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# POLICY PAPER ON THE PROPOSED SCOPE AND MANDATE FOR COMPETENT AUTHORITY COVERING VETERINARY SERVICES

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## **Deliverable 1.41 on**

### **Policy paper on the proposed scope and mandate for competent authority covering veterinary service**

#### **Workpackage 74, Sub-activity 4.1**

Based on the legislation on food safety, develop policies or rules for establishing a Competent Authority for veterinary services in the country.

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# INTRODUCTION

The WHO/FAO have created a widely accepted definition of Food Control. The FAO define food control as :

“All mandatory activities necessary to assure the quality and safety of food”<sup>1</sup>.

(Refer to Annex I or use the below hyperlink to access the full report.)

<http://www.fao.org/3/x7354e/X7354e07.htm>

This basic definition has expanded in the Food and Nutrition Paper 76 and is still used to set the context for the development of national food control systems. According to the FAO/WHO (2003) a Food Control System is:

“A mandatory regulatory activity of enforcement by national or local authorities to provide consumer protection and ensure that all food during production, handling, storage, processing and distribution are safe, wholesome and fit for human consumption; conform to food safety and quality requirements; and are honestly and accurately labelled as prescribed by the law.”<sup>2</sup>

(Refer to Annex I or use the below hyperlink to access the full report.)

<http://www.fao.org/3/y8705e/y8705e00.htm>

There are three elements to a Food Control system.

1. **The Legal Structure:** This is the institutional structure(s) with law making/enforcement capacity and the legislation that is produced as a result.
2. **The Competent Authority:** The Competent Authority (CA) is the organisation with the responsibility for effective operation of the national food control system.
3. **The Supporting Organisations and Structures:** These are the organisations which contribute to the successful delivery of food controls by enabling or supporting the Competent Authority. These organisations may be accredited in their own capacity but will not be authorised to deliver official controls, as in the Competent Authority. Supporting organisations typically include Laboratories, Academic and Scientific organisations, Accreditation bodies, Professional organisations, Consumer organisations

Ideally, these three interconnected elements work together within the constitutional framework of the country.

## BACKGROUND

In most countries the food control system has evolved reactively within the governmental structure over time. It tends to reflect historic situations and bias and varies from country to country. Codex Alimentarius has developed various guidelines and tools to assist countries wishing to review and develop their existing Food Control Systems. This policy document is based on those guidelines, particularly:

1 <http://www.fao.org/3/x7354e/X7354e07.htm>

2 <http://www.fao.org/3/y8705e/y8705e00.htm>

- Codex Principles and guidelines for national food control systems (CAC/GL 82-2013)
- Codex Principles and guidelines for monitoring the performance of national food control systems (CXG 91-2017)

In Bangladesh a number of government agencies are involved in implementing food control practices at different stages of the food value chain. Among others, the newly established Bangladesh Food Safety Authority (BFSA) plays the overall coordinating role. The Bangladesh Standards and Testing Institute (BSTI) is responsible for setting standards in food and non-food packaged or finished items.

The Department of Livestock Services (DLS) is responsible for assuring safe practices in animal production and the primary processing of food of animal origin. These areas are subject to a number of regulations. The purpose of this paper is to formulate recommendations to improve food safety through the implementation of these regulations.

## **OBJECTIVES**

The main objective of this document is to identify and outline the relevant policies and elements needed for the proposed scope and mandate for competent authority covering veterinary services of the Competent Authorities, focusing on the DLS, under the Ministry of Fisheries and Livestock, within the current constitutional and legal structure, taking into account international best practice and standards.

The document will also refer to the other components, no 1, The legal Structure and no. 3, supporting structures but the main focus is on the Competent Authority, particularly the DLS and its interaction with other competent authorities.

The proposal is divided into four areas with recommendations for each. The four areas are:

1. Competent Authority Responsibility for control of Products of Animal Origin (POA)
2. The delivery of official controls
  - 2.1 Structure and management
  - 2.2 Enforcement and compliance
  - 2.3 Materials and guidance
3. Staff Competence
4. Review and Monitoring

There are 12 recommendations in total. These are summarised at the end of the discussion.

A fifth area, supporting organisations, is also considered. It is outside the remit of this document to make recommendations for the supporting organisations, but two are critical to the comprehensive and accurate delivery of official controls, so consideration has been given to aspects that would benefit from improvement. These are listed as 'comments' rather than recommendations.

## 1. Competent Authority Responsibility for control of Products of Animal Origin (POA)

As is common in food control, the products of animal origin in Bangladesh are controlled by more than one competent authority. To ensure the comprehensive delivery of food controls across the full food chain from farm to table, it is essential that all competent authorities have a clear mandate. Principle 4 of the CAC/GL 82-2013 guidance states that

'All participants in a national food control system should have specific roles and responsibilities clearly defined

The main ministries with responsibility for the delivery of Official Controls for POA are:

- a. Ministry of Food via the Bangladesh Food Safety Authority (BFSA).
- b. Ministry of Fisheries and Livestock (Department of Livestock Services (DLS) is given the responsibility for the delivery of official controls through the Animal Disease Act 2005 together with other legislation including the Animal Slaughter and Quality Control of Meat Act 2011 and the Fish Feed and Animal Feed Act 2010.
- c. Ministry of Commerce
- d. Ministry of Shipping
- e. Ministry of Industries (BSTI)
- f. Ministry of Finance: National Board of Revenue (NBR)- Bangladesh Customs
- g. Ministry of Local Government, Rural Development and Cooperatives- city corporations/ municipalities
- h. Ministry of Health and Family Welfare, Directorate General of Drug Administration (DGDA) who are responsible for the management of veterinary drugs

There needs to be formal agreement between the competent authorities in Bangladesh as to which CA will take responsibility for each sector of the food chain. This should include clarification on who has responsibility for Border Inspection Posts.

Principle 7 of the same Codex document (CAC/GL 82-2013) explains that the competent authorities in a national food control system should cooperate and work in a coordinated

manner which clearly reflects the agreed roles and responsibilities and facilitates good communication and exchange of information.

The competent authorities within a national food control system should operate in a cooperative and coordinated manner, within clearly assigned roles and responsibilities, for the most effective use of resources in order to minimise duplication and/or gaps and to facilitate information exchange.

### **Recommendation:**

- ✓ The Component Authorities (Ministry of Food; Ministry of Fisheries and Livestock, Ministry of Commerce; Ministry of Industries; Ministry of Local Government, Rural Development and Cooperatives; Ministry of Health and Family Welfare) should establish Memoranda of Understanding setting out which ministry will be responsible for the Delivery of Official Food Controls and for Enforcement in each sector.
  - The MOU's should define the scope and responsibility for each Ministry and department. The DLS with the support from the Ministry of Fisheries and Livestock, should act as the lead authority enforcing food safety compliance in animal production and primary processing.
  - The MOU's should ensure the full food chain is covered, from farm to table, including imports.
  - Where overlaps occur, the relevant departments (BFSA, DLS, city corporations, DGDA and BTSI, Ministry of Commerce) should agree joint working practices to ensure no sectors or premises are overlooked and to avoid duplication of effort.
  - Where Enforcement may potentially be carried out by one CA against another (e.g DLS against City Corporation as owners of an abattoir), a process should be developed and described to accommodate this, following the principles in the hierarchy of enforcement or VADE.
  - Formal lines of communication should be established between all the competent authorities. These lