provisions for accurate and sufficient information on food products;
xiii. provides for the approval, registration or licensing of food premises;
xiv. defines the appointment of authorized officers;
xv. provides for the tracing of food products and their recall in case of problems; and
xvi. recognizes the country's international obligations, particularly in relation to trade.

agency system and integrated system). Involving external facilitators can be useful to incorporate experiences and approaches from other countries. By ensuring that the discussions are grounded on an understanding of the current situation of food legislation, the vision that emerges should also be realistic and achievable.

Discussing the following questions can also help to envision the desired future of food legislation:

- What is the desired goal of food legislation?
  The overarching goal of food legislation should be to provide adequate protection of human health and safety based on an integrated approach from farm to table, and to protect consumer interests by preventing deceptive practices. Different countries articulate this goal in different ways.
- What is the desired scope of food law?
  Food legislation should be broad enough to adequately cover all aspects of food production, handling, storage, processing, distribution, sale and/or consumption in the country. It should take into account particular legislative, cultural, political and social traditions, as well as consumer demands and preferences.
- How should stakeholders be involved in the formulation of food legislation?
  Food law and regulations are most effective when they are clearly understood and supported by all the stakeholders along the farm to table continuum. Ensuring the concerns and needs of stakeholders are heard and reflected during the development of legislation will improve understanding of the need for laws and regulations, and enhance compliance.

Relevant resource materials

- **FAO.** 2005. *Perspectives and guidelines on food legislation, with a new model food law.* Legislative Study No. 87 (available at: http://www.fao.org/Legal/legstud/list-e.htm).
- **FAO/WHO.** 2003. Guidelines for developing a national food law. Annex 6. In

Assuring food safety and quality. Guidelines for strengthening national food control systems. Food and Nutrition Paper No. 76 (available at: ftp://ftp.fao.org/docrep/fao/006/y8705e/y8705e00.pdf).

- Codex Alimentarius standards for raw, processed and/or semi-processed foods (available at: www.codexalimentarius.net/standard_list.asp).
- Codex Alimentarius general provisions covering food hygiene, food additives, pesticide residues, contaminants, labelling and presentation, methods of analysis and sampling (available at: www.codexalimentarius.net/standard_list.asp).

STEP 6: Identify capacity building needs to strengthen food legislation

A capacity building need is a gap between "what is" (the present) and "what should be" (the desired future). Capacity building needs can be identified by comparing the present situation of food legislation (the results of the situation analysis) with the desired future situation (the outcome of the previous step). In addition, it will be necessary to consider whether any major changes in the future (for instance membership of the WTO or regional trade groupings) are likely to place new demands or requirements on food legislation.

The process of identifying capacity building needs should be participatory and consultative. It should involve both technical and legal experts from government agencies

Table M2-5. Matrix to identify capacity building needs for food legislation

	Column A	*Column B*	*Column C*
Food legislation	***Current Situation***	***Desired Future Situation***	***Capacity Building Needs***
Content and substance of food law, regulations and standards	• What are the current strengths and weaknesses in the policy setting, content and substance of legislation for food control? • What opportunities are there to improve the policy setting, content and substance of food control legislation? • What threats might hinder improvements to food control legislation?	• What should the legal and regulatory framework for food control address and achieve in the medium term?	• What actions are required to strengthen the legal and regulatory framework for food control?
Implementation and enforcement of food legislation	• How are food law(s), regulations and standards currently implemented and enforced? • What opportunities are there to improve the implementation of food control legislation? • What threats might hinder improvements to the implementation of food control legislation?	• How should food control legislation be implemented and enforced in the medium term?	• What are the needs to improve the capacity of government agencies responsible for implementing and enforcing food control legislation?

responsible for the development of food legislation, as well as representatives from agencies responsible for enforcement, and food enterprises and other groups responsible for compliance. Asking the food industry for inputs and feedback on proposed changes will provide another perspective and often highlight areas of overlap or conflict in legislation (such as in the mandates of food inspectorates).

Facilitated workshops and focus group discussions can be used to enable concerned stakeholders to participate in the identification of needs. These sessions will provide an opportunity to link the outcomes of the situation analysis with the outcomes of the exercise to consider future goals. By enabling relevant government agencies to engage in a structured discussion that compares the existing situation of food legislation with the desired future situation, it will be possible to identify the capacity building needs and changes required to reach the objectives set for the future.

The matrix in Table M2-5 provides support to structure these discussions and identify capacity building needs. The findings of the situation analysis can be used to complete Column A. The outputs of the previous step can be used to describe the desired future situation of food legislation in Column B. Once this has been completed, it will be possible to identify the capacity building needs (Column C) to move from the present situation to the desired future situation.

Where a number of needs are identified, it will be important to discuss and rank them in terms of priority, sequencing and the resources required. This information could then be used to help raise additional sources of funds from internal or external sources.

STEP 7: Determine options to strengthen food legislation based on the identified needs

Once the capacity needs for food legislation have been identified, it will be possible to determine and discuss the options to improve food law, regulations and standards. This step involves the development of a list of such options, and a consideration of their costs and benefits. This will provide an empirical basis to improve government decision making and action.

Countries can address capacity needs in food legislation in different ways. For instance, possible options may include, but not be limited to, the following:

- Develop a new food safety policy, which includes a framework for legislative development
- Harmonize and update existing laws, regulations and/or standards related to food
- Formulate a new food law and supporting regulations
- Move from prescriptive legislation towards an approach based on risk analysis
- Rely on industry self-regulation and consumer education
- Change the way in which food legislation is enforced
- Involve stakeholders (consumers and their organizations, food industry, academia, etc.) in the legislative development process

The various options considered will have different costs and benefits to government, consumers and their organizations, food enterprises and other stakeholders. For instance, amending existing legislation may be the cheapest and easiest way for government to meet the capacity needs identified. However, the outcome may be cumbersome and impenetrable for the individuals and groups that are responsible for implementation (e.g. food enterprises) and enforcement (e.g. food inspectors). On the other hand, the development of a new food law may raise national awareness about the importance of food safety and quality and provide a basis on which to incorporate new scientific knowledge and principles such as risk analysis. However, it will require high-level endorsement and may take several years to come into force.

Regulatory Impact Assessment (RIA) offers a method to analyse the costs and benefits of regulatory change, which can assist governments to determine where to expend resources with the maximum impact. It is particularly useful to countries undergoing major reforms of their legal frameworks as it helps to explore alternatives and provides relevant information to select the best options, contributing to the wider objectives of effective and transparent government. Guidance on how to carry out a simple RIA is provided in Part 3 of these Guidelines.

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ANNEX 2-1

Template for collection of information on food law(s)[8]

Country:		Date:	
Title of law	**Coverage/scope of sections dealing with food**	**Date of enactment (and amendments if any)**	**Responsible agency**

[8] Including relevant laws and acts enacted at different levels by decentralized units of government (such as state, provincial or district government) and covering all stages of the food chain from farm to table (i.e. production, processing, distribution/trade, retailing/catering, etc.)

ANNEX 2-2
Template for collection of information on food regulations

This template can be used to collect information about regulations covering food products, additives, contaminants, processing and packaging, labelling, health and hygiene, weights and measures, imports and exports, etc. This will include:

- Regulations for organizational or coordinating purposes
- Regulations affecting food products in general (horizontal regulations)
- Regulations affecting specific food products (vertical regulations)
- Schedules (e.g. lists of inspection and sampling analysis fees, models for application forms/certificates, etc.)

Country:		**Date:**	
Title	**Description of coverage/scope**	**Date enacted (and amendments if any)**	**Responsible agency**

ANNEX 2-3

Template for collection of information on food standards[9]

Country:		Date:	
Title	**Description of coverage/scope**	**Date (specify date enacted if legally binding and) amendments if any)**	**Responsible agency**

[9] Including both mandatory and voluntary standards covering food products, additives, contaminants, processing and packaging, labelling, health and hygiene, weights and measures, imports and exports, etc.

ANNEX 2-4

Template for collection of information on guidelines, codes of conduct and other related documentation

Country:		Date:
Title	**Description of coverage/scope**	**Responsible agency**

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ANNEX 2-5
Steps to conduct a literature review for food legislation

1. Information collection

Relevant legislative documents related to food safety and quality should be collected as an initial step including:

- Laws or acts related to the production, processing, handling, storage, trading, transportation, distribution, labelling, etc. of food produced for domestic consumption, food imports and food exports.
- Regulations, standards, codes of practice, good practices, etc. related to the production, processing, handling, trading, transportation, distribution, labelling, etc. of food produced for domestic consumption, food imports and food exports.
- Ministerial and administrative documents describing the mandates, roles and operating principles of different agencies involved in the administration and implementation of food legislation.
- Activity reports, guidelines and other documents produced by government agencies dealing with food legislation.

2. Review and analysis

Based on an analysis of the information collected, it will be possible to describe and critically examine the existing legislative and regulatory framework for food control. During this process, additional questions will become apparent. While it may be possible to respond to some of these based on the contents of the available material, other questions might be more difficult to answer at this point. Such questions should be noted and raised during interviews and focus group discussions with relevant government authorities or external stakeholders.

The types of questions that the literature review should seek to answer are given below. This list includes examples and is not exhaustive.

2.1 National legal framework

- What is the type of legal system (e.g. civil law, common law, Napoleonic Code, other system) in the country?
- How are laws and regulations developed and enacted?
- How are legislative and executive functions and responsibilities distributed within different government institutions and at different levels?

2.2 Inventory of legislation related to food

- What laws, regulations and standards related to food currently exist at the central, provincial and/or local level (see template form for information collection), and when were they enacted/amended?
- Which existing policy frameworks provide the context for the development of food legislation?

2.3 Content and substance of legislation related to food

- Identify and analyse to what extent the legislation reveals contradictions or areas of overlap in institutional responsibilities for food control in the country?
- How does food legislation define food, contaminants, enforcement powers and procedures, etc.?
- Identify and analyse to what extent aspects of food safety and quality from farm to table are not addressed in food legislation?
- To what extent does the content of legislation provide for protection of consumer health?
- To what extent does the content of legislation protect against fraudulent practices and adulteration?
- To what extent do relevant parts of legislation encompass risk analysis (i.e. risk assessment, risk management and risk communication)?
- Does the existing law provide sufficient flexibility to revise food regulations and standards, and develop new regulations and standards as considered necessary?
- To what extent is existing legislation harmonized with regional and international standards particularly Codex?
- Does existing legislation cover biotechnology, genetically modified organisms, organic foods, novel foods and processes, irradiated foods, etc.?

- Does legislation cover agricultural inputs such as veterinary drugs, pesticides or animal feed and the risks related to their use?
- Does legislation address GAPs, GHPs, GMPs, HACCP, etc.?
- What are the penalties for non-compliance with food legislation? Are they too high, too low, fairly imposed?
- Are there adequate provisions to guarantee defence of those accused of infringing food laws and regulations?
- To what extent does food legislation facilitate food exports?
- Does the food law allow measures to be taken in emergency situations and for product recall?

2.4 Institutional mandates and implementation

- Which ministries/departments (central and local level) are involved in the development, administration, implementation and enforcement of laws, regulations and standards for food control?
- Are institutional mandates and operating principles (e.g. application of risk analysis) clear: i) based on the written legislation; and ii) in practice? What is the specific role of each of the institutions involved?
- Is there any duplication or overlap in roles and responsibilities: i) based on the written legislation; and ii) in practice?
- Are institutional mandates coordinated in practice? To what extent and how do the concerned agencies collaborate: i) on paper; and ii) in practice?
- To what extent is implementation of existing food law, regulations and standards supported or constrained by the following: availability of resources, stakeholder awareness, political commitment, corruption, transparency, laboratory support, etc.?
- To what extent are food producers, processors, distributors, consumers, etc. involved in the preparation of laws and regulations?

2.5 Participation in international standard setting bodies

- To what extent and how does your country participate in the Codex Alimentarius Commission?
- Which agencies are responsible?
- Is there a National Codex Committee or a multi-sectoral forum to formulate national positions?

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ANNEX 2-6

Legal and regulatory framework for food control: Matrix for stakeholder analysis

Steps to conduct a stakeholder analysis for food legislation

1. Identify all the government agencies in the country that influence food legislation, as well as the stakeholders that are affected by food legislation. Stakeholders can exist at different levels (national, provincial, local). List these groups in the Stakeholders Column. It will be useful to be as specific as possible in identifying stakeholders (e.g. name of concerned government ministries, departments and agencies). It may be useful to use a Venn diagram (see Part 3: Tools and Techniques) to visualize the relationships between the different stakeholders involved.
2. Once all the potential stakeholders have been identified, discuss the specific mandate, roles and/or interests of each of these in food legislation using the table below. The expectations of these stakeholders on the future desired situation of food legislation can be discussed in focus group discussions.

Stakeholders	**Current roles/interests** (what is their current mandate / role / interest in food legislation?)	**Future needs/expectations** (what would they like to see included in food legislation and why?)
Government agencies (central, regional and local)		
Food inspection services (independent or part of a government agency)		
Food laboratories (central, regional and local; official food control laboratories or independent)		
Food enterprises		
Consumers		
Judicial system / courts		
Other stakeholders		

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SWOT analysis scenario for food legislation

The following table gives an example of strengths, weaknesses, opportunities and threats relevant for food legislation in a hypothetical country.

	Positive	*Negative*
Internal factors	**Strengths** • Need for legislation was recognized more than 25 years ago and food law enacted • Food law includes some key definitions • Some regulations and standards have been prepared to respond to national economic and cultural requirements	**Weaknesses** • Food law is fragmented and incoherent • Laws governing food are out-dated • Food law does not cover food from farm to table • Food law is not based on risk analysis • Legal provisions are overlapping • Regulations and standards not revised to reflect scientific and technological progress, changes in the global trade environment and requirements of new trade agreements • Overlapping responsibilities for enforcement • Wide variations in how legislation is implemented by different agencies/services and in different parts of the country • Little coordination between agencies responsible for implementation of food legislation • National standards and regulations have not been harmonized with Codex • External stakeholders (consumers, food enterprises) are poorly informed about food law and regulations • Lack of analytical expertise to assess compliance with food legislation
External factors	**Opportunities** • Membership of Codex Alimentarius Commission • Membership of WTO • Opportunities to obtain financial assistance from donors to enhance capacity to meet WTO membership requirements • Increasing consumer interest in food safety and quality • Availability of legal expertise in the country • Availability of specialized knowledge on WTO matters within the country • Law reform commission established	**Threats** • Internal resistance to legislative reform from some parts of the government • Confusion between the powers allocated to different levels of government in a decentralized system • Weak judicial institutions and country system that is over-burdened and under-financed • Many competing development challenges and needs likely to detract attention of policy makers from food safety and quality • Lack of understanding by politicians of the international and socio-economic implications of food safety and quality • Lack of risk analysis capabilities in regulatory agencies • Official food control laboratories lack the capability to assess compliance

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ANNEX 2-8
Focus group discussions on food legislation with food inspectors

Objective
To obtain views and insights from a representative group of food inspectors on the adequacy and performance of existing food law, regulations and standards.

Participants
Up to 12 representatives from food inspectorates.[10]

Possible questions
1. To what extent are existing food law and regulations accessible (in printed format) and easy to understand?
2. How knowledgeable are most inspectors about current food legislation? What are the main gaps in knowledge if any?
3. To what extent does existing food law and regulations allow, encourage or constrain food inspection?
4. To what extent are existing laws risk-based?
5. What are the main strengths and weaknesses of existing food legislation?
6. To what extent is food legislation adequately enforced in different parts of the country?
7. To what extent is the distribution of resources (human, financial, equipment, etc.) for food inspection equitable throughout the country?
8. Is more than one agency responsible for enforcement of the same law? If so, to what extent is there consistency in enforcement?
9. To what extent are food producers, processors, manufacturers, traders, retailers, etc. familiar with and/or knowledgeable about existing food legislation?
10. To what extent is self-regulation (codes of practice, standards, etc.) effective and relevant in the foodstuffs sector?
11. What changes would you like to see in existing food legislation and why?

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[10] If more than one agency is involved in food inspection, it may be useful to conduct focus group discussions with each. This will enable opinions and perspectives from different inspection services to be expressed freely and subsequently compared.

Focus group discussions on food legislation with representatives of food enterprises and consumer organizations

Objective

To obtain views and insights from representatives of the food industry (including small and medium-sized enterprises), consumers and their organizations on the adequacy and performance of existing food legislation

Participants

Up to 12 individuals representing food enterprises involved in food production and/or processing for the domestic market and/or export, and/or representatives of consumers and their organizations.[11]

Possible questions

1. To what extent is existing food legislation (laws, regulations, standards) accessible (in printed format) and easy to understand?
2. To what extent are you familiar with and/or knowledgeable about existing food legislation?
3. To what extent is there consistency in the enforcement of legislation by food inspectors?
4. What are the main strengths and weaknesses of existing food legislation from your point of view?
5. To what extent does food law and regulations grant food enterprises the freedom and flexibility required to ensure food safety and quality?
6. To what extent does existing food legislation support or promote exports?
7. How could compliance with food law and regulations be improved?
8. To what extent is self-regulation (codes of practice, standards) effective and relevant in the foodstuffs sector?
9. What changes would you like to see in food legislation and why?

Note

Depending on the availability of resources and country circumstances, it may be useful to consider conducting focus group discussions:

- in different parts of the country to ensure that the feedback received is representative (particularly in large countries or where there are diverse production systems, etc.)
- addressing specific sectors such as food imports, food exports, street foods, food processing plants, etc.

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[11] Focus group discussions can be conducted with representatives of food enterprises and consumer organizations jointly or separately as appropriate.

ANNEX 2-10
Template for situation analysis report for food legislation

Introduction

The following template can be used to help structure and document the findings of the various surveys, interviews, focus group discussions, etc. that are carried out to collect information on the existing situation of food legislation in the country. It lists the main components of a situation analysis report and provides an example which could be adapted as needed to national circumstances.

Terms of Reference: The reasons for conducting the situation analysis.

Acknowledgments: Recognize people who helped with the profile.

Summary of Findings/Recommendations: What are the key points or issues identified? List any results by order of importance.

Methodology: Explain what was done, how it went, and what was learned in the process. For instance, which groups were consulted and how? Could the analysis have been improved? These questions may be of assistance later, if ever the profile needs to be updated, or the findings need to be cross-checked.

Findings: Based on the findings of the literature review, focus group discussions, SWOT Analysis, etc., describe the current state of food legislation. For instance, this should address, amongst others, the following questions: What laws, regulations and standards exist? What do they cover? When were they written and/or amended? Are they clear and easy to understand? Do they cover the food chain from farm to table? Are they based on independent scientific advice? Do they clearly identify the responsibilities of stakeholders from farm to table? Do they encompass risk assessment, risk management and risk communication? Are there any gaps or inconsistencies? To what extent are they harmonized with international requirements (e.g. Codex, SPS, TBT) and regional agreements (e.g. Mercosur, ASEAN, Gulf Cooperation Council, etc.)?

Weaknesses: Present information that your group was not able to find or knowledge that was lacking to complete the required analysis.

Appendices: Present other relevant information such as main results of surveys or copies of questionnaires used. This may be useful for follow up.

Sources: List the main sources of information including key persons interviewed, focus groups, external stakeholders consulted, etc.

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Sample agenda for a needs assessment workshop for food legislation

Objective

To review the findings of the situation analysis for food legislation, discuss the optimal desired future situation of food legislation, and identify capacity building gaps

Participants

- Technical and legal experts from the government agencies responsible for developing, implementing and enforcing food legislation
- Representatives of the food industry, and consumers and their organizations

Day one – morning

- Introduction to situation analysis and needs assessment process
- Presentation of the findings of the situation analysis for food legislation
- Review, discuss and reach consensus on the findings

Day one – afternoon

- Review the purpose of food legislation and internationally accepted benchmarks
- Discuss to what extent food legislation in the country currently conforms with these benchmarks
- Discuss the desired future legal and regulatory framework for food

Day two

- Consider examples of how other countries have modernized their food legislation
- Define the capacity building needs and priorities for food legislation using the matrix to compare the existing situation and performance of food legislation to the desired future situation
- Rank needs in order of importance
- Rank needs in order of ease of implementation

ANNEX 2-12
Guidelines for developing a national food law[12]

The original 1976 FAO/WHO *Guidelines for Developing an Effective National Food Control System* contained a Model Food Law that has been used as a benchmark by many developing countries. Unfortunately this model has not always been appropriate because its precepts are not consistent with all legal systems. Many concepts and issues in food law have evolved over time and these were not reflected in the Model Food Law. In addition, strict adherence to the terms of the Model Food Law meant that many countries left out provisions, concepts and standards that their individual circumstances, administrative structures and legal frameworks required.

In this document, a set of guiding principles have been prepared. These principles describe a general approach to the drafting of food legislation, and as such they should be applicable to different legal systems. There is no substitute, however, for an in-depth analysis of the legal framework and the institutional set-up that directly or indirectly govern food production, import, export, distribution, handling and sale in a particular country. Only in that way can the particular and unique national needs be met.

In addition to legislation, governments need updated and internationally accepted food standards. In recent years, many highly prescriptive standards have been replaced by horizontal standards that address the broad issues involved in achieving food safety and quality objectives. While horizontal standards are a viable approach to delivering food safety goals, they require a food chain that is highly controlled and supplied with good data on food safety risks and risk management strategies and as such may not initially be applicable in many developing countries.

In preparing food regulations and standards, countries should take full advantage of Codex standards and food safety and quality lessons learned in other countries. Taking into account the experiences in other countries while tailoring the information, concepts and requirements to the national context is the only sure way to develop a modern regulatory framework that will satisfy both national needs and meet the demands of the SPS Agreement, TBT Agreement and trading partners.

Form and Content of Food Law

Legal provisions relating to food regulate specific activities, namely the production, processing and sale of food. Such provisions are designed with specific purposes, such as health protection and/or the promotion of fair trade in food commodities. Most commonly, they are contained in a general law covering all food products. The law addresses specific aspects of food safety, food adulteration, food quality and food control, such as inspection, the use of additives, prevention of food contamination, food labelling and import controls. Most modern food legislation consists of a basic law upon which all other regulatory instruments are based. However, a number of countries have enacted, side by side with this basic law applicable to food products in general, other laws governing either a distinct sector of food law, certain types of food processing or specific legal aspects of the production of or trade in foodstuffs.

The general form of the basic law depends on the legislative traditions of the particular country. One established practice in highly industrialized common law countries is to enact comprehensive and detailed texts which bring together practically all general provisions which may concern food. In such cases there is little left for the administrative authorities to do beyond prescribing the technical procedures for enforcement and detailed provisions in respect of particular foods.

An alternative approach is to limit the contents of the basic law to the enabling provisions (i.e. those that set up the administrative structures to enforce the law), together with a few very general principles. This approach is to be found in a number of developing countries, as well as in many countries where Roman, German or Scandinavian law prevails. This system has an inherent flexibility in that, within the general framework laid down by the law, the

[12] Reproduced from: FAO/WHO. 2003. *Assuring food safety and quality. Guidelines for strengthening national food control systems.* Food and Nutrition Paper No. 76. Annex 6. See also: FAO. 2005. *Perspectives and guidelines on food legislation, with a new model food law.* Legislative Study No. 87.

necessary powers are delegated to the appropriate authority to make rules governing the administration of the law, and to prescribe technical regulations and standards for specific foods.

Another advantage of this second approach, in all legal systems, is that because the law is basic and all details are confined to the regulations and standards, changes can be made more easily and quickly. For example, regulations and standards may need to be changed in response to scientific advancements, and rather than approaching Parliament to amend the law, the relevant Minister or Ministers usually have the power to issue any appropriate regulations or schedules and can therefore act to take account of the new developments.

In principle, there are eight categories of provisions to be found in a basic food law:

(a) Scope and Definitions

The first category describes the ambit of the law and provides the tools for its interpretation. A provision in the food law stating its purpose, objectives and/or scope must clearly precede all others. This provision may have no real legal effect, but instead operates as a kind of policy statement explaining why the law was enacted and what purpose it is intended to serve. It also can state the areas covered by the law.

Countries often include a list of definitions of the main terms employed. In drafting the definitions, internationally agreed sources should be consulted, along with other national legislation on related issues. It must be emphasized that the list of definitions is not a glossary of food control terms in general. Those definitions that are included must be only those that appear in the body of the law. The definitions should not be overly detailed but should be designed solely for the purpose of application and interpretation of the law in question. In particular, the definitions should be drafted with consideration to who might challenge the law at some future date. For example, if the law contains a definition of ***to sell*** that provides that ***to sell means to exchange for money***, and if the law prohibits selling adulterated food, then someone charged with violating the law might hide proof of sale and attempt to argue that since he or she gave away the food for free (and not for money) the law was not violated.

(b) General Principles

In some legal systems, the basic food law contains a group of provisions articulating general principles that will govern the food control system. For example, the law may provide that all food in circulation in the country must be safe for human consumption, or the law may prohibit the adulteration of food. Other provisions may set out the basic rules to be observed by all persons engaged in the production, processing or sale of food. It should be borne in mind, however, that there exist many differences between countries. Some countries have a detailed statement of principles in the basic law, whilst others leave these principles to be laid down in general enforcement regulations, and still others include only a statement of objectives and purposes (as outlined above) and do not elaborate principles at all.

(c) Enabling Provisions

Every law must define the nature and the limits of the powers to be exercised under it and should designate the public authorities in whom those powers are to be vested. There are two categories of powers, namely formulation and control, which are usually not delegated to the same authority and which are not necessarily exercised at the same level of authority. Naturally, the law must also establish guidelines for and limitations on the exercise of these powers. Such enabling provisions establish the legality of the enforcement rules made by the executive authority and also protect private persons against that authority's arbitrary or excessive use of its powers. The powers vested in the government or executive authority under these enabling provisions relate to the formulation of rules for the implementation of the law and for the intervention of the authority in order to ensure that the laws and its accompanying regulations are being observed.

(d) Administrative Provisions

Most food laws contain a category of provisions that set up particular administrative structures to carry out the activities necessary to enforce the law. For example, the law may establish a Food Control Agency, which brings together the many official actors from various ministries who are implicated in food control in the country. The food law does not usually delve into great detail on the functioning of the Food Control Agency, but instead describes its mandate, defines its membership, outlines some basic rules regarding the appointment and resignation of members and the establishment of technical committees, and provides for a Secretariat, if any. The law may provide that all other details that will govern the actions of the Food Control Agency will be

established by regulation or by by-laws elaborated by the Agency itself. Other administrative structures that may or may not be created or defined in the food law are an inspection service and a licensing authority (for example to grant licenses to food manufacturers or importers). The law may also empower the Agency to delegate or license certain types of enforcement activities to different government agencies.

(e) Enforcement Provisions

Because no penalty may be imposed except by virtue of legal authority, food laws contain provisions delegating to an executive authority the power to sanction as well as to take preventive measures in the public interest. It goes without saying that the limits of such powers and the conditions governing their exercise must be laid down with precision in the basic law. Offences must be defined, along with the nature and limits of the penalties that may be imposed, together with the procedures for such imposition once the commission of an offence has been duly established. The law may also outline other necessary measures for the protection of the public, such as the seizure and confiscation of suspect food or the recall of products. It should be noted, however, that in some countries, specific offences and penalties are not elaborated, but instead the food law simply refers to the general provisions of the Criminal Code and the Code of Criminal Procedure.

With the trend away from an enforcement-oriented approach in food control, some countries have incorporated concepts from food control, such as HACCP, into their food laws. In general this may be achieved through the subsidiary regulations more than through the law, as the regulations may consist of elements such as guidelines for the inspection service. Under a purely enforcement-oriented approach, improper activities (packaging, transportation, etc.) would be described in the law, and any violation would be perceived and acted upon by an inspector so charged by the law. With a more collaborative and preventive approach, the inspectors might instead be charged with simply controlling the fact that a food enterprise is exercising its own controls on its production systems.

(f) Substantive Provisions

The food law will contain many substantive provisions relating to food control, production, import, export, transport, distribution and sale. These provisions may be very basic ("all food in the country must be safe for human consumption"), or may be more detailed, in which case the details are more likely to be found in the subsidiary legislation. For example, the regulations issued under the food law may outline all the precise information that must be contained on food labels (weight, name of manufacturer, sell-by date, etc.) and may even contain model labels in a specific format that must be followed throughout the country.

(g) Regulations

In most legal systems, the food law contains a provision or provisions listing the many subject matters that the Minister may address through regulations in order to carry out the purposes of the law. The main advantage of the regulations is that they can be easily changed. The list of regulations may be extremely detailed or it may simply give broad outlines to the kinds of topics that the Minister may address. In either case, the Minister's powers are rarely limited, as in almost all cases the food law will contain a general statement that the Minister may "make all regulations he or she deems necessary to achieve the purposes of this law."

(h) Repeal and Savings

Where a new food law makes significant changes to the food control system, existing laws or regulations may have to be amended or repealed. In such cases the food law will have to list which provisions in which other laws are to be repealed or altered. However, in order not to dismantle the food control system entirely, many laws contain a provision stating that any regulations made under any provision repealed under the new law remain effective, just as if they had been issued under the new food law itself.

Form and Content of Food Regulations

As noted, the topics that may be addressed by regulations made by the executive authority under the basic law may be very broad. Generally, they fall into four categories:

(a) Regulations Affecting Food Products in General

Usually the purpose of this category of regulations is to establish general rules regulating the contents, handling, packaging and labelling of food products. These kinds of regulations are of particular importance in countries which do not include in the basic law rules governing the manufacture, processing and sale of food but leave it to the Minister to introduce detailed regulations. But whether or not general principles are laid down in the basic law, in one way or another a

government authority must be entrusted with their implementation at the technical level.

(b) Regulations Affecting Specific Food Products

In many countries the provisions peculiar to each food may constitute specific and distinct regulations (for example novel foods, baby foods, special dietetic foods). The practice has developed in some other countries, however, of grouping such provisions, under different headings, into a comprehensive set of regulations governing food. Here, the legislative traditions may vary appreciably from one country to another.

(c) Regulations for Organizational or Coordinating Purposes

Although the main body of regulations putting into effect the food law will fall into the above two categories, there are a great number of internal regulations or 'house' rules that are of no direct concern to the public but which are required for the efficient operation of the administrative units created or empowered under the law. For example, regulations may address the functioning of the Food Control Agency, if any; the issuance, suspension and revocation of licenses of various kinds; the conduct of the inspection and analysis services; and so forth.

(d) Schedules

Many countries include detailed schedules among the subsidiary legislation to the basic food law. These will contain, for example, lists of inspection and sampling/analysis fees; models for application forms or certificates used under the law; and other detailed matters.

MODULE 3. ASSESSING CAPACITY BUILDING NEEDS IN FOOD INSPECTION

Introduction

Food inspection, based on risk analysis, is a vital component of a modern food control system. Food inspection protects consumers by ensuring that domestically-produced or imported food is handled, stored, manufactured, processed, transported, prepared, served and sold in accordance with the requirements of national laws and regulations. In addition, inspection and verification of food exports promotes confidence in the safety and quality of exports, which is essential for international trade.

This module provides a step-by-step guide to plan and carry out a capacity building needs assessment for food inspection. Although it has been designed for official inspection systems, it can easily be adapted for use with officially-recognized inspection systems. References are made to internationally accepted benchmarks, principles and guidelines for food inspection; however, this module is not intended to be a theoretical guide to food inspection.

The target audience includes:

- staff of official inspection systems covering food including managers and inspectors; and

Box M3-1 Definitions of food inspection and certification

Food inspection is the examination of food or systems for the control of food, raw materials, processing and distribution, including in-process and finished product testing, in order to verify that they conform to requirements. Food inspection services can be operated by government agencies, as well as independent organizations that have been officially recognized by national authorities.

Certification is the procedure by which official certification bodies and officially recognized bodies provide written or equivalent assurance that foods or food control systems conform to requirements. Certification of food may be, as appropriate, based on a range of inspection activities which may include continuous on-line inspection, auditing of quality assurance systems, and examination of finished products. Certification system means official and officially recognized certification systems.

Official inspection systems and official certification systems are systems administered by a government agency having jurisdiction to perform a regulatory or enforcement function or both.

Officially-recognized inspection systems and officially-recognized certification systems are systems which have been formally approved or recognized by a government agency having jurisdiction.

Source: FAO/WHO. 1997. Guidelines for the design, operation, assessment and accreditation of food import and export inspection and certification systems. *CAC/GL 26-1997 (available at: ftp://ftp.fao.org/docrep/fao/005/X4489E/X4489E00.pdf).*

Box M3-2 Guiding questions for a capacity building needs assessment of food inspection

Keep the following questions in mind while working through this module:

1. What is the existing situation and performance of food inspection services? Are they risk based?
2. What is the desired future situation of food inspection services?
3. What are the major gaps in the current capacity of food inspection services?
4. What are the requirements to improve the performance of food inspection services?

- officials in related government departments and ministries involved in food control.

Use of this module provides a means to:

- profile the current situation and performance of food inspection;
- identify capacity gaps and needs in the area of food inspection; and
- increase awareness about the role of food inspection within an overall food control system.

GETTING STARTED >

STEP 1: Establish a team to manage the capacity building needs assessment process

Once the decision has been made to assess food inspection capacity building needs, a small team should be established to manage and lead the overall process. This team should be composed of individuals from the main agencies involved in food inspection. It will be responsible for leading and managing the needs assessment process for food inspection.

The exact nature and composition of the team should reflect the institutional set-up for food inspection in the country. Different countries have different types of arrangements for food inspection and the officials involved in inspection can be referred to by many different titles (such as food inspectors, food and drug inspectors, environmental health officers, food safety officers, public health inspectors, veterinary inspectors, food hygienists, food control officers, etc.) depending mainly on their employer. For instance:

- Some countries have designated one particular agency for food inspection and inspectors from this agency inspect only food products.
- Some countries have one national inspectorate that addresses a range of products including food, drugs, household products, cosmetics, etc. In these cases, inspectors normally spend just some of their time inspecting food. These inspectors may have a technical background related to food, however, often their training may be in another area (such as pharmacology, environmental health, fraud, etc.).
- Some countries have several departments or agencies, within different government ministries, dealing with food inspection. In these cases, inspectors with responsibility for food can be based in the ministry of health, ministry of commerce, ministry of agriculture, ministry of fisheries, etc.
- In some countries, responsibility for food inspection may be shared among central, regional and local agencies.

To be comprehensive, the team should include representatives from each of the inspection groups, departments or agencies that deal with food on an exclusive or partial basis. It could also include officials from government agencies responsible for food control management, as well as representatives of those served by food inspectorates (such

as consumers and food enterprises) as a means to obtain external inputs and views, and avoid conflict of interest situations.

STEP 2: Define the scope of the capacity building needs assessment

Before getting started, it will be important to decide on the scope of the needs assessment. Responding to the following questions will help to define the scope:

- Which food inspection agencies will be included in the capacity building needs assessment?
- Will the needs assessment focus on the inspection of: i) food produced and sold domestically; ii) food imports; and/or iii) food exports?
- Will all foods of animal and non-animal origin be addressed by the needs assessment?
- What will be the geographic scope (national, sub-national, regional, local, etc.) of the assessment?

Considering the above questions will help to focus the situation analysis, and provide a better indication of the time and resources needed.

In some countries, several different agencies perform food inspection services under the responsibility of government ministries concerned with health, commerce and trade, agriculture and fisheries, industry, etc. These inspection agencies often work independently of each other, with overlapping mandates and responsibilities.
A capacity building needs assessment provides a good opportunity to review and clarify the roles and mandates of existing food inspection services, helping to minimise gaps in coverage, reduce duplication and improve performance. Therefore, all the agencies involved in food inspection should ideally be involved. Identifying these agencies and bringing them on board will be an important initial step in the capacity building needs assessment process.

Once the team has agreed on the scope and objectives of the situation analysis, it will be useful to prepare:

- a written statement to inform internal staff and management about the needs assessment; and
- an action plan for the needs assessment including a time line, responsibilities, expected outputs and budget (specifying the source of funds).

ANALYSING THE CURRENT SITUATION > > > > > > > > >

STEP 3: Gather and analyse information about food inspection

Once the scope of the needs assessment has been defined, the team can start to gather the information needed to build up a picture of the current situation and performance of food inspection in the country. This will indicate to what extent food inspection is based on a risk analysis approach, which provides an objective means to identify inspection priorities and allocate resources.

Analysing the situation of food inspection requires detailed information about the agencies involved including their formal roles and responsibilities, their human and financial resources, the quantity and quality of equipment and infrastructure available, their procedures, etc. (see Table M3-1). In countries where different ministries or agencies share responsibility for food inspection, it will be necessary to gather information about the respective roles, responsibilities and coverage of each. Some of this information will be quantitative and can be analysed statistically. Other information will be qualitative; it will help to explain what is happening, as well as describe how and/or why something is happening.

In addition, it will be important to consider dimensions of capacity at the system level. Understanding the overall context (system) in which food inspection agencies operate is essential given its influence on day-to-day operations and performance. For instance, although food inspectors are not responsible for developing food legislation and regulations, the adequacy or inadequacy of such laws and regulations will have a critical effect on the success of food inspection services. When regulations are inadequate or outdated, food inspectors will be unable to do their job properly. Or if several ministries are involved in food inspection and there is no coordination between them, then it is more likely that there will be duplication and or/gaps in the coverage of food inspection services. Therefore, the situation analysis should also consider the dimensions of capacity in the overall system as outlined below (see Table M3-2).

How to gather this information? Different methods can be used to gather and analyse information (see Table M3-3). The choice of methods will depend on the type and source of the information sought, and the local situation. Some methods will be more suited for gathering particular kinds of information than others.

Table M3-1. Dimensions of food inspection capacity at the organizational level
These dimensions should be addressed separately for different food inspection agencies

Mission and strategy	• Role, mandate and definition of services provided by each of the organizations involved in food inspection • Specific mandate for food inspection services (e.g. general sanitary, phytosanitary, veterinary, pharmacy, weights and measures, trade, etc.) and different types of premises
Organizational structure, competencies and culture	• Structure and management of food inspection services at different levels (central to lower levels) and linkages between them • Core competencies • Culture and values (e.g. honesty, integrity, diligence, etc.) of food inspectors including independence from outside pressures and commercial influences • Accountability of food inspectors
Operational aspects	• Methods used (e.g. sampling techniques, inspection manuals, others tools and materials, etc.) • Operational principles, processes and procedures for food inspection including risk analysis and systems for the prioritization and documentation of control activities based on high, medium and low risk[13] • National database of food premises categorized according to high, medium and low risk • Internal audit systems to monitor operation of inspection services • Number and types of clients served • Number of food inspectors per establishments served • Compliance policies and certification
Human resources	• Number of suitably qualified personnel • Technical knowledge and skills of inspectors (scope of specialized training on food) • Managerial expertise • Access to training (including refresher courses)
Financial resources	• Budget for food inspection activities • Budgetary allocations for different types of inspections (including extent to which resource allocation is based on risk)
Information resources	• Availability of electronic (e.g. databases, Intranet sites) and paper-based (e.g. reports) information resources for food inspection • Systems available for managing information related to food inspection
Infrastructure	• Buildings (offices), vehicles, etc. • Food inspection and sampling equipment and supplies • Computer and communications equipment

[13] See Annex 3-7 for a description of food businesses categorized by high, medium and low risk.

Information should be obtained from both internal and external stakeholders:

- Consulting staff within departments and agencies involved in food inspection will provide internal insights and opinions.
- Consulting the clients (e.g. food producers, food processors, food enterprises, establishments serving food) served by food inspectors, as well as representatives of consumer organizations, will be useful to provide an outside view of food inspection services.

A number of tools and templates to support information collection and analysis are presented in the resources annexed to this module, and can be modified as needed to fit

Table M3-2. Dimensions of food inspection capacity at the system level

Food legislation	• Support provided or constraints caused by existing food laws, regulations and standards • Legal/enforcement powers (enshrined in national legislation) that provide a clear and sound basis for food inspection services based on risk • Enforcement/compliance policies
Education and training	• Number and performance of technical schools, colleges, universities, institutes, etc. responsible for training food inspectors • Scope, relevance and quality of curriculum and training for food inspectors
Institutional relationships, interdependencies and cooperation	• Relationships between various agencies and institutions involved in food inspection • Division of roles and responsibilities between agencies involved in food inspection (duplication, overlaps, gaps in coverage) • Relationship with food laboratories

Table M3-3. Methods to collect information on food inspection

Method	*Purpose*
Stakeholder analysis	• To identify all the authorities (public and private) involved in the inspection of food, animal and fisheries products (covering production, processing, markets, distribution, etc.) throughout the country (at the central, regional and local level) • To visualize the linkages, information flows, overlaps, gaps, etc. between the institutions identified by producing an organizational chart (Venn diagram) and mapping relationships
Literature review	• To collect and analyse available documents related to food inspection (e.g. organizational mandates, operational rules and procedures, government decrees and circulars, annual reports, trade data, reports on rejections and detentions, etc.)
Inventory of equipment	• To take stock of the infrastructure and equipment that is currently available for food inspection
Focus group discussions	• To enable a representative sample of food inspectors dealing with different types of inspection, different clients or in different parts of the country to discuss their capacity in different areas, and identify strengths, weaknesses, opportunities, threats (SWOT analysis), etc. • To generate awareness among food inspectors about the need for capacity building and indicate how much consensus there is about capacity gaps and needs • To enable a representative group of clients of food inspection (food producers, processors, exporters, etc.) to provide their views and opinions on food inspection
Key person interviews	• To obtain in-depth information about food inspection from key persons (leaders of inspection agencies, external organizations that have provided support for food inspection, etc.)
Survey (questionnaire)	• To obtain information from a large number of stakeholders that would be impossible to interview individually: e.g. survey to consult food inspectors about their day-to-day work, equipment, qualifications, etc. or to ask food enterprises (including SMEs) about the services provided by food inspectors

country circumstances. They provide guidance to review relevant documents, conduct focus group discussions with food inspectors and their clients, carry out a SWOT analysis for food inspection, etc.

Although the situation analysis should aim to obtain a broad overview of food inspection, it will be important not to become lost in too much detail. Having a plan, identifying the key types of information sought and setting a clear time frame for the situation analysis will help to avoid this.

The time taken to carry out the situation analysis will depend on the scope of the situation analysis and the size of the country. In countries with relatively small populations (less than 10 million inhabitants), it may be possible to conduct the situation analysis in 3 to 4 days. More time will be needed in larger countries.

STEP 4: Document and discuss the findings of the situation analysis

This situation analysis will reveal strengths and weaknesses in the organization and operation of food inspection. It will also provide indicators that will be useful to help plan and monitor subsequent capacity building activities.

It will be important to document and discuss the findings of the situation analysis in order to help identify needs. Although the findings of every situation analysis will be different, some kinds of information should always be included in such a report. A template for a situation analysis report is presented in the resources annexed to this module.

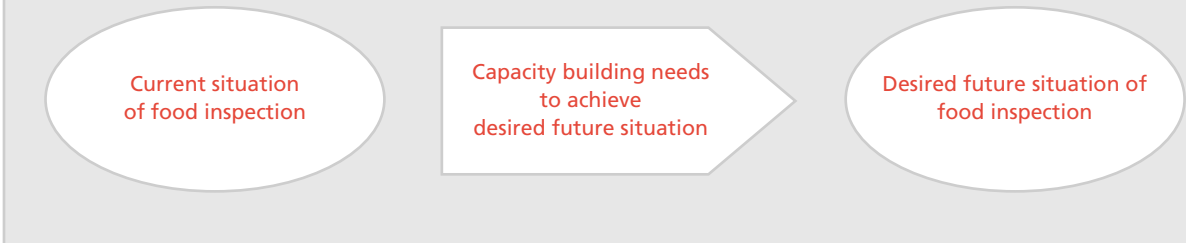
CONSIDERING THE FUTURE AND IDENTIFYING CAPACITY BUILDING NEEDS > > > > > >

STEP 5: Define the desired future situation of food inspection in the medium term

A capacity building needs assessment for food inspection asks two main questions: "where are we now?" and "where do we want to be?" This step in the assessment process concentrates on defining the future direction and role of food inspection. Having a clearer understanding of the future desired situation of food inspection is important to be able to determine capacity gaps. When the desired future situation is compared to the existing situation, the capacity building needs can be more precisely identified and measured.

A broad description of the desired situation of food inspection in the medium term (approximately five years) can be developed through discussions and brainstorming sessions involving officials from each of the agencies dealing with food inspection. The aim of these discussions will be to visualize the purpose, role, values and operation of food inspection, based on an understanding of the present situation and internationally accepted benchmarks of effective food inspection (see Box M3-3). Referring to

Figure M3-1 Identifying capacity building needs for food inspection



benchmarks of effective food inspection provides a way to learn from good practices and ensure that the objectives set are in line with international recommendations. Taking into account the present situation will help to ensure that the future scenario produced is realistic and achievable.

Defining the desired future of inspection services is an important task, and cannot be left to just one or two people. It will be beneficial to involve the leaders of all inspection agencies and any other national institutions or committees (such as a food control authority or food administration) that play a role in coordinating or managing food control activities at the country level. Internal employees should also be consulted to create acceptance and support for the subsequent capacity building activities and any related changes to the organization and operation of food inspection.

In addition to internationally accepted benchmarks, it may also be useful to keep in mind the core roles and responsibilities of food inspectors (see Box M3-4), as well as to refer to existing guidelines, principles or recommendations related to import and export inspection systems (see below).

Box M3-3 Internationally accepted benchmarks for food inspection

1. Existence of documented policies and procedures for risk-based inspection (including sampling) of domestically-produced, imported and exported food.
2. Existence of a national database of food premises that categorizes premises according to risk and includes food inspection records.
3. System for the collection, reporting and analysis of information related to food inspection.
4. Planning, implementation and monitoring of food inspection activities is based on high, medium and low risk.
5. Number of officers authorized to carry out work outlined in food legislation is adequate.
6. Food inspectors have suitable qualifications, training and experience, consistent with their authorization under food legislation.
7. Access to adequate resources, facilities, equipment and supplies for food inspection.
8. Reliable transportation and communication systems to ensure delivery of inspection services and transmission of samples to laboratories.
9. Consistency, fairness and honesty in the implementation of food inspection.
10. Documented procedures for the collection and submission of food samples to official food control laboratories, the request for analysis and reporting of results.
11. Documented procedures to respond to and manage food emergencies.
12. Documented procedures for the investigation and management of outbreaks of food-borne illnesses.
13. Documented procedures to respond to consumer complaints.
14. Documented procedures for food inspection are part of a quality management system.
15. Mechanism for review and evaluation of the food inspection system.

Box M3-4 Core responsibilities of food inspection services

Food inspection is essential to protect consumers by ensuring that food is handled, stored, manufactured, processed, transported, prepared, served and sold in accordance with the requirements of national laws and regulations.

Core responsibilities of food inspection services include:

- Risk-based inspection of food premises and processes for compliance with hygienic and other requirements of standards and regulations.
- Evaluation of HACCP plans and their implementation.
- Sampling of food during harvest, processing, storage, transportation or sale to establish compliance with regulations and standards, contribution of data for risk assessments and identification of offenders.
- Identification of different forms of food decomposition by organoleptic assessment, identification of food which is unfit for human consumption or food which is otherwise deceptively sold to the consumer and any necessary remedial action.
- Identification, collection and provision of evidence when breaches of law occur and appear in court to assist prosecution
- Inspection, sampling and certification of food imports and exports.
- Risk-based audits for food establishments using HACCP.

Source: FAO/WHO. 2003. Assuring food safety and quality. Guidelines for strengthening national food control systems. *Food and Nutrition Paper No. 76.*

In some cases, an appropriate mission and objectives for food inspection will already exist. However, in other cases, objectives for food inspection may need to be reviewed and revised. Often the same problems that food inspection was originally established to address (i.e. unsafe or adulterated food) will still exist but the methods to address the problem may have changed. Sometimes, it will also be necessary to re-examine the mission of the organizations that are responsible for food inspection services, especially if the situation analysis finds that several different agencies inspect food with unclear mandates and/or overlapping roles.

A mission statement can be formulated to describe the purpose of food inspection services, the methods used to achieve this purpose, and the basic beliefs and values that guide this work. This statement should seek to answer the following questions:

- What is the purpose of food inspection services? What does food inspection seek to accomplish?
- What services are performed in order to achieve this purpose?
- What principles (e.g. risk-based, science-based, etc.) and values (e.g. honesty, integrity) guide the work of food inspection?

Once there is agreement on the purpose of the inspection agencies, objectives can be set. The objectives set for food inspection should be '***SMART***' – in other words, they should be:

- **S**pecific so that they are clear and easy to understand
- **M**easurable and able to be quantified so that it is possible to measure progress
- **A**chievable and realistic given the circumstances in which they are set and the resources available
- **R**elevant to the country's needs and to the food inspectors responsible for achieving them
- **T**ime bound with realistic deadlines for achievement

Relevant resource materials

- **FSAI.** 2000. *Code of practice on the risk categorisation of food businesses to determine priority for inspection.* Code of Practice No. 1. Food Safety Authority of Ireland (FSAI).
- **FAO/UNEP/WHO.** 1984. *Manuals of food quality control. Food inspection.* Food and Nutrition Paper 14/5. Reprinted 1997.
- **FAO/WHO.** 1995. Principles for food import and export inspection and certification. Codex Alimentarius Commission. CAC/GL 20. In *Codex Alimentarius Commission combined texts on food import and export inspection and certification systems* (available at: ftp://ftp.fao.org/docrep/fao/005/X4489E/X4489E00.pdf).
- **FAO/WHO.** 1997. *Guidelines for the design, operation, assessment and accreditation of food import and export inspection and certification systems.* Codex Alimentarius Commission. CAC/GL 26 (available at http://www.fao.org/DOCREP/005/X4489E/x4489e03.htm).

STEP 6: Identify capacity building needs to strengthen food inspection

Capacity building needs can be identified by comparing the present situation (the results of the situation analysis) with the desired future situation of food inspection (the outcome of the previous step). It will be important to compare existing capacities of food inspection with current demands and expectations. In addition, it will be necessary to consider whether changes in demands or new challenges (e.g. trade requirements, transboundary food scares) are likely to require a different mix of skills and competencies, modified working procedures or a reformed institutional set-up for food inspection.

Table M3-4. Matrix to identify food inspection capacity building needs

	Column A	*Column B*	*Column C*
Food inspection	***Current Situation***	***Desired Future Situation***	***Capacity Building Needs***
Legal and regulatory framework	• What is the legal and regulatory framework for food inspection?	• How should the legal and regulatory framework for food inspection look five years from now?	• What legal revisions or amendments are needed to bring about the desired legal and regulatory framework for food inspection?
Mission and strategy	• What is the mandate and strategy of the various agencies involved in food inspection? • Are there any overlaps or gaps in coverage?	• What should the desired future institutional set-up of food inspection be? • How should the mandate and strategy of food inspection look five years from now?	• What changes (legal, institutional, etc.) are required to redefine and rationalize the mandate and strategy of food inspection?
Structure, procedures and culture	• How is food inspection organized? • Are food inspection priorities/frequencies based on risk? • What procedures, methods and processes are currently used? • What principles (e.g. risk-based, science-based) and values (e.g. honesty/dishonesty, integrity/corruption, trust/suspicion, reliability/irregularity, etc.) guide food inspection? • Are food inspections carried out consistently by officers at different locations?	• How should food inspection be organized in the future? • What new or amended processes, procedures and methods should be in place five years from now? • What principles and values should guide food inspection five years from now?	• What changes are required to rationalize the organizational structure of food inspection in line with the future vision? • What is required to introduce new procedures and methods and ensure their effective adoption and use? • What is required to encourage food inspectors to adopt the desired principles and values?
Human resources	• What is the current level (quality and quantity) of technical and managerial skills among food inspection service(s)? • What is the current curriculum and nature of training for food inspectors?	• What core skills and competencies should be available to food inspection service(s) five years from now? • What training should food inspectors have five years from now?	• What is required to upgrade the skills of food inspectors and management in line with the future vision? • What is required to improve training and develop improved curriculum in line with the future vision?

(Cont.)

Table M3-4 (cont.). Matrix to identify food inspection capacity building needs

	Column A	*Column B*	*Column C*
Food inspection	***Current Situation***	***Desired Future Situation***	***Capacity Building Needs***
Financial resources	• What financial resources are currently available for food inspection? • To what extent do they meet current needs? • Are resources for food inspection allocated according to high, medium and low risk? • How is food inspection funded?	• What financial resources should be available for improved food inspection services? • How should resources for food inspection be allocated? • Should new sources of revenue for food inspection be generated?	• What changes are required to arrive at the desired level and allocation of resources?
Information resources	• What types of information are currently available to food inspectorates? • How is information about food inspection managed (collected, stored, analysed, distributed, etc.)?	• What information should be available to food inspectorates five years from now? • How should information about food inspection be managed?	• What is required to improve access to required information? • What is required to improve information management for food inspection?
Infrastructure and equipment	• What equipment is currently available for food inspection and how is it used?	• What equipment should be available five years from now?	• What is required to improve access to and use of essential equipment?
External linkages and interdependencies	• How do food inspectors currently cooperate with concerned institutions and groups (e.g. food control agencies, laboratories, food enterprises, consumers and their organizations, etc.)?	• How should food inspectors and other concerned institutions and groups work together five years from now?	• What mechanisms and other changes are required to improve relationships and collaboration between food inspectorates and other concerned groups?

The process of identifying these needs should be participatory and transparent in order to increase acceptance of the proposed changes among food inspectors and support implementation and sustainability. Facilitated workshops and focus group discussions can be used to encourage the participation of food inspectors. A sample agenda for a needs assessment workshop is presented in the resources annexed to this module.

At these workshops and discussions, the above matrix (see Table M3-4) can be used to help identify capacity building needs. The steps carried out until now will help to complete the matrix. The findings of the situation analysis (Steps 3 and 4) can be utilized to complete Column A. The outputs of Step 5 (the desired future situation of food inspection) will be helpful to complete Column B. Once this has been done, it will be possible to identify the capacity building needs (Column C) based on the differences between current capacity and the desired future situation.

Sometimes the needs identified will be numerous and impossible to address at once. Therefore, it will be important to differentiate between what is essential and what is

simply desirable, and to prioritize the identified needs by focusing on the areas, resources and capabilities believed to be most important, as well as the time it takes to implement activities including sequential requisites.

STEP 7: Determine options to strengthen food inspection based on the identified needs

Once the capacity building needs have been identified, it will be possible to identify options to strengthen the capacity of food inspection based on existing strengths and weaknesses, as well as the opportunities and threats.

Reviewing the available options will clarify the range of actions that may be taken to achieve the desired future situation and objectives. This step will involve the development of a list of such actions. For instance, options may include, but not be limited to, one or more of the following:

- Clarification of the roles of different agencies involved in food inspection to eliminate duplication and gaps in coverage
- Moving away from random end-product inspection towards a risk-based system that includes auditing the control procedures carried out by the private sector
- Development of a computer-based system for the risk-based categorization and management of food inspection information
- Replacement and/or upgrading of essential food inspection equipment
- Information and education programmes on quality assurance targeted at food enterprises
- Publication of an updated food inspection manual
- Adjustments to food inspectors' salaries to reflect qualifications, responsibilities and market rates
- Provision of selected inspection, testing and training services on a user-pays basis

Some of the proposed options may require additional resources, for instance to improve the availability of equipment or quality of human resources for food inspection. Others may require a clarification of mandates and roles, the development of improved operational procedures and processes, or a change in the approach or culture of the agencies or individuals concerned. In some cases, the main priorities to improve the performance of food inspection may relate to needs in the broader food control system such as the need for revised food laws or regulations. What is important is that the options are based on, and tailored to, the requirements and priorities emerging from the needs assessment.

The various options considered will have different costs and benefits to stakeholders. For instance, moving away from random end-product inspection towards a risk-based system, that includes auditing control procedures carried out by the private sector, will likely result in greater effectiveness and cost savings. However, there will be costs associated with the transition from one system to another including the costs of training personnel in systems management and auditing. Carrying out a simple Cost Benefit Analysis helps to identify and quantify the costs and benefits of the various options under consideration (see the Regulatory Impact Assessment and Cost Benefit Tool in Part 3 for guidance).

Once capacity building needs in food inspection and options to address them have been identified, it will be possible to prepare a strategy for capacity building. This strategy can be used to mobilize resources from within the country, as well as from external donors.

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Document review for food inspection

1. Information collection

Collect existing documents related to the inspection of food including:

- Organizational charts of the agencies involved in food inspection and enforcement
- Ministerial and administrative documents describing the mandates, functions and responsibilities of agencies involved in food inspection and enforcement
- Laws or regulations that provide rules and procedures for food inspection and enforcement
- Food inspection manuals or procedures
- Activity reports and other relevant documents produced by agencies involved in food inspection and enforcement
- Inventory of equipment available for food inspection
- Previous internal and external reviews of food inspection and lessons learned
- Trade data (including on rejections and detentions), annual reports, etc.

2. Review and analysis

The documents gathered should be reviewed in order to answer the following questions as far as possible. Information obtained using self-assessment workshops, focus group discussions and/or surveys will provide a means to supplement and cross-check the findings of the document review:

1. How is the food sector structured? What are its characteristics?
2. Which government ministries/agencies are involved in food inspection?
3. What are their respective roles and responsibilities for the inspection of food manufacturing establishments, food processing and storage establishments, food retail establishments and markets, catering and food-serving establishments, slaughter houses, etc.?
4. How is food inspection organized (e.g. by geographical area, by the type of foods inspected, according to the risk category of food businesses, etc.)?
5. What is the frequency of food inspection?
6. Is the frequency of food inspections based on risk (high, medium and low)? Do establishments with greater risk receive more inspections?
7. What is the ratio of food inspectors to the population served?
8. What is the ratio of food inspectors to the number of establishments served?
9. What are the procedures for the inspection of food manufacturing or processing plants; markets and shops; slaughter houses; eating places, etc.?
10. What procedures are used for: sampling; sealing, storage and transportation of samples; reporting; collection of evidence of non-compliance; handling consumer complaints, etc.?
11. What are the procedures for the inspection of food imports and food exports?
12. What are the minimum qualifications for food inspectors?
13. What is the salary scale for food inspectors relative to officials with similar education/skills, and the potential for career development?
14. What is the status of food inspectors?

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ANNEX 3-2
Focus group discussions with food inspectors

Objective
To obtain information from inspectors about the procedures used for, and the performance of, food inspection services

Participants
Up to 12 inspectors from an agency involved in food inspection[14]

Possible questions
1. What is the scope of the food inspection services performed by your agency (e.g. general sanitary, phytosanitary, veterinary, pharmacy, trade, fraud, etc.)?
2. Does your agency have policies and procedures in place to guide food inspections?
3. To what extent do food inspectors in your agency have a specialized background in food?
4. Have you had training in the Hazard Analysis and Critical Control Point System (HACCP)?
5. What types of clients do you serve? How many clients do you serve?
6. Do you have access to any operational manuals, procedures, etc. related to food inspection? To what extent are these useful or not, and why?
7. How much time (as a percentage of a day or week) is typically allocated to food by inspectors in your agency?
8. Do you have adequate equipment to perform your job?
9. How do food inspectors in your agency work with official food control laboratories?
10. To what extent does existing food legislation (food law, regulations, standards) support or hinder food inspection, and why?
11. How do food inspectors react to a food-borne emergency? Is there a plan for the operation of food inspection during emergencies?
12. How are priorities for food inspection set? To what extent are they based on high, medium and low risk?
13. Do you communicate regularly/share information with your colleagues at other locations in the execution of your duties?
14. Does your agency keep you up to date with recent developments relating to food safety and quality and food inspection?
15. Do food inspectors have opportunities for continuous professional development?

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[14] Where different agencies are involved in food inspection, separate focus group discussions could be carried out with inspectors from each.

Focus group discussions on food inspection with food enterprises

Objective

To obtain information about food inspection from food producers, processors, manufacturers, handlers and marketers

Participants

Up to 12 managers from food enterprises[15] including SMEs

Possible questions

1. How many times per year on average have food inspectors visited your enterprise during the last three years?
2. Were these visits announced or unannounced? If announced, how and when were you informed?
3. What did the visiting food inspectors generally check and how during these visits?
4. Did the food inspectors take any samples during their visits?
5. Were the food inspectors properly equipped to perform their functions in terms of their equipment and overall cleanliness?
6. Did you receive a written record of the outcome of the inspection?
7. Are you aware of the food laws and regulations that govern food inspection and how your company is expected to comply?
8. Does your enterprise independently implement any procedures (e.g. good manufacturing practices, HACCP, etc.) to enhance food safety and quality?
9. Does your enterprise pay a fee for food inspection services received?
10. If no, under what circumstances would your enterprise be willing to consider paying a fee for food inspection services?
11. How do you rate the level of knowledge of food inspectors who have visited your enterprise?
12. In your opinion, how could food inspection services be improved?

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[15] Depending on the resources and time available, a series of focus group discussions could be organized with different types of food enterprises (e.g. according to their size, products, manufacturing processes used, locations, focus on exports, etc.) to ensure as many views as possible feed into the process.

ANNEX 3-4

Focus group discussions on food inspection education and training

Objective

To obtain information about food inspection education and training from food inspection trainers/educators and food inspectorate managers

Participants

Up to 12 individuals from education and training institutes/colleges/universities as well as food inspectorate managers

Possible questions

1. What does education and training for food inspectors encompass (subjects, focus, etc.)?
2. What is the average duration of training for food inspectors?
3. What are the strengths of the current education and training system for food inspectors?
4. What are the weaknesses of the current education and training system for food inspectors?
5. Are there any gaps in the current curriculum?
6. To what extent does the current curriculum meet the demands of food inspectorates?
7. To what extent are food inspectorates involved in the development of education and training for food inspectors? How could this be improved in the future?
8. Does the food inspection agency keep you up to date with its needs relating to the skills of persons qualifying at your training institution?

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SWOT analysis scenario for food inspection

The following table gives an example of strengths, weaknesses, opportunities and threats related to food inspection in a hypothetical country.

	Positive	*Negative*
Internal factors	**Strengths** • Network of food inspectors throughout the country • Some food inspectors trained in use of modern sampling and inspection techniques • New electronic system for record keeping introduced successfully • Food inspection manual translated into local language • Dynamic leadership of some agencies involved in food inspection • Good system of rewards and incentives (e.g. overtime pay, promotion possibilities, use of car vehicle for private transport) for food inspectors • Industry has established quality assurance system that requires auditing by food inspection services • Etc.	**Weaknesses** • Overlapping mandates and jurisdictions of agencies involved in food inspection • Food inspection still focused on detection of food safety problems after they occur and not based on risk categorization • Insufficient knowledge and equipment for sampling and tests • Insufficient budget • Periodic reports of corruption and fraud • Limited enforcement ability • Increased work load of food inspectors • Lack of accountability • Etc.
External factors	**Opportunities** • Efforts to harmonize national standards with Codex • Network of laboratories throughout the country • Growth of consumer associations • Increased attention to food safety and quality in the country and region • WTO membership • Establishment of equivalency • Quality assurance by industry • Etc.	**Threats** • Food regulations are out-dated • Limited capacity of official food control laboratories in food analysis • Limited knowledge of food hygiene among food producers and food processors • Increased frequency of transboundary food hazards • Political instability (strikes or civil unrest) in part of the country • Apathy • Etc.

ANNEX 3-6
Template for situation analysis report for food inspection

Introduction

The following template can be used to help structure and document the findings of the various surveys, interviews, focus group discussions, etc. that are carried out to collect information on the existing situation of food inspection. It lists the main components of a situation analysis report and provides an example which could be adapted to the particular circumstances in the country.

Terms of Reference: The reasons for conducting the situation analysis.

Acknowledgments: Recognize those that have helped with the profile.

Summary of Findings/Recommendations: What are the key points or issues identified? List any results by order of importance.

Methodology: Explain what was done, how it went, and what was learned in the process. For instance, could your analysis have been improved? What are the major weaknesses in the accuracy or validity of your data? How were stakeholders consulted? These questions may be of assistance later, if ever the profile needs to be updated, or the findings cross-checked.

Findings: Based on the information collected during the situation analysis, describe the existing situation of food inspection, addressing *inter alia* the following: Describe the current situation of food inspection. How does the overall context or environment (e.g. institutional set-up, laws and regulations) influence inspection? Which organizations are involved? What is their mandate and role? How do they operate? What resources do they have available? What are the achievements and weaknesses of each?

Implications for the Future: Are these trends likely to continue or are they expected to change (e.g. is there a new law in the making? Are any external projects to enhance inspection in the pipeline)? It is a good idea to identify and explain any relevant external circumstances including both positive and negative ones.

Appendices: Present information that does not fit appropriately elsewhere e.g. main results of surveys or copies of questionnaires used. This will help those who may wish to follow-up on the findings in more detail and to know on what evidence conclusions were based.

Sources: List the main sources of information including key persons interviewed, external stakeholders consulted, etc.

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Setting food inspection priorities based on the risk categorization of food businesses

Introduction

During the analysis of the existing situation of food inspection and discussions to define the desired future situation in the medium term, it will be important to consider to what extent food inspection is based on risk. The following table presents a categorization of risk[16] in the context of food inspection and can be used to help structure these discussions.

Food business	Any undertaking (profit or non-profit, public or private) that carries out any or all of the following relating to foodstuffs: • preparing • processing • manufacturing • packaging • storing • transporting • distributing • handling or offering for sale or supply
High-risk business	In general, business where the potential exists to put vulnerable groups or large numbers of consumers at serious risk due to: • the nature of the food (e.g. ready-to-eat) • the manner of food preparation or processing • the facilities provided • the control system in place
Medium-risk business	In general businesses where high-risk ready-to-eat foods are not prepared but the scale of the business is large. Such foods include: • shellfish/fish (cooked and raw) • raw meat • cooked meat/poultry and meat/poultry products • milk and milk products • egg and egg products, etc.
Low-risk business	In general, businesses where the potential to cause harm to consumers is low. For instance: • primary producers of honey • manufacturers of cereal products, jams and jelly, oils and fats • packers of tea, herbs, spices, nuts, etc.

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[16] Based on: FSAI. 2000. *Code of practice on the risk categorisation of food businesses to determine priority for inspection*. Code of Practice. No. 1. Food Safety Authority of Ireland (FSAI). Dublin (available at: http://www.fsai.ie/publications/codes/COP_risk_categorisation.pdf).

ANNEX 3-8
Sample agenda for a needs assessment workshop for food inspection

Objective
To discuss the findings of the situation analysis, discuss and agree on the desired future situation of food inspection, and identify capacity building needs

Participants
- Technical and managerial officials involved in food inspection
- Representatives of food producers, processors, exporters, consumer organizations, etc.

Day one – morning
- Introduction to situation analysis and needs assessment process
- Presentation of the findings of the situation analysis for food inspection
- Review, discuss and reach consensus on the findings of the situation analysis

Day one – afternoon
- Discuss the core roles of food inspection, internationally accepted benchmarks and good practices
- Identify trends that will likely affect the future needs and role of food inspection

Day two – morning
- Discuss and reach agreement on the mission and objectives of food inspection

Day two – afternoon
- Define capacity building needs and priorities for food inspection using the matrix to identify capacity building needs and other tools
- Rank needs in order of importance
- Rank needs in order of ease of implementation

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MODULE 4. ASSESSING CAPACITY BUILDING NEEDS IN OFFICIAL FOOD CONTROL LABORATORIES[17]

Introduction

Food control laboratories are an essential part of a national food control system. Analysis of food samples for physical, chemical and microbiological contamination is important to verify the safety and quality of food (including compositional characteristics, nutrition values, adulteration, presence of contaminants, etc.) that is produced domestically, imported and/or exported, and to enable appropriate action to be taken to protect consumers whenever necessary.

Laboratories are responsible for analysing food samples to detect, identify and quantify contaminants (such as pesticide residues or heavy metals), and for analysing specimens from humans and foods implicated in food-borne illness outbreaks to identify the causes and sources. They also provide support for food law enforcement. The scientific information produced by food control laboratories also informs and supports policy and decision making processes related to food safety and quality, for instance to design surveillance and monitoring programmes that target priority hazards or to investigate adulteration, misleading information, fraud, consumer complaints, disease outbreaks, etc. and other emerging food safety and quality issues.

This module provides a step-by-step guide to plan and carry out a capacity building needs assessment of official food control laboratories. References are made to internationally accepted benchmarks and principles for official food control laboratories; however, this module is not intended to give a theoretical guide to food analysis.

The target audience is:

- staff of official food control laboratories including managers and analysts; and
- officials in government agencies and ministries with responsibility for official food control laboratories.

Use of this module provides a means to:

- profile the current situation and performance of official food control laboratories;
- identify capacity gaps and needs in the area of official food control laboratories; and

Box M4-1 Guiding questions for a capacity building needs assessment of official food control laboratories

Keep the following questions in mind while working through this module:

1. What is the existing situation and performance of official food control laboratories?
2. What is the desired future situation of official food control laboratories?
3. What are the major gaps in the current capacity of official food control laboratories?
4. What are the requirements to improve the performance of official food control laboratories?

[17] Including both government laboratories and laboratories accredited by government.

- increase awareness about the role of official food control laboratories within a national food control system.

GETTING STARTED > > > > > > > > > > > > > > > > > > >

STEP 1: Establish a team to manage the capacity building needs assessment process

Once the decision has been made to assess the capacity building needs of official food control laboratories, a small team should be established to manage and lead the overall process. This team should be composed of laboratory analysts and managers, as well as representatives of government ministries with jurisdiction for laboratory analysis. Given the role of this team, it will be important to ensure that the team members include a mix of staff with the ability to encourage and ensure participation of staff within their respective organizations.

STEP 2: Define the scope of the capacity building needs assessment

Before getting started, it will be useful to decide on the scope of the needs assessment. Responding to the following questions will help to define the scope:

- Which laboratories (public and private, reference and specialized, etc.) at central, regional and local level are involved in food analysis (physical, chemical and microbiological)? Which ones will be included in the needs assessment?
- What is the geographic scope (national, sub-national, regional, local, etc.) of the assessment?
- Will the needs assessment consider capacity of official food control laboratories for routine analysis as well as capacity during food-borne emergencies?

In many countries, a number of different official food control laboratories are responsible for the routine analysis of food and food products for compliance with regulations, and for analysis in outbreak situations. These laboratories are often affiliated to, or under the jurisdiction of, different government agencies (such as agriculture, health or industry ministries) or authorities in different parts of the country. In order to ensure a comprehensive capacity building needs assessment, the scope of the assessment should ideally cover all the official food control laboratories (including government laboratories and others that have been accredited to provide services to government) in the country. However, in some cases particular circumstances (such as the availability of donor funding) may result in the scope of the assessment being narrowed, for instance to focus on official food control laboratories in specific geographic areas.

Once the team has agreed on the scope and objectives of the situation analysis, it will be useful to prepare:

- a short written statement to inform internal staff and management about the needs assessment; and
- an action plan for the needs assessment including a time line, responsibilities, expected outputs and budget (specifying the source of funds).

ANALYSING THE CURRENT SITUATION > > > > > > > > >

STEP 3: Gather and analyse information about laboratory analysis

Once the scope of the needs assessment has been defined, the team can start to gather the information needed to document the current capacity of official food control laboratories in the country.

Table M4-1. Dimensions of capacity of official food control laboratories at the organizational level

These dimensions should be considered for all the laboratories included in the needs assessment

Mission and strategy	• Mandate • Priorities for analysis (including time devoted to food and non-food analysis)
Organizational structure, competencies and culture	• Structure and management • Core competencies • Accreditation status • Policy for analytical quality assurance (AQA) • Culture and values of staff (scientific integrity, honesty) including independence from producers, processors, food enterprises, etc. • Membership in any scientific networks
Operational aspects	• Types of food analysis performed (physical, chemical, microbiological) • Sampling protocols and analytical procedures: sampling, sample preparation and analysis; collection, transportation, handling and storage of samples; methods and procedures used; criteria for adopting methods; use of international standards (e.g. GLP, ISO/IEC 17025); reporting and documentation; quality assurance; method validation and data quality evaluation; statistical procedures; safety, general housekeeping, etc. • Number and types of clients served • Ability to keep pace with technological advances in instrumentation and analytical techniques, and requirements of food law
Human resources	• Quantity and quality (qualifications, skills, training) of managerial, analytical (microbiological and chemical) and support staff
Financial resources	• Annual budget allocation • Operating expenses (salaries, maintenance, supplies, etc.) • Cost recovery / income generated per year (fee for different analyses, type of clients)
Information resources	• Systems for record keeping and information management (electronic and paper-based) • Availability of information on relevant international standards and guidelines • Access to scientific/technical publications, journals and other related information
Infrastructure and equipment	• Premises/buildings (including type and quality of power supply, air-conditioning, safety features, etc.) • Computer and communications equipment • Equipment and instruments (essential and sophisticated, calibration and maintenance) • Supply of standard reference materials, certified reference materials and microbial cultures • Type and quality of calibration facilities (and other support services) available internally or externally

The capacity of food control laboratories in any country depends on a range of factors. Internal characteristics of individual laboratories – such as the quality and quality of equipment and instruments available, the skills and qualifications of staff, procedures and methods used for analysis, etc. – are obviously important determinants of the ability to perform routine food analysis and to deal with emergencies (see Table M4-1).

In addition to considering the internal capacity of official food control laboratories, the situation analysis should also consider the system or framework within which they operate (see Table M4-2). The ability of official food control laboratories to carry out food analyses will be less than optimal if there are weaknesses in this system. For instance, laboratories cannot meet their food analysis objectives without a clear mandate. Furthermore, outbreak investigations can be delayed when laboratories are not informed about outbreaks of food-borne illnesses in certain areas. Similarly, the results obtained by laboratory analysis depend on the quality of the food samples provided by food inspectors.

Different methods, including interviews, focus groups discussions, document reviews, etc., can be used to gather and analyse information about official food control

Table M4-2. Dimensions of capacity of official food control laboratories at the system level

Food legislation	• Framework provided by food laws, regulations and standards (e.g. types of food analysis legally required, food standards)
Institutional relationships, interdependencies and cooperation	• Division of roles and responsibilities among official food control laboratories • Collaboration with other laboratories inside or outside the country (e.g. information exchange, inter-laboratory proficiency testing, contaminant monitoring studies) • Consistency in data collection, methods, reporting, etc. including existence of a national database of analytical results • Links between official food control laboratories, public health institutions (including those involved in food-borne disease surveillance and investigations) and academic institutions
Food inspection	• Type, quantity and quality (authenticity and integrity) of samples provided by food inspection services *See Module 3 on Food Inspection*
Food control management	• Procedures for approval and accreditation of official food control laboratories • Feedback and use of results • Communication of results to concerned stakeholders • Type of programme in place to decide on the type and frequency of analysis of samples • Enforcement functions (e.g. responsibilities to serve as expert witness for legal action)

Table M4-3. Methods to collect information on official food control laboratories

Method	***Purpose***
Institutional analysis	• To identify all the official food control laboratories working at different levels (including reference laboratories) and involved in different types of food analysis, and the agencies under which they operate. • To produce an organizational chart to visualize the linkages, information flows, overlaps, gaps, etc. between them
Literature review	• To collect and analyse available documents related to official food control laboratories (e.g. organizational mandates, operational rules and procedures, laboratory publications, government decrees and circulars, etc.)
Self-assessment workshops / focus groups	• To enable a representative sample of laboratory analysts and managers to discuss their capacity in different areas, and identify strengths, weaknesses, opportunities, threats (SWOT analysis), etc. • To generate awareness about the need for capacity building and indicate how much consensus there is about capacity gaps and needs
Key person interviews	• To obtain in-depth information about laboratories from key persons involved in the supervision, management or analysis of food samples
Client consultations	• To enable representatives of food inspection services and government agencies responsible for food control management to provide their views and opinions on analyses performed by official food control laboratories • To enable a representative group of clients of official food control laboratories (food industry, consumers and their organizations, etc.) to provide their views and opinions on analyses performed by official food control laboratories

laboratories (see Table M4-3). The choice of methods will depend on the type and source of the information sought. Some methods will be more suited for gathering particular kinds of information than others.

Consulting staff of official food control laboratories – including analysts, technicians and managers – will provide internal insights and opinions about the existing capacity for food analysis. In addition, by consulting external stakeholders – such as food inspectors, staff of official food control authorities, employees of accreditation agencies and food enterprises – it will be possible to get an external opinion about the capability and performance of official food control laboratories.

A number of tools and templates to facilitate information collection and analysis are included in the resources annexed to this module, and can be modified as needed to fit country needs. They include assistance to conduct focus group discussions, review documents related to official food control laboratories, and produce an inventory of laboratories and their equipment and instruments, etc.

The time taken to carry out the situation analysis will depend on the number of official food control laboratories in the country, and the scope of the needs assessment as agreed upon in Step 2. In countries with a small number of official food control laboratories, the situation analysis can be conducted relatively quickly. Countries with more official food control laboratories will require more time.

STEP 4: Document and discuss the findings of the situation analysis

This situation analysis will reveal strengths and weaknesses in the organization and operation of official food control laboratories. It will also provide a set of indicators that will be useful to help plan and monitor subsequent capacity building activities.

It will be important to document and discuss the findings of the situation analysis in order to help identify needs. Although the findings of every situation analysis will be different, some kinds of information should always be included in such a report. A template for a situation analysis report is presented in the resources annexed to this module.

CONSIDERING THE FUTURE AND IDENTIFYING CAPACITY BUILDING NEEDS > > > > > >

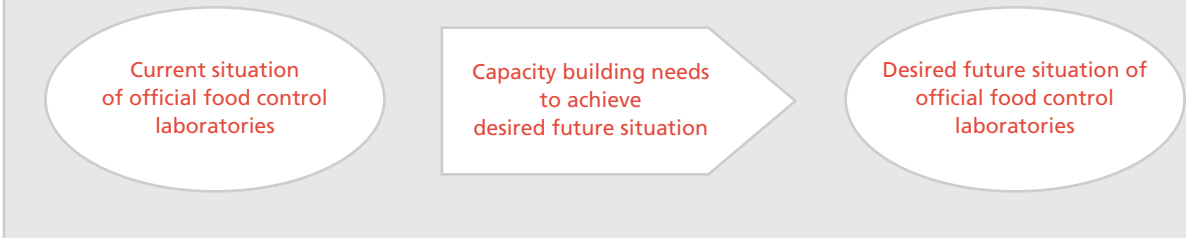
STEP 5: Define the desired future situation of official food control laboratories in the medium term

A capacity building needs assessment for official food control laboratories asks two main questions: "what is the current situation of capacity in official food control laboratories?" and "what is the desired future situation of capacity in official food control laboratories?" This step in the assessment process concentrates on defining the future.

Official food control laboratories provide an important supporting function to the national food control system. However, often little attention has been given to discussing the overall purpose of food analysis and the objectives of official food control laboratories within the food control system. Considering these questions is important in order to be able to define the desired future situation of official food control laboratories in terms of their role and performance, and to identify the capacity building requirements to achieve this improved future situation.

A broad description of the desired situation of official food control laboratories in the medium term (approximately five years) can be developed through discussions

Figure M4-1 Identifying capacity building needs for official food control laboratories



Box M4-2 Internationally accepted benchmarks for official food control laboratories

1. Adequate number of suitably located food control laboratories to support the food control system
2. Adequate number of specialized (reference) laboratories for contaminants, food-borne disease organisms, etc.
3. Documented procedure for the approval and accreditation of official food control laboratories according to international standards
4. Existence of a network of official food control laboratories, accredited to carry out specific analytical tests, and for appellate purposes as necessary
5. Adequate number of: i) food analysts with suitable qualifications, training, experience and integrity; ii) management staff; and iii) support staff
6. Official food control laboratories have adequate infrastructure, facilities, equipment, supplies and reference materials, and access to calibration and maintenance
7. Official food control laboratories have an operating quality assurance programme including participation in inter-laboratory proficiency testing
8. Validated analytical methods are used wherever available
9. Existence of a manual of official analytical methods and Standard Operating Procedures (SOPs)
10. Effective linkages between official food control laboratories and the food control system including food inspection
11. Effective linkages between official food control laboratories and the public health system for food-borne disease surveillance, as well as any other relevant laboratories

and brainstorming sessions involving laboratory staff, as well as affiliated ministries and other agencies involved in food control management. This process should engage laboratory managers and analysts, as well as food control managers, in exploring various possibilities for the future based on an understanding of internationally accepted benchmarks for official food control laboratories (see Box M4-2), recognized good laboratory practices (GLPs) and good management practices, and international recommendations for food analysis. Referring to internationally accepted benchmarks provides a way to learn from good practices and ensure that the vision of the future is in line with international recommendations. Taking into account the present situation will help to ensure that the resulting scenario for the future is realistic and achievable.

The aim of these discussions will be to visualize the purpose, role, values and operation of official food control laboratories. Discussing and reaching consensus on the answers to the following questions can help to visualize and describe an improved system for official food control analysis in broad terms:

- What is the purpose of food analysis? What does analytical testing seek to accomplish?
- What services are required in order to achieve this purpose?
- What basic principles should underpin food analysis performed by official food control laboratories?

In some countries, particular events – such as increased consumer concern about food safety following a serious outbreak of food-borne disease or the need to demonstrate that food exports comply with international food safety regulations – may have altered the context in which official food control laboratories operate. These factors should be considered in discussions about the desired future situation and role of official food control laboratories. Similarly, it will be important to take account of the size of the population served, the anticipated volume and complexity of food analysis, the capital-intensive nature of laboratories and their role in providing a support function to the food control system.

Relevant resource materials

- **FAO/WHO.** 1993. *Analysis of pesticide residues: Guidelines on good laboratory practice in pesticide residue analysis.* Codex Alimentarius Commission. CAC/GL 40 (available at: http://www.codexalimentarius.net/web/standard_list.jsp).
- **FAO/WHO.** 1997. *Food control laboratory management: Recommendations.* Codex Alimentarius Commission. CAC/GL 28-1995, Rev.1-1997 (available at: http://www.codexalimentarius.net/web/standard_list.jsp).
- **FAO/WHO.** 1997. *Guidelines for the assessment of the competence of testing laboratories involved in the import and export control of food.* Codex Alimentarius Commission. CAC/GL 27-1997 (available at: http://www.codexalimentarius.net/web/standard_list.jsp).
- ISO/IEC 17025. *General requirements for the competence of calibration and testing laboratories* (formerly ISO Guide 25 & EN45001).

STEP 6: Identify capacity building needs to strengthen official food control laboratories

Capacity building needs can be identified by comparing the present situation (the results of the situation analysis) of official food control laboratories with the desired future situation (the outcome of the previous step).

It will be important to compare existing capacities of food analysis with current demands and expectations. In addition, it will be necessary to consider whether changes in demands or new challenges (e.g. the need to demonstrate quality assurance or ensure a national accredited laboratory) are likely to require new competencies (e.g. new types of food analysis), modified working procedures or a reformed institutional set-up for food analysis.

The process of identifying needs should be participatory and transparent in order to increase acceptance of the proposed changes among the staff of official food control laboratories, and support implementation and sustainability. Facilitated workshops can be used to encourage this participation. At these workshops, participants could try to identify capacity needs by completing the following matrix.

The steps carried out until now will enable the matrix in Table M4-4 to be completed. The findings of the situation analysis (Steps 3 and 4) can be used to complete Column A. The outputs of Step 5 on the desired future situation will help to complete Column B. Once this has been done, it will be possible to identify the capacity building needs (Column C) based on the differences between current situation and the desired future situation.

Sometimes the needs identified will be numerous and impossible to address at once given resource (human, financial, etc.) constraints. Therefore, it will be important to differentiate between what is essential and what is simply desirable, and to prioritize the identified needs by focusing on the areas, resources and capabilities considered most important, as well as the time required and the sequencing of activities.

STEP 7: Determine options to strengthen official food control laboratories based on the identified needs

Once the capacity building needs have been identified, it will be possible to identify options to strengthen the capacity of official food control laboratories. Identifying and reviewing these options will provide a better understanding of the range of actions, including their respective costs and benefits, that may be taken to achieve the desired future situation.

Depending on the particular circumstances in the country, different options to strengthen the capacity of official food control laboratories will exist. This step involves

Table M4-4. Matrix to identify capacity building needs for official food control laboratories

Food analysis laboratory	*Column A* ***Current Situation***	*Column B* ***Desired Future Situation***	*Column C* ***Capacity Building Needs***
Mission	• What is the mandate of official food control laboratories? • How are roles and responsibilities currently shared between official food control laboratories?	• What should be the role of official food control laboratories five years from now? • How should roles and responsibilities be shared among official food control laboratories five years from now?	• What is required to revise mandates and objectives in line with the desired future vision of official food control laboratories? • How can the mandate of official food control laboratories be redefined? • What is required to rationalize roles and responsibilities in line with the desired future situation?
Organizational structure and culture	• How many official food control laboratories are there, where are they located and how are they structured? • What values and principles guide food analysis?	• How should official food control laboratories be organized five years from now? • What values should underpin laboratory analysis?	• What is required to organize official food control laboratories more efficiently? • What is required to promote a change in culture and values?
Operations	• What are the procedures and methods for analyses (physical, chemical and microbiological) carried out by official food control laboratories? • How are methods selected and validated?	• What procedures and methods should be used five years from now to improve efficiency and performance? • How should methods be selected and validated?	• What is required to implement the procedures and methods sought in the future? • What are the priorities to upgrade official food control laboratories to conform to accreditation requirements?
Human Resources	• What is the current level of scientific and managerial competencies in official food control laboratories? • What is the current curriculum and nature of continuing education / training for food analysts?	• What core competencies (skills, qualifications, experience) should official food control laboratories have five years from now? • What training should be available for laboratory personnel (analysts and managers) five years from now?	• What is required to upgrade scientific and managerial competencies to achieve the desired future situation? • What are the needs to upgrade personnel to conform to basic analytical quality assurance and accreditation requirements?
Analytical capabilities	• What are the current capabilities of official laboratories in food analysis? • Are official food control laboratories accredited?	• What improved capabilities should be available in the future?	• What additional food analyses are required to address the country's food control needs? • What are the capacity building needs to expand analytical capabilities as required?

(Cont.)

Table M4-4 (cont.). Matrix to identify capacity building needs for official food control laboratories

Food analysis laboratory	*Column A* ***Current Situation***	*Column B* ***Desired Future Situation***	*Column C* ***Capacity Building Needs***
Financial resources	• What financial resources are currently available for official food control laboratories? • What is the source of funding?	• What financial resources should be available for official food control laboratories five years from now? • Should any new sources of funding/ revenue be developed?	• What changes are required to obtain the desired level and allocation of resources sought in the medium-term?
Information resources	• What information is currently available in official food control laboratories?	• What information should official food control laboratories have access to five years from now?	• What is required to increase access to the required information?
Infrastructure, equipment and supplies (including reference materials)	• What infrastructure, equipment and supplies are currently available in official food control laboratories and how is it used?	• What infrastructure, equipment and supplies should be available in official food control laboratories five years from now?	• What would be required to optimize access to and use of equipment? • What are the priorities to upgrade infrastructure, equipment and supplies in official food control laboratories to conform to accreditation requirements?
Dimensions of capacity in the food control system	• Is the legal framework for analyses performed by official food control laboratories adequate? • How does the capacity of food inspection affect laboratory analysis? • What kinds of relationships exist between official food control laboratories, the public health system and other relevant institutions? • Do education and training programmes for personnel of official food control laboratories meet current needs?	• How should the legal framework look five years from now? • How should food inspection support laboratory analysis five years from now? • What kinds of relationships should exist between official food control laboratories, public health institutions, and academic institutions five years from now? • What types of curriculum and education should be available five years from now?	• What is required to improve the legal framework for food analysis? • What is required to enhance access to suitable samples for food analysis and improve linkages with food inspection? • How can relations between official food control laboratories, public health and academic institutions be improved? • What is needed to improve education and training for staff of official food control laboratories?

the preparation of a list of such actions. Options on this list may include, but not be limited to, one or more of the following:

- Accreditation of official food control laboratory based on international standards to ensure competency and validity of test results
- Changes to the way in which analytical work is apportioned to reflect the availability of expertise and resources

- Development and implementation of a quality assurance programme for official food control laboratories
- Participation in international proficiency testing programmes
- Refresher courses for food analysts and inter-laboratory training activities
- Provision of essential and specialized equipment for modern analytical testing
- Development and implementation of a national food contamination monitoring and assessment programme
- Development of mechanisms to link information on food-borne diseases with food monitoring data including development of early warning systems for food contamination and outbreaks

Some of the proposed options may require additional resources such as equipment and training to enable laboratory staff to carry out new types of analyses. Others may require a clarification of laboratory mandates, or the development of new or improved operational procedures and methods including for quality control and proficiency testing.

The various options considered will have different costs and benefits for different stakeholders. Carrying out a simple Cost Benefit Analysis provides a way to evaluate the costs and benefits of the main options (see the Regulatory Impact Assessment and Cost Benefit Tool in Part 3 for guidance).

Based on the capacity building needs identified and options to address them, it will be possible to prepare a strategy for capacity building. This strategy can be used to mobilize resources from within the country, as well as from external donors.

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ANNEX 4-1
Inventory of official food control laboratories[18]

	Laboratory 1	Laboratory 2	Laboratory 3
Name			
Location (including name and location of sub-laboratories if existing)			
Legal status (publicly or privately operated)			
Affiliation (responsible ministry or authority)			
Scope (types of analyses performed, e.g. mycotoxins, pesticide residue analysis, heavy metals, etc.)			
Date established			
Accreditation status (Yes / No)			

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[18] Complete for all official food control laboratories in the country, adding new columns as necessary.

ANNEX 4-2

Inventory of equipment and instruments in official food control laboratories

Objective

To assess the quantity and quality of major equipment and instruments available to official food control laboratories

Complete a copy of the following inventory for each official food control laboratory included in the needs assessment

Name of Laboratory:				
Date of Inventory:				
Instrument/ Equipment	**Quantity**	**Use** (for which analysis / analyses)	**Quality** (age, working condition, etc.)	**Remarks** (technical support, calibration, maintenance, etc.)
Food Chemistry (e.g. MS/GC, HPLC, GC, etc.)				
Microbiology				
Equipment to analyse physical food properties (e.g. colour, texture, extraneous matter)				
Sample preparation equipment				

Instrument/ Equipment	**Quantity**	**Quality** (age, condition, etc.)	**Remarks** (specify whether used for control of instruments or for administration)
Computer and communication equipment			
Computer			
Printer			
Modem (indicate type and speed of Internet/Intranet access if existing: dial-up, DSL, wireless, fixed network, etc.)			
Digital camera			
Fax			
Telephone			
Other (describe)			

ANNEX 4-3
Document review for official food control laboratories

During the document review, relevant documents (internal and external) related to official food control laboratories will be collected. These documents will provide important baseline information for the situation analysis.

1. Information collection

Collect relevant existing documents including:

- Statutes, ministerial and administrative documents describing the mandates, functions and responsibilities of official food control laboratories
- Organizational charts of official food control laboratories
- Laws, regulations or standards related to physical, chemical and microbiological analysis
- Food analysis manuals or procedures used including criteria for selection of methods
- Activity reports and other relevant documents produced by official food control laboratories (including reports on proficiency testing)
- Inventory of equipment for food analysis
- Recent internal and/or external reviews and assessments of official food control laboratories including those prepared by accreditation authorities

2. Overview of official food control laboratories

The documents collected should be reviewed in order to provide an initial overview of official food control laboratories, particularly to respond to the following questions:

- Which laboratories carry out analysis of food samples for physical, chemical and microbiological contamination?
- Where are they located?
- What are their respective roles and responsibilities?
- Which products (e.g. dairy, fruit and vegetables, cereals, spices, animal feed, other etc.) are analysed and which analytical tests are performed?
- Are there any overlaps or gaps in laboratory analysis?
- Is there a central reference laboratory in the country?
- Do official food control laboratories have a quality assurance programme in place? How effective is it?
- Are official food control laboratories able to maintain their accreditation status?

This information will be complemented and expanded using the laboratory assessment survey, focus group discussions and workshops.

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Capacity assessment survey for official food control laboratories

Staffing

1. What is your laboratory's current human resource capacity (number of staff, qualifications, skills, etc.)? Use the table below to help compile information.
2. What types of training (regular or special, internal or external) have staff of your laboratory participated in during the last few years?
3. Does your laboratory have adequate and competent human resources in terms of the number of managerial and analytical staff, and their qualifications/skills/training? Are staff specifically qualified and trained to perform food analysis and use relevant laboratory equipment, analytical methods, etc.?
4. How do salaries paid to laboratory staff equate to salaries paid to similarly-qualified scientists and managers working in other public sector and private sector organizations in your country?

	Food Analysts			**Laboratory Managers**		
	Number of staff	**Average no. of years experience**	**Salary range (monthly)**	**Number of staff**	**Average no. of years experience**	**Salary range (monthly)**
Food chemistry						
Doctoral level						
Masters level						
Bachelors level						
Lower than Bachelor degree						
Microbiology						
Doctoral level						
Masters level						
Bachelors level						
Lower than Bachelor degree						
Other (specify)						

Equipment and infrastructure

5. What equipment (essential and specialized) is available to analysts in your laboratory (use the inventory template)?
6. Does your laboratory maintain an inventory of its equipment?
7. Are instructions available for the use and maintenance of equipment?
8. How often are performance checks carried out on equipment and instruments?
9. Which equipment is calibrated and by whom?
10. Where does your laboratory obtain the chemicals, solvents, etc. used and how much do they cost?
11. Are there any environmental stresses on your laboratory (e.g. temperature, vibrations, wind, dust, smell, etc.)?
12. What safety devices (e.g. fume hoods, emergency showers, eye douche, fire extinguisher, fire blanket, first aid kits, etc.) are available?
13. What is the layout, size, age, structural

conditions of the laboratory buildings (including testing areas and office space)?

14. Is there currently adequate space for: bench testing, equipment, administrative activities and general storage?
15. Is there a secure area – with appropriate environmental controls – for receipt and storage of samples and specimens?
16. Does your laboratory have Uninterruptible Power Supply (UPS)?
17. Is your water supply controlled by static pressure or electricity?
18. Does your laboratory have a central gas supply for specialized gases (hydrogen, nitrogen, oxygen, helium)?
19. Does your laboratory use special gases from pressurized gas tanks or from gas generators?
20. Are all gases available at the required purity (e.g. 99.999 %)?

Financial management

21. How much funding does your laboratory receive (total annual budget) for food safety or food-borne disease testing?
22. What is the source of this funding: i.e. national government, state/provincial government, fee-for-service, other, etc.?
23. How is this total annual budget allocated (salaries, supplies, equipment, operating expenses, other, etc.)?
24. What is the approximate size of the population (i.e. national, state, provincial, city, etc.) served by your laboratory?

Sample management

25. Who does the sampling, sampling plan, sample delivery and intermediate storage?
26. Does your laboratory have a written protocol for the collection of food samples?
27. Does your laboratory have written rejection criteria for food samples?
28. Does your laboratory have a standard requisition form for specimens and samples?
29. Does your laboratory provide collection kits for different types of specimens and samples or provide information on how samples should be submitted (i.e. acceptable packaging, temperature control requirements, etc.)?
30. Are all samples properly labelled and traceable?
31. What is the procedure and actual practice for sample storage and disposal?
32. Is your sample management system well documented?

Analytical methods (see table below)

33. What types of analyses does your laboratory perform?
34. Which methods (in-house, external) are used for analyses and what is their source?
35. How were these methods selected?
36. Are these methods validated?
37. Are the methods used documented in a form that is available to analysts?
38. What are the requirements and procedures for testing, analysis and reporting: i) for routine checks; ii) in response to accidents, suspicions or complaints; and iii) for product development.
39. What are the requirements and procedures (including frequency) for laboratory testing, analysis and reporting of:
    - food imports
    - food exports
    - food enterprises
    - primary producers
    - retail outlets (shops and markets)
    - eating places
    - street food vendors
    - slaughterhouses, etc.

Area of analysis	Method used	Number of samples received	Number analysed	Turn-around time

Standards

40. Does your laboratory have reference standards for all the substances that need to be analysed?
41. Are these reference standards certified?
42. How are the standards in your laboratory labelled, recorded and stored?

Quality control and assurance

43. Does your laboratory review its performance? How?
44. Does your laboratory have a quality assurance programme/manual?
45. Does your laboratory compare its performance/results with any other food analysis laboratories inside or outside the country?
46. Does your laboratory apply good laboratory practices?
47. Is your laboratory approved/accredited by national or international bodies according to current ISO standards?
48. Has the quality system and validation work of your laboratory ever been assessed by an accredited agency, third party authority or one or more collaborating laboratories?
49. In which areas do you see a need to improve your laboratory's systems or operations to improve quality assurance?

Emergency response

50. Does your laboratory have a written plan that can be implemented during a food-borne disease outbreak?
51. If no, what action would you take if there was a large food-borne outbreak occurring in your areas?
52. Does your laboratory have adequate resources (staff, scientific equipment, communication equipment, etc.) to respond to a food-borne outbreak?
53. Does your laboratory have a written plan, developed in cooperation with relevant agencies such as national food safety agencies, ministries of health and agriculture, etc. outlining the roles and responsibilities of each entity in the event of a food-borne disease outbreak?

Reporting and information management

54. How do analysts in your laboratory record the results of laboratory tests and analyses performed?
55. Do analysts in your laboratory prepare written reports for all samples tested?
56. What happens to laboratory reports once completed?
57. Does your laboratory have a paper-based or electronic system for managing information? What does this system encompass and how is it used?
58. Does your laboratory have a Laboratory Information Management System?
59. Do analysts in your laboratory have access to e-mail, Internet, an Intranet? How are they used?

Relationships with related institutions

60. Does your laboratory cooperate with other laboratories or institutions for routine food-borne disease surveillance? If so, with which institutions and how (e.g. information exchange, testing, inter-proficiency testing, validation of results, etc.)?
61. Does your laboratory cooperate with other laboratories or institutions during food-borne disease outbreaks? If so, with which institutions and how?
62. Does your laboratory cooperate with public health and academic institutions? If so, with which ones and how?
63. Does your laboratory cooperate with food inspectors? To what extent is this cooperation effective?

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ANNEX 4-5

Focus group discussions with staff of official food control laboratories

Objective

To obtain information and views from staff (managers and analysts) of official food control laboratories on the strengths and weaknesses of food analysis, as well as opportunities and threats. This information can be used to help complete a SWOT analysis.

Participants

Up to 12 staff (scientific and managerial) from official food control laboratories[19]

Possible questions

1. What types of food analysis is carried out by analysts in your laboratory?
2. Does your laboratory have policies and procedures in place to guide food analysis?
3. Are the qualifications and skills of analysts in your laboratory adequate to perform the types of analyses required of your laboratory?
4. Do you have the instruments, equipment and supplies needed to perform your job?
5. What types of relationships does your laboratory have with food inspectors?
6. What are the positive aspects of your laboratory's operations and performance?
7. What are the weaknesses of your laboratory's operations and performance?
8. How does your laboratory ensure the reliability of analytical results?

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[19] If possible separate focus group discussions should be carried out with staff from each of the official food control laboratories included in the assessment. This will enable personnel from each laboratory to express their views freely and ensure a complete picture of the existing situation.

Focus group discussions on services performed by official food control laboratories with officials involved in food control management, food inspection, and representatives of the food industry and/or consumer organizations

Objective

To seek views from officials involved in food control management, food inspectors, and representatives of the food industry and/or consumers organizations about food analysis services performed by official food control laboratories. This information can be used to help complete a SWOT analysis.

Participants

Up to 12 individuals representing government agencies responsible for food control management, food inspectors and representatives of the food industry and/or consumer organizations

Possible questions

1. What is the nature of your relationship with official food control laboratories?
2. What do you believe should be the role and responsibility of official food control laboratories?
3. To what extent do you believe official food control laboratories currently meet these responsibilities?
4. Have you requested food analysis services to be performed by one or more official food control laboratory in your country and why?
5. How would you rate the quality of the analysis performed by official food control laboratories with which you have been in contact? What factors did you consider in forming this judgement?
6. What do you believe are the priorities to improve the services offered by official food control laboratories, and why?

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ANNEX 4-7
SWOT analysis scenario for official food control laboratories

The following table gives an example of strengths, weaknesses, opportunities and threats that are relevant for official food control laboratories in a hypothetical country.

	Positive	*Negative*
Internal factors	**Strengths** • Basic analytical equipment available in all official food control laboratories • Efforts initiated to develop and establish quality assurance system (quality manual prepared, analysts have attended training) • Laboratory information management system (LIMS) installed in some official food control laboratories • E-mail accounts recently established for staff in two official food control laboratories • One official food control laboratory accredited by external accreditation agency • Staff have access to scientific literature and laboratory-related documentation • Staff highly qualified and trained in the use of equipment to test food samples • Staff motivated to apply Good Laboratory Practices • Etc.	**Weaknesses** • Official food control laboratories operate in isolation of each other • Limited capacity for chemical and microbiological analysis • Most analysts lack skills in modern analytical techniques and quality assurance • Inadequate funds to replace essential equipment • Weaknesses in the system for management of samples – samples not always properly labelled and traceable, inadequate cold storage space, risk of cross-contamination • Inadequate or uncertified reference standards for substances routinely analysed • Weaknesses in the implementation of quality assurance system • Most official food control laboratory buildings in poor condition and lacking essential services (e.g. air conditioning, safety features) • Unstable electricity supply – frequent power cuts and fluctuations • Documentation, reporting and information management weak (written reports not always prepared, sometimes difficult to locate reports, databases not regularly updated) • Limited exchange of information between laboratories in the country • High staff turn-over due to low salaries • Lack of contingency planning in the event of a crisis • Etc.
External factors	**Opportunities** • Plans to establish Internet access and to develop an Intranet for official food analysis laboratories • Independent laboratory established by seafood industry and accredited • Pilot activities in place to secure new sources of revenue for laboratories • WTO membership • Improvements to import inspection • Recent food emergency raised awareness of food safety and quality issues among politicians and the general population • Improvement in sampling procedures and capabilities • Etc.	**Threats** • Linkages between official food control laboratories and institutions involved in food control management are weak • Weak inspection services including high probability of cross-contamination during the collection and delivery of food samples for analysis • Rising cost and erratic availability of chemicals and solvents required for laboratory testing • Ongoing rivalry between ministries with responsibility for overseeing official food control laboratories • Government has limited ability to cope with a food-borne crisis • Etc.

Template for situation analysis report of official food control laboratories

Introduction

The following template can be used to help structure and document the findings of the various surveys, interviews, focus group discussions, etc. carried out to collect information on the existing situation of official food control laboratories. It lists the main components of a situation analysis report and provides an example which could be adapted to the particular circumstances in the country.

Terms of Reference: The reasons for conducting the situation analysis.

Acknowledgments: Recognize individuals and organizations that contributed to or participated in the situation analysis.

Summary of Findings/Recommendations: What are the key points or issues identified? List any results by order of importance.

Methodology: Explain was done, how it went and what was learned in the process. For instance, could the analysis have been improved? What are the major weaknesses in the accuracy or validity of the data? How were relevant stakeholders consulted? These questions may be of assistance later if the profile needs to be updated or the findings cross-checked.

Findings: Based on the information collected during the situation analysis (using literature reviews, focus group discussions, questionnaires, etc.): Describe the current situation of food analysis. Which laboratories exist and what kinds of analyses do they perform? What procedures and methods are used? What resources (human, financial, information, etc.) are available to support food analysis? How does the overall food control system (e.g. laws and regulations, food inspection) influence analyses performed by official food control laboratories? Is there a programme in place for quality assurance?

Implications for the Future: Are these trends likely to continue or are they expected to change? Are any external projects to enhance inspection in the pipeline?

Appendices: Present information that does not fit appropriately elsewhere (e.g. specific results of surveys or copies of questionnaires used). This will help those who may wish to follow-up on your conclusions in more detail and to know on what evidence conclusions were based.

Sources: List the main sources of information including key persons interviewed, external stakeholders consulted, etc.

ANNEX 4-9

Sample agenda for a needs assessment workshop for official food control laboratories

Objective

To discuss the findings of the situation analysis for official food control laboratories, discuss the optimal capacity of official food control laboratories in the future, and identify capacity building gaps.

Participants

Representatives of official food control laboratories and relevant food control agencies

Day one – morning

- Introduction to situation analysis and needs assessment process
- Presentation on the findings of the situation analysis for official food control laboratories
- Review, discuss and reach consensus on the findings of the situation analysis

Day one – afternoon

- Discuss core roles of official food control laboratories, best laboratory practices and internationally accepted benchmarks
- Identify trends that will likely affect the future needs and roles of official food control laboratories

Day two – morning

- Define and reach agreement on the mission and objectives of official food control laboratories taking into account the benchmarks

Day two – afternoon

- Define capacity building needs and priorities for official food control laboratories using the matrix
- Rank needs in order of importance
- Rank needs in order of ease of implementation

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MODULE 5.

ASSESSING CAPACITY BUILDING NEEDS IN FOOD SAFETY AND QUALITY INFORMATION, EDUCATION AND COMMUNICATION (IEC)

Introduction

Information, education and communication (IEC) plays an important role in an effective food control system by increasing awareness and knowledge about food safety and quality issues among consumers and their organizations, food producers, processors, traders, food enterprises, industry associations and others, and empowering them to enhance food safety and quality for themselves, or for those who consume the food they produce and/or market. Governments can use IEC to educate consumers about food safety and quality, and to encourage the food industry to adopt good agricultural, manufacturing, hygiene and handling practices (including HACCP). Although the specific objectives and nature of IEC activities targeted at different audiences will differ, they should be based on risk communication[20] principles.

This module provides a step-by-step guide for government agencies responsible for food control management to assess and identify their capacity building needs for food safety and quality IEC activities targeted at:

i. consumers and their organizations;
ii. the food industry including producers, processors, handlers, traders, retailers, food enterprises, street food vendors, industry associations, etc.

The target audience is officials in the government agency(s) responsible for food control management who are responsible for the development and dissemination of food

Box M5-1 IEC to enhance food safety and quality

IEC is the process of developing, packaging and disseminating appropriate messages to specific audiences to increase their knowledge, skills and motivation to make decisions that enhance food safety and quality. IEC provides a means for the government agency(s) involved in food control management to engage in dialogue with diverse stakeholders along the food chain – including consumers and their organizations, the food industry, industry associations, grassroots organizations, etc. – about food safety and quality issues. Specifically, IEC can be used to:

- increase awareness and knowledge among consumers about ways they can enhance food safety and quality for themselves and their families;
- promote the adoption of good agricultural, manufacturing, hygiene and handling practices (including HACCP) by the food industry; and
- obtain information from different stakeholders (including consumers and their organizations and the food industry) that can be used to support decision-making processes, planning and implementation of official food control management activities.

[20] Risk communication is the interactive exchange of information and opinions throughout the risk analysis process concerning risk, risk-related factors and risk perceptions, among risk assessors, risk managers, consumers, industry, the academic community and other interested parties, including the explanation of risk assessment findings and the basis of risk management decisions (FAO/WHO. 2005. *Codex Alimentarius Commission. Procedural Manual.* 15th Edition).

Box M5-2 Guiding questions for a capacity building needs assessment of food safety and quality IEC activities

Keep the following questions in mind while working through this module:

1. How do government agency(s) involved in food control management currently carry out IEC activities related to food safety and quality with: i) consumers and their organizations; and ii) the food industry? What is the impact of such activities?
2. How should the government agency(s) involved in food control management inform, educate and communicate with: i) consumers and their organizations; and ii) the food industry in the future?
3. What are the major gaps in existing food safety and quality IEC programmes and activities including in their execution and impact?
4. What are the capacity building needs to improve food safety and quality IEC activities to achieve the desired future situation?

safety and quality IEC activities targeted at: i) consumers and their organizations; and ii) the food industry.

Use of this module provides a means to:

- profile existing food safety and quality IEC activities targeted at consumers/consumer organizations and the food industry, and undertaken by the government agency(s) responsible for food control management;
- identify capacity gaps and needs in the area of food safety and quality IEC activities; and
- increase awareness among the concerned government agency(s) about the role and benefits of food safety and quality IEC activities.

GETTING STARTED >

STEP 1: Establish a team to manage the capacity building needs assessment process

Once the decision has been made to assess IEC capacity building needs, a small team should be established to manage and lead the overall process. This team should be composed of individuals in the government agency(s) responsible for food control management who are involved in developing and/or implementing IEC activities targeted at consumers and consumer organizations, and the food industry.

Depending on the situation in the country, it may also be useful to involve officials from other government agencies focused on health, agriculture, information, consumer affairs, industry or commerce, etc. that have experience in IEC activities addressing consumers and the food industry. In addition, some countries may wish to invite representatives of consumer organizations, NGOs and food industry to join this team in order to better understand the target audiences and improve the outcomes of subsequent IEC activities.

STEP 2: Define the scope of the capacity building needs assessment

Before getting started, it will be important to decide on the scope of the capacity building needs assessment. Responding to the following questions will help to define the scope:

- Has the official food control management agency prepared a policy or strategy that defines the purpose, scope and target audiences for IEC activities?
- Will the capacity building needs assessment for food safety and quality IEC address both consumers and their organizations, and the food industry?
- Will the assessment cover the entire country or focus on some selected areas (e.g. particular states, regions, provinces, cities, etc.)?

The answers to these questions will help to focus the needs assessment and provide an indication of the time and resources needed. In countries where an IEC strategy or plan has already been elaborated, the parameters of the capacity building needs assessment may be relatively clear. In countries where there is no such strategy or where a number of different agencies are involved in food safety and quality IEC, with limited coordination between them, more time may be required initially to clarify the scope.

Once the team has agreed on the scope and objectives, it will be useful to prepare:

- a short written statement to inform internal staff and management about the needs assessment (introducing the background to the needs assessment, its scope, objectives and the individuals involved, etc.); and
- an action plan for the needs assessment including a time line, responsibilities, expected outputs and budget (specifying the source of funds), etc.

STEP 3: Gather and analyse information about food safety and quality IEC

Once the scope of the needs assessment has been defined, the team can start to gather the information needed to describe and analyse the type, performance and impact of existing food safety and quality IEC activities.

Conducting a situation analysis will require an examination of the overall system in which IEC activities focused on food safety and quality take place (see Table M5-1). Considering this system is important to determine to what extent there is a framework in place for informing, educating and communicating with consumers, consumer organizations and the food industry on a day-to-day basis as well as during emergency situations. For instance, in some countries, food legislation recognizes the role of diverse stakeholders in ensuring food safety and quality, and requires government agencies to provide relevant information to, and/or consult, concerned stakeholders. By contrast, in other countries, there may be little if any visible endorsement of the need for transparency and the provision of information to consumers and other groups.

The main focus of the situation analysis will be on the government agencies engaged in developing or delivering food safety and quality IEC activities targeted at consumers and their organizations and/or the food industry. This will require an examination of the capacity of these agencies, as well as the nature, scope and impact of their IEC activities (see Table M5-2).

Table M5-1. Dimensions of capacity for food safety and quality IEC at the system level

Policy	• Policy setting down requirements (e.g. transparency, science-based, unbiased, etc.) for IEC (including risk communication) with stakeholders from farm to table • High-level endorsement of transparency and the need for information provision to concerned stakeholders
Legislation	• Justification in food or consumer law for IEC with stakeholders • Legal requirements for the provision of information about specific attributes of food, labelling, etc.
Institutional relationships, interdependencies and cooperation	• Relationships between agencies involved in developing and disseminating food safety IEC activities and materials • Division of roles and responsibilities • Existence of other IEC activities and materials (e.g. health, agriculture, enterprise development) that address topics linked to food safety and quality

Table M5-2. Dimensions of capacity for food safety and quality IEC at the organizational level

Mission and strategy	• Mandate, role and operating principles of government agency(s) involved in the development and/or dissemination of food safety and quality IEC materials
Organizational structure, competencies and culture	• Structure, management and implementation of food safety and quality IEC activities at different levels (central to lower levels) • Core competencies • Culture (extent of transparency, openness, willingness to inform and consult stakeholders)
Operational aspects	• Scope, nature and implementation of food safety and quality IEC activities: objectives, messages, target audience, coverage, tactics and media used, languages, self-produced or sub-contracted, outputs and performance, monitoring and evaluation, etc.
Human resources	• Skills and experience(s) at different levels (central government, local government, etc.) for the development, implementation and monitoring of food safety and quality IEC activities
Financial resources	• Budget for the development and dissemination of IEC activities
Information resources	• Data about food risks, incidence of food-borne disease, vulnerable groups, export rejections/detentions, etc. • Information about knowledge, attitudes, behaviour, beliefs, etc. related to food safety and quality among different types of stakeholders (required to produce appropriate IEC activities) • Access to and use of relevant IEC materials produced by international donors/organizations, NGOs, consumer groups, food industry associations, groups in other countries, etc.
Infrastructure	• Equipment (e.g. computers, printers, audiovisual equipment, vehicles, mobile education units, etc.) for the production and dissemination of IEC activities and materials

Different methods can be used to gather and analyse the information outlined above including focus group discussions, workshops, interviews or surveys. In general, it will be beneficial to use a variety of methods to collect different types of information and enable the findings to be cross-checked.

In addition to consulting the government agency responsible for food control management, other agencies that produce or disseminate IEC materials related to food safety and quality should also be engaged. Obtaining information and opinions from some of the stakeholders targeted by these IEC activities (i.e. consumers and their organizations, food enterprises, etc.) will be useful to help measure the impact.

Table M5-3 describes some of the methods that can be used for information collection and analysis. A number of tools and templates are provided in the resources annexed to this module to provide a starting point for information collection and analysis. These provide assistance to carry out an inventory of existing IEC materials and conduct focus group discussions with concerned stakeholders. They can be modified as needed to individual country circumstances.

The time taken to carry out the situation analysis will depend on the scope of the situation analysis and the extent of relevant IEC activities. In smaller countries or countries where IEC activities are poorly developed, it may be possible to conduct the situation analysis in a few days. More time may be needed in larger countries or if there are several different IEC activities taking place in different areas.

STEP 4: Document and discuss the findings of the situation analysis

The situation analysis will provide a picture of how government agencies are involved in planning and carrying out IEC activities as a means to enhance food safety and quality. It will describe the roles and responsibilities of these agencies and their ongoing IEC

Table M5-3. Methods to collect information on food safety and quality IEC activities

Method	*Purpose*
Stakeholder analysis	• To identify all the government agencies involved in IEC activities targeted at consumers, consumer organizations and the food industry. Helps to visualize the linkages, information flows, overlaps, gaps, etc. between the institutions identified by producing an organizational chart and mapping relationships • To identify the groups (e.g. consumers, consumer organizations, food industry, street food vendors, grassroots organizations, etc.) targeted by ongoing IEC activities
Inventory of IEC materials	• To take stock of existing IEC materials related to food safety and quality
Focus group discussions	• To enable officials from government agencies involved in relevant IEC to discuss their capacity in different areas, and identify strengths, weaknesses, opportunities, threats (SWOT analysis), etc. • To obtain information from consumers, consumer organizations and the food industry on their access to, and views of, existing IEC materials and programmes • To consult public health workers, NGO staff, agricultural extension providers and others in grassroots organizations about what kinds of IEC materials they currently have and need to increase knowledge of good food safety practices • To consult representatives of the food industry, industry groups, street food vendors and their associations, etc. about the provision and delivery of IEC activities • To generate awareness about the need for capacity building and indicate how much consensus there is about capacity gaps and needs
Key person interviews	• To obtain in-depth information from key persons (leaders of food control agencies, agriculture/health ministries, consumer's organizations, media organizations, etc.) about food safety and quality IEC activities and needs
Survey (questionnaire)	• To consult people in grassroots organizations (e.g. health workers, NGO staff, agriculture extensionists), the food industry and industry groups, street food vendors, etc. about what kinds of IEC materials related to good food safety and quality practices they currently have, use and need

activities targeted at consumers and consumer organizations and/or the food industry. Through the situation analysis, the range of strengths and weaknesses of these activities, as well as existing opportunities and threats will become apparent.

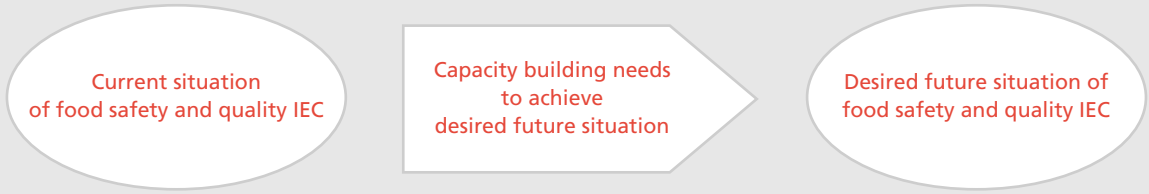
Documenting and discussing the findings of the situation analysis will be essential to enhance transparency and assist with the identification of needs. This report will also provide indicators that will be useful to help plan and monitor subsequent capacity building activities. Although the findings of every situation analysis will be different, some kinds of information should always be included in such a report. A template for a situation analysis report is presented in the resources annexed to this module.

CONSIDERING THE FUTURE AND IDENTIFYING CAPACITY BUILDING NEEDS > > > > > >

STEP 5: Define the desired future situation of food safety and quality IEC in the medium term

A capacity building needs assessment asks two main questions: "where are we now?" and "where do we want to be?" This step in the assessment process concentrates on defining the desired future situation of food safety and quality IEC activities. It will provide a means to come up with a realistic picture of the desired situation of food safety and quality IEC in the medium term (approximately five years). Having a clear understanding of the desired future situation is important to be able to determine

Figure M5-1 Identifying capacity building needs for food safety and quality IEC



Box M5-3 Internationally accepted benchmarks for food safety and quality IEC

- Food control agency has a policy for IEC related to food safety and quality targeting external audiences (consumers, consumer organizations, food industry, professional associations, etc.)
- Existence of a programme for planning, developing and implementing IEC activities in a coordinated manner
- Existence of, or access to, appropriate IEC materials (in local languages)
- Food control agency has adequate number of trained staff with appropriate IEC skills
- Access to appropriate equipment (e.g. computers, printers, mobile education units, audio-visual) and financial resources
- Staff of the food control agency actively pursue IEC with external stakeholders including the mass media
- Involvement of relevant groups (e.g. agricultural extensionists, local communities, public health workers, food industry, social/religious and academic institutions) in IEC activities
- Regular collection of data and information about consumer behaviour, attitudes, concerns, dietary patterns, etc.
- Existence of a system for risk communication, particularly during food emergencies
- System to evaluate the performance and impact of IEC materials and programmes

capacity gaps. When the desired future situation is compared to the existing situation, the capacity building needs can be more precisely identified and measured.

Discussions and brainstorming sessions can be used to build up a picture of the desired future situation of food safety and quality IEC activities in the medium term. This will enable the purpose, role, functions and values of these activities to be visualized, based on an understanding of the current situation and internationally accepted benchmarks of effective food safety and quality IEC (see Box M5-3). Referring to benchmarks for food safety and quality IEC will provide a means to learn from good practices and guiding principles, and ensure that the objectives set for the future are in line with international recommendations. By ensuring that discussions are grounded on an understanding of the current situation, participants at this workshop will be able to produce a scenario for the future that is realistic and attainable, as well as transferable into operational steps.

Organizing a workshop is a useful way to arrive at this vision of the desired future situation. The workshop could be facilitated to ensure that the necessary support and encouragement is available. In some cases, it may be useful to have external facilitators who can provide examples of good practices from other countries. Discussing and reaching consensus on the following questions can help to focus the discussions:

- What should food safety and quality IEC activities seek to accomplish in the medium term (the goal)?
- What principles or values (e.g. unbiased, transparent, science-based, etc.) should guide such IEC activities?
- What impact should food safety and quality IEC have in the medium-term future?

The desired future situation of food safety and quality IEC should be discussed in the context of the government's overall priorities or goals for food safety and quality. Where a

policy for food safety and quality exists, this should provide the rationale and parameters for the conceptualization and implementation of IEC activities. It is important to realize that IEC activities provide a means to promote enhanced food safety and quality and, as such, should be planned and implemented to support the government's goals and priorities in this regard.

A suggested agenda for a workshop to define the desired future situation of food safety and quality IEC (Step 5) and identify capacity building needs (Step 6) is presented in the resources annexed to this module.

STEP 6: Identify capacity building needs to strengthen food safety and quality IEC

Capacity building needs can be identified by comparing the present situation (the results of the situation analysis) with the desired future situation (the outcome of the previous step). The process of identifying these needs should be participatory and transparent in order to increase acceptance of the proposed changes and support implementation and sustainability. Facilitated workshops can be used to encourage this involvement. A sample agenda for a needs assessment workshop is available in the resources for this module.

During the discussions, participants could try to identify needs by completing the following matrix (Table M5-4). The steps carried out until now provide the information needed to complete the matrix. The findings of the situation analysis (Steps 3 and 4) can be used to complete Column A. The outputs of Step 5 on the desired future situation will be useful to complete Column B. Once this has been done, it will be possible to identify the capacity building needs (Column C) based on the differences between the current capacity and the desired future situation.

Sometimes the needs identified will be numerous and impossible to address at once given the limited availability of resources (human, financial, etc.). Therefore, it will be important to differentiate between what is essential and what is simply desirable, and to prioritize the identified needs by focusing on the areas, resources and capabilities considered most important, as well as the time required and the sequencing of activities.

STEP 7: Determine options to strengthen food safety and quality IEC based on the identified needs

Once the capacity building needs have been identified, it will be possible to identify a range of options to improve food safety and quality IEC. This step involves the development of a list of such options, and a consideration of their respective costs and benefits.

Countries can address capacity needs in IEC in different ways. For instance, possible options may include, but not be limited to, one or more of the following:

- Develop a transparent policy for IEC activities that covers the food chain from farm to table and is based on risk communication
- Develop a strategy for IEC activities targeted at food enterprises and consumers
- Improve cooperation between the government agencies and other groups (e.g. NGOs, industry associations, health centres, etc.) involved in producing and distributing relevant information to the food industry and/or consumers
- Establish mechanisms to promote regular and systematic two-way communication with stakeholders (e.g. consumers, food industry, academia, etc.) and engage them in discussions about food safety risks
- Develop targeted information materials and/or organize training courses on food standards, certification programmes, quality assurance schemes, etc. for food industry associations and food enterprises

Table M5-4. Matrix to identify capacity building needs for food safety and quality IEC

Food safety and quality IEC	*Column A* ***Current Situation***	*Column B* ***Desired Future Situation***	*Column C* ***Capacity Building Needs***
Legal and policy framework	• To what extent does legislation and policy promote openness and transparency in IEC activities with stakeholders from farm to table?	• How should the legal and policy framework support IEC activities with consumers and their organizations and the food industry?	• What kinds of changes are required to provide an enabling legal and policy framework for IEC activities?
Mission and strategy	• Which government agencies are involved in IEC activities targeted at consumers and their organizations and the food industry? • What is their mission and role?	• How should roles and responsibilities for IEC activities targeted at consumers and their organizations and the food industry be shared five years from now? • How should missions, mandates and roles, etc. be defined?	• What is required to revise and/or rationalize mandates, roles and responsibilities for IEC activities?
Structure, competencies and culture	• How are IEC activities currently planned and implemented? • What values, attitudes and beliefs currently guide IEC activities?	• How should IEC activities be planned and implemented five years from now? • What values, beliefs and attitudes should guide IEC activities five years from now?	• What is required to amend and/or reorganize the planning and implementation of IEC activities? • What is required to change the culture of individuals and agencies involved in IEC activities?
IEC activities and programmes	• What is the scope, nature and reach of IEC activities and materials?	• What kinds of IEC activities and materials should exist five years from now?	• What is required to develop IEC activities and materials in line with the desired future situation?
Human resources	• What skills are available for planning and implementing IEC activities?	• What skills should be available for planning and implementing IEC activities five years from now?	• What is required to develop the desired skills?
Information resources	• What information about risks, consumer attitudes, behaviour, food-borne diseases, etc. is available to support IEC activities?	• What information should be available to support the development of IEC activities and materials five years from now?	• What is required to improve the availability of information to plan and develop tailored and targeted IEC activities and materials?
Infrastructure	• What equipment and infrastructure is available for IEC activities?	• What equipment and infrastructure should be available for IEC activities five years from now?	• What is required to obtain the needed equipment and infrastructure?

- Develop activities to advise food exporters on the implementation, accreditation and/or certification of their quality assurance programmes including HACCP systems
- Establish mobile units to inform and educate urban and rural consumers about specific food safety risks of concern and safe food practices
- Create a plan for communication with stakeholders during food-related emergencies

The range and choice of options will vary according to the country circumstance and needs. The various options identified will affect stakeholders differently. Conducting a simple Cost Benefit Analysis provides a basis to evaluate these costs and benefits in order to inform the decision making process (see the Regulatory Impact Assessment and Cost Benefit Tool in Part 3 for guidance).

To ensure transparency, the capacity building needs and various options considered (including their costs and benefits) should be documented. These could subsequently be written up as a capacity building strategy to help mobilize resources from within the country, as well as from external donors.

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ANNEX 5-1
Inventory of food safety and quality IEC materials

Purpose
To take stock of existing food safety and quality IEC materials available in the country

How to develop an inventory?
Consult relevant government agencies, operating at the central and lower levels, to find out about existing food safety and quality IEC materials that have been produced by government agencies (with or without external support).

Use the information collected to complete the table below.

Type of IEC material (i.e. leaflet, video, training manual, poster, etc.)	**Focus** (topics addressed)	**Target Audience**	**Organizations responsible for preparation and/or delivery**	**Date of production**

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Stakeholder analysis for food safety and quality IEC

Purpose

To identify the organizations which:

- prepare and deliver food safety IEC materials and programmes
- are targeted by and/or use these materials

Information Providers*	Target Audience / Potential Users**

* Information providers could include organizations at the central, regional and local level such as: government ministries and line departments (agriculture, health, trade, etc.); food inspectorates; universities, schools and colleges; research institutes; laboratories; NGOs; development projects; etc.
** Target audiences and potential audiences of IEC activities and materials could include: consumers and their organizations; grassroots groups, community organizations, women's groups, health workers, agricultural extensionists; food industry and industry associations; food producers, processors, traders, retailers, market stall keepers; eating places and street food vendors; the media; etc.

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ANNEX 5-3

Focus group discussions on food safety and quality IEC with government officials

Objective

To obtain information about IEC activities and programmes related to food safety and quality from:

- officials in the government agency(s) responsible for food control management
- officials in other government agencies (e.g. agriculture, health, consumer affairs, information, industry, etc.) also involved in producing and/or disseminating IEC materials and programmes to consumers, consumer organizations and the food industry

Possible questions

Content and delivery of IEC materials and programmes

1. What kinds of IEC materials related to food safety and quality are currently produced and disseminated in your country: i) on a regular basis; and ii) during food-related emergencies or crises? Are the latter based on a risk assessment?
2. Are these materials targeted at a particular audience (such as consumers, pregnant women, NGOs and community organizations, educators, local government service providers, small and medium food enterprises, food importers and exporters, street food vendors, etc.)?
3. Which channels (e.g. radio, television, leaflets and posters, web sites, community meetings, events, government extension workers, exhibitions, etc.) are used to reach different stakeholders?
4. What are the main messages of IEC activities and materials? Are they consistent and coherent?
5. Do IEC activities try to obtain information and opinions from concerned groups (as well as provide information to them)? How?
6. Has any research been undertaken to investigate consumer perceptions and understanding of food risks?
7. Have there been any efforts to assess the performance and impact of IEC activities and materials in terms of their reach, adoption of message, influence on the target audience, etc.?
8. Have there been any efforts to assess the performance and impact of IEC activities and materials in terms of improved food safety and quality?
9. Are IEC activities and materials produced in all the languages spoken in the country?

Roles and mandates for food safety and quality IEC activities and materials

10. Which government agencies (central, regional and local level) are involved in the production and delivery of IEC activities and materials?
11. What is the mandate/role of these agencies, and to what extent and how do they work together?
12. Does your government have a strategy or plan for food safety and quality IEC?
13. What resources (financial, human, equipment, etc.) are available for the preparation and dissemination of IEC activities and materials?
14. What processes are used to develop and deliver IEC activities and materials?
15. To what extent and how do government agencies cooperate with stakeholders (e.g. NGOs, food enterprises, business associations, the media, donor projects/organizations, etc.) in the development and/or delivery of IEC activities and materials?

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Focus group discussions on food safety and quality IEC with consumers and their organizations

Objective

To obtain information about consumer perceptions, knowledge and behaviour with respect to food safety and quality from representatives of consumers and organizations representing consumer interests.

Possible questions

The following questions should be adapted to the particular situation in the country. For instance, they could be adapted to address the main known causes of food-borne disease, recent food crises, and/or any relevant education campaigns or programmes recently carried out.

1. What are your concerns related to food safety and quality?
2. What specific food safety risks are of concern to you, and how do you seek to reduce them?
3. Do you read labels before purchasing food?
4. If yes, are you satisfied with the amount of information currently displayed on food labels?
5. What kinds of measures do you take to reduce the risk of food-borne disease for you and/or your family?
6. Do you know where to complain/report if there is something wrong with the food you have bought?
7. What is your source of information on matters related to food safety and quality?
8. What in your opinion are the three most important sources of information on matters related to food safety and quality?
9. What do you know about [insert name of appropriate public education campaign in your country if existing]?
10. To what extent, do you believe that existing government controls are able to ensure the safety and quality of food sold in your country?

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ANNEX 5-5

Focus group discussions on food safety and quality IEC with the food industry and industry associations

Objective

To obtain information from representatives of food enterprises and associations representing their interests about their knowledge of food safety and quality, including the application of good practices (GAPs, GMPs, GHPs, HACCP, etc.), and access to relevant IEC materials.

Possible questions

The following questions should be adapted as needed:

1. How important is food safety and quality in the context of your work?
2. Do managers in your food enterprise keep you informed about trends and news related to food safety and quality? If yes, how?
3. Do you have access to information/information materials about how to improve food safety and quality in the context of your work?
4. If yes, what does this information address? By whom is it produced? What media does it use (i.e. leaflet, booklet, video, etc.)?
5. How do you use or apply this information in your day-to-day work?
6. How would you evaluate the usefulness of this information?
7. How is available information about food safety and quality shared among employees in your enterprise?
8. What do you know about good agricultural practices / good hygiene practices / good manufacturing practices / HACCP etc.? Where did you obtain this information?
9. What kinds of information about food safety and quality (not currently available at your work place) would you like to be able to access, and why?

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SWOT analysis scenario for food safety and quality IEC

The following table gives an example of strengths, weaknesses, opportunities and threats relevant for food safety and quality IEC in a hypothetical country.

	Positive	***Negative***
Internal factors	**Strengths** • Food law refers to government's role to provide information to consumers • IEC materials have been developed to promote good manufacturing practices for food • Relevant ministry has recently reorganized and improved its library/documentation centre • IEC materials produced encouraging food enterprises to apply HACCP • Etc.	**Weaknesses** • Different ministries/departments are involved in developing and disseminating food safety and quality IEC materials with little coordination between them • Existing IEC materials fail to target particular stakeholder groups • Prior IEC campaigns focused on urban areas but population is largely rural • Lack of IEC materials targeting street foods and informal food sector • Few officials responsible for food control activities have skills or training in IEC • Weak commitment of government to disclose and provide access to information about food safety and quality • Communication and information is generally of low priority • Etc.
External factors	**Opportunities** • Experience in conducting successful communication campaigns for public health concerns • Expansion in number of industry associations and consumer groups • Increased awareness about food safety and food-borne diseases • Political leaders supportive of the need for increased attention to food safety and quality • Goals and objectives have been formulated for food control • New food law requires provision of certain information on labels • Some journalists interested in food safety and quality, and writing on related topics • Etc.	**Threats** • Low literacy rates increase challenges of providing food safety IEC materials and programmes • Potential for food-related risks to be exaggerated by media • Many people in rural areas have limited access to conventional communication channels (e.g. newspapers, television, etc.) • Lack of transparency in some government agencies • Consumers in some areas are inundated with different messages (difficult for food safety messages to penetrate) • Etc.

ANNEX 5-7
Template for situation analysis report for food safety and quality IEC

Introduction

The following template can be used to help structure and document the findings of the various surveys, interviews, focus group discussions, etc. carried out to collect information on the existing situation of food safety and quality IEC. It lists the main components of a situation analysis report and provides an example which could be adapted to the particular circumstances in the country.

Terms of Reference: The reasons for conducting the situation analysis.

Acknowledgments: Recognize those that have helped with the profile.

Summary of Findings/Recommendations: What are the key points or issues identified? List any results by order of importance.

Methodology: Explain what was done, how it went, and what was learned in the process. For instance, could the analysis have been improved? What are the major weaknesses in the accuracy or validity of the data? Who was involved and/or consulted? These questions may be of assistance later, if ever the profile needs to be updated, or the findings need to be cross-checked.

Findings: Based on the information collected and analysed during the situation analysis, describe the current situation of food safety and quality IEC activities and their impact.

Implications for the Future: Are there any trends (e.g. changes to food legislation, increasing consumer interest in food safety and quality, new donor project to increase awareness about issues related to food safety and quality) that are likely to impact food safety and quality IEC activities in the future? It is a good idea to identify and explain any relevant external circumstances including both positive and negative ones.

Appendices: Present information that does not fit appropriately elsewhere e.g. main results of surveys or copies of questionnaires used. This will help those who may wish to follow-up on your conclusions in more detail and to know on what evidence conclusions were based.

Sources: List the main sources of information including key persons interviewed, external stakeholders consulted, etc.

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ANNEX 5-8

Sample agenda for a capacity building needs assessment workshop for food safety and quality IEC

Objectives

- Imagine how food safety and quality IEC should ideally be five years from now: In what ways would the outcomes achieved be different? What would the benefits be?
- Identify the capacity building needs to achieve this desired future situation

Participants

- Officials in the agency(s) responsible for food control management and involved in IEC activities targeting different audiences
- Officials from other government agencies with responsibilities for the production and/or dissemination of IEC activities and material related to food safety and quality
- Representatives of food enterprises, consumers and consumer organizations

Day one – morning

- Introduction to the needs assessment process
- Presentation of the findings of the situation analysis and SWOT analysis
- Review, discuss and research consensus on the findings of the situation analysis

Day one – afternoon

- Discuss the desired future situation of food safety and quality IEC and relevant internationally accepted benchmarks and good practices
- Visualize the purpose, role, functions, values, operation, etc.
- Use key words to describe in broad terms how improved food safety and quality IEC would look five years from now – concentrate on describing the characteristics of the desired future situation rather than thinking about to reach this situation

Day two – morning

- Presentation of different descriptions of the desired future situation of food safety and quality IEC
- Identify and discuss similarities in these descriptions
- Discuss and agree on the goals and objectives of food safety and quality IEC

Day two – afternoon

- Use the capacity building needs identification matrix to identify the main capacity building needs and requirements to achieve the desired future situation
- Rank needs in order of importance
- Rank needs in order of ease of implementation

Notes

- An external facilitator or resource person could be available during this workshop to provide experiences and good practices related to the organization and implementation of food safety and quality IEC in other countries
- This workshop will normally require at least two days. However, the exact amount of time required will depend on the nature and complexity of the existing situation, size of the country, number of stakeholders involved, etc.

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PART 3

TOOLS AND TECHNIQUES

FOCUS GROUP DISCUSSIONS

A focus group is an organized discussion with particular stakeholders (e.g. government employees, consumers, food industry representatives, etc.). Focus group discussions aim to collect information on the attitudes, beliefs, perceptions and experiences of different stakeholders. They provide a convenient way to obtain a large amount of qualitative information in a relatively short time.

Objectives

Clear and explicit objectives for the focus group discussion should always be defined in advance. What do you hope to learn through the discussion? The clearer the objectives, the easier it will be to design the rest of the session.

Planning, preparation and facilitation

Planning and preparation will involve deciding on the agenda and objectives, developing and testing questions, identifying and inviting suitable participants, and organizing a venue. The questions should be open-ended, clearly formulated and easily understood. Easiest and most general questions should come first. They should be neutral and not attempt to influence the answer. Normally, a focus group should not last longer than three hours, allowing time for about 8 to 10 questions. Focus groups require a skilled and impartial facilitator. The role of the facilitator will be to create a good atmosphere, encourage participation and discussion, listen and probe for further information.

Participants

Focus group discussions usually have between 6 and 12 people. A good session requires a small but representative sample of "expert" participants. Participants may be government employees, clients of government services, representatives of food enterprises, consumers or technical experts, etc. In selecting participants, it will be important to ensure that the composition of the group will enable them to speak freely and openly. Focus groups usually bring together people with similar backgrounds or interests. Different focus groups should be organized to obtain differing views. For example, if the subject of the needs assessment is food legislation and regulations, it may be useful to organize separate focus groups for representatives of government ministries that support legislation reform and those that oppose reform, and for food industry and consumers. It will also be important to ensure that the participants are suitable for the selected objectives and questions.

Equipment

The availability of basic equipment and supplies will contribute to the success of the

focus group. Flipcharts, markers, note cards, tape, name tags, pencils, a clock, refreshments, etc. should normally be available.

Follow-up

The purpose of the focus group is to gather information that can help to identify options for action. Therefore, the findings and should be clearly documented and disseminated, and used to inform subsequent discussions or workshops.

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SWOT ANALYSIS

Introduction

SWOT analysis is a strategic planning tool that can be used to identify and assess an organization's (internal) strengths and weaknesses, as well as the (external) opportunities and threats facing it. It is a simple technique, which can be used as a brainstorming tool to help paint a picture of the current situation. The process of conducting a SWOT helps to facilitate a common understanding of "reality" among a group of people within an organization. This makes it easier to understand and identify key capacity building goals and needs, as well as possible solutions.

Components

A SWOT analysis consists of two parts:

1. An analysis of the internal situation (strengths and weaknesses)
   This should only be discussed on the basis of what exists now, i.e. about real actual strengths and weaknesses. It should not try to identify speculative, future weaknesses or strengths.
2. An analysis of the external environment (opportunities and threats)
   This should take into account the actual situation (existing threats, unexploited opportunities) as well as probable trends.

Figure 5 SWOT analysis: strengths, weaknesses, opportunities, threats

Internal	**Strengths** Any internal asset (e.g. skills, motivation, technology, finance, coordination) which enables the organization to effectively carry out its mandate, take advantage of opportunities, or deal with threats	**Weaknesses** Internal deficits (e.g. inadequate staff skills, insufficient equipment, out-dated procedures) that prevent the organization from effectively carrying out its mandate and meeting demands of clients
External	**Opportunities** Any external circumstance or trend (e.g. membership in regional or global trade groupings, increased consumer awareness or attention to food safety) that could positively affect the organization's role and operations.	**Threats** Any external circumstance or trend (e.g. economic or political crisis, transboundary food-borne disease, etc.) that could negatively affects the organization's role and operations

Outputs

A SWOT analysis provides a framework to evaluate an organization's role and operations including its services, activities and products based on effectiveness (or "doing the right thing") and efficiency (or "doing things right"). It may discover that an organization's strengths and weaknesses are very similar to each other. That is, an organization's greatest strengths may also be its greatest weaknesses.

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VENN DIAGRAM

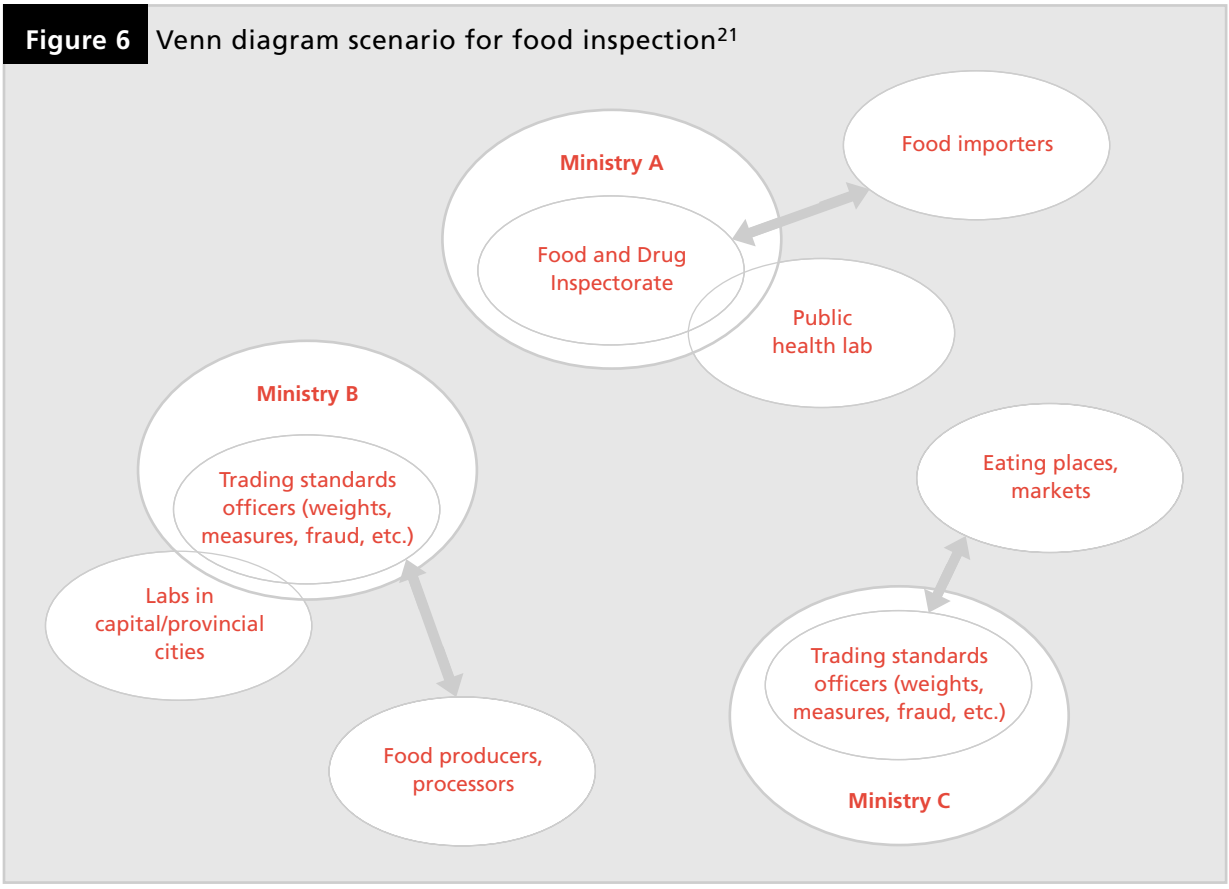
Introduction

Venn diagrams are used to identify key stakeholders, assess their importance and explore the relationships or power dynamics between them, as well as with their external clients. The process of constructing Venn diagrams is a useful way for participants with different perspectives to exchange views and achieve some form of understanding. Mapping organizations using the Venn diagram tool provides a framework for individuals to share information and opinions in a structured way, and helps to identify opportunities for change.

Purpose

To illustrate the extent to which organizations interact with each other or overlap, as well as the importance of each and their role to the issue being evaluated.

Figure 6 Venn diagram scenario for food inspection[21]



[21] This is a hypothetical example. The organizations involved and relationships between them will vary from country to country.

Creating a Venn diagram

Venn diagrams are made up of a variety of circles, each of which represents a different stakeholder. The diagrams may be created by small groups using cut out circles or by drawing.

The size and position of the circles reflects the influence of the stakeholder:

- Larger circles represent more powerful organizations.
- Overlapping circles represent interacting organizations.
- Circles near the centre represent organizations with an important role
- Circles towards the edge of the drawing represent les powerful organizations.
- A small circle within a larger circle represents a component of that organization.

The visualisation of the present situation created using a Venn diagram can be extended to add different values to each organization, for example indicating which groups are allies, which are neutral and which are rivals. In addition, the Venn diagram tool can be used to discuss and develop ideal future scenarios and explore how to get there.

A hypothetical example of a Venn diagram scenario for food inspection is presented in Figure 6.

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REGULATORY IMPACT ASSESSMENT AND COST BENEFIT ANALYSIS

What is a Regulatory Impact Assessment (RIA)?

Regulatory Impact Assessment (RIA) provides a flexible tool to assess the likely positive and negative impacts (benefits and costs) of existing or potential regulatory measures. It asks: Do the benefits of regulation justify the costs? What is the most efficient management option? RIA helps to provide decision makers with information about the potential effects of new or changed regulations, thereby contributing to accountability, transparency and consistency. RIA is used to define problems and to ensure that government action is justified and appropriate (OECD, 2005).

How can RIA be used in the context of food safety and quality?

RIA can be used whenever changes are proposed to food legislation to identify and, wherever possible, quantify the impact of changes. A RIA will ask: What are the consequences and trade-offs of the proposed regulation(s)? It will attempt to evaluate both the positive and negative effects of the proposed measures (i.e. the benefits and costs), including their impact on different stakeholders such as consumers, the food industry and government. A RIA therefore generates information that helps to clarify the options available and guide the decision-making process.

Two approaches have been suggested for determining the costs and benefits of regulatory measures in food safety. Theoretical models can be developed to estimate: i) the willingness to pay (WTP) for reduced risk of morbidity and mortality, or ii) the cost of illness (COI) covering lifetime medical costs and lost productivity. However, both approaches require considerable data for interpretation. Estimating the COI is possibly easier for policy makers to understand and has been used widely to justify measures for food control even though it does not measure the full value of risk reduction (FAO, 2003).

How can a RIA be carried out?

A RIA comprises an analysis of the range of regulatory options identified for a particular problem together with an analysis of the socio-economic impacts of implementing each option.

Although there is no one model for conducting a RIA, such an assessment should generally[22]:

- provide a clear statement of the policy objectives
- identify regulatory and non-regulatory options

[22] List adapted from the web site of the Better Regulation Executive, Cabinet Office, UK (available at: http://www.cabinetoffice.gov.uk/regulation/index.asp).

- estimate the likely direct and indirect costs (e.g. current/anticipated cost to government of regulating food safety, current/anticipated cost to food industry of compliance with food safety regulations, etc.)
- describe the expected benefits (e.g. reduced incidence of food-borne disease, reduction in the number of rejections and detentions of agricultural and food exports, increased export earnings, etc.)
- summarise who (i.e. food industry, consumers, government agencies or other groups) bears the costs and benefits of each option
- recommend a preferred option
- describe the rationale for the proposed option
- explain why other alternatives (including the status quo) were not accepted

Assessing costs and benefits

Reviewing costs and benefits of alternative regulatory options is useful to reduce uncertainty during decision making. Cost Benefit Analysis attempts to measure the actual costs of different options to strengthen capacity and the value of these improvements for different stakeholders (consumers, food industry, government, etc.), and to measure whether the benefits exceed the costs. This process generates information that is useful to help select the best or most valuable option(s). It can also support fund raising since potential donors may be more interested to support activities that are expected to be most cost-effective and to have the maximum impact.

Costs may be one-off or recurring. Benefits may be immediate (e.g. in the case of a food safety emergency) but are most often received over time. Both costs and benefits can be considered in quantitative and/or qualitative terms. However, it is often difficult to measure the costs and benefits of changes to food safety systems in pure monetary terms.

Firstly, although the direct costs of failures in food safety systems (such as the costs of export rejections) can and have been documented, there is much less information available on the total costs of efforts undertaken by government, the private sector, consumers and others to ensure food safety. Part of the difficulty in identifying the costs of food safety systems is that they are closely intertwined with normal production, processing, handling, quality management and distribution costs in general. Secondly, it is difficult to put a financial value on many of the costs and benefits (such as risk, loss of reputation, market penetration, human life and health, etc.) associated with changes in the performance of food safety systems. Where quantitative data is unavailable (or too difficult or costly to generate), costs and benefits can be described in qualitative terms.

Table 1 below illustrates the potential costs and benefits of new EU food safety regulations, which were identified during a RIA carried out by the UK Food Standards Agency.

Challenges

Estimating costs and benefits is a challenging task, and it may not be possible to do a complete RIA. The expertise, resources and/or information required may not always be readily available. Sometimes there may be limited data, or data that exists may be fraught with assumptions that may create uncertainty as to the outcome of adopting a specific regulatory option For instance, limited data on the incidence of food-borne illnesses makes it difficult to accurately assess the current costs and economic impact of food-borne illness, as well as to quantify the economic benefits to government and the general public of new food safety regulations that may reduce the incidence of food-borne illness. In other cases, it may be difficult to predict how regulations will actually affect industry and/or consumer behaviour.

Table 1. Simple model of potential costs and benefits of new EU food safety regulations[23]

Processes and Changes	*Costs*	*Potential Benefits*
1. Registration of food businesses 2. Traceability systems 3. Move from prescriptive legislation to hazard analysis-based approach	**Businesses in the food chain** ***One-off costs*** • Consultancy • Investments in recording systems, etc. • Staff training • Management time ***Recurring costs*** • Management time • Documentation and record keeping • Staff training • Microbiological testing • Operational changes **Consumers** ***Recurring costs*** • Food prices if cost increases are passed on by producers **Regulators/Enforcers** ***One-off costs*** • Training of staff • Advice to businesses ***Recurring costs*** • More registered businesses • More detailed inspections	**Consumers** • Decrease in food poisoning • Greater buying confidence • More choice of safe foods **Businesses in the food chain** • Savings in costs from removal of unnecessary regulations **Regulators/Enforcers** • Saving in regulatory and enforcement costs

In spite of these challenges, RIA and Cost Benefit Analysis offer a useful framework to consider and discuss the effects of regulatory and capacity building options. What is most important is to identify and document the various regulatory options, assemble the available data (quantitative and/or qualitative) on the respective costs and benefits of each option, and, by comparing costs and benefits provide a justification for the preferred options. The process does not need to be overly burdensome.

Once the relevant costs and benefits of possible regulatory and/or capacity building options have been identified, and the net benefits or costs estimated, decision makers are then able to compare the available options to help select the best one(s).

The following references provide more information and advice on utilizing RIA and Cost Benefit Analysis:

- **Cabinet Office**, UK. Web site on Regulatory Impact Assessment (available at: http://www.cabinetoffice.gov.uk/regulation/ria/index.asp).
- **Food Standards Agency**, UK. Web site with links to Regulatory Impact Assessments carried out by year (available at: http://www.food.gov.uk/foodindustry/regulation/ria/).
- **Food Standards Australia New Zealand.** 1999. *An analysis of the regulatory impact of the proposed national food safety reforms* (available at: http://www.foodstandards.gov.au/mediareleasespublications/publications/foodsafetystandardscostsandbenefits/).
- **Guasch, J.L. and R.W. Hahn.** 1999. *The costs and benefits of regulation: Some implications for developing countries.* World Bank (available at: http://www.worldbank.org/html/dec/Publications/Workpapers/WPS1700series/wps1773/wps1773.pdf).

[23] Food Standards Agency, UK. No date given. *Updated Partial Regulatory Impact Assessment for Proposals to Consolidate EU Food Hygiene Legislation* (available at: http://www.food.gov.uk/multimedia/pdfs/latest_draft_ria.pdf).

- **Kirkpatrick, C.** 2001. *Regulatory impact assessment in developing countries: Research issues*. Centre on Regulation and Competition, Institute for Development Policy and Management, University of Manchester. Working Paper Series. Paper No. 5 (available at: http://www.enterprise-impact.org.uk/pdf/RegulatoryImpactAssessment.pdf).
- **OECD.** 2005. *Regulatory impact analysis in OECD countries: Challenges for developing countries*. Prepared by Delia Rodrigo for the South Asian Third High Level Investment Roundtable, Dhaka, Bangladesh, June 2005 (available at: http://www.oecd.org/dataoecd/21/52/35258511.pdf).

FURTHER READING

FAO/WHO. 2003. *Assuring food safety and quality. Guidelines for strengthening national food control systems.* Food and Nutrition Paper No. 76. Food and Agriculture Organization of the United Nations (FAO). Rome (available at: ftp://ftp.fao.org/docrep/fao/006/y8705e/y8705e00.pdf).

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Morgan, P. 1997. *The design and use of capacity development indicators.* Prepared for the Policy Branch of the Canadian International Development Agency (CIDA). Ottawa (available at: https://www.oecd.org/dataoecd/34/37/1919953.pdf).

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UNDP. 1998b. *Participatory organizational evaluation tool.* Developed for UNDP by Beryl Levinger of Education Development Center and Evan Bloom of Pact. United Nations Development Programme (UNDP). New York (available at: http://www.eldis.org/static/DOC6142.htm).

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Food safety and quality are essential for food security, public health and economic development. Improving food safety is necessary to increase food security, which exists when *all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food, which meets their dietary needs and cultural preferences to have an active and healthy life* (World Food Summit Declaration, 1996). Increasing the supply of safe and wholesome food reduces the impact of food-borne diseases, which cause many illnesses and deaths, as well as detrimental economic consequences, in both developing and developed countries every year. Ensuring the safety and quality of food exports promotes international trade, which provides a means to generate growth and reduce poverty.

Effective national food control systems are fundamental to ensure food safety and quality. However, in many countries, they are unable to ensure an adequate supply of safe food for domestic consumers or to meet international sanitary and phytosanitary requirements for food exports. Capacity building is necessary to address these concerns. The identification and prioritization of needs are important initial steps in the capacity building process. These steps are necessary to ensure that activities to strengthen national food control systems are demand-driven and tailored to specific local conditions, strengths and weaknesses.

These Guidelines assist countries to identify their capacity building needs in the core components of a national food control system. They include five modules to assess needs in: i) food control management; ii) food legislation; iii) food inspection; iv) official food control laboratories; and v) food safety and quality information, education and communication. Each module sets out a step-by-step process to examine critically existing capacity and performance, consider the desired future improved situation, pinpoint capacity building needs and identify options to address them. Internationally accepted benchmarks for an effective national food control system are incorporated, as well as practical tools and suggestions to support the needs assessment process.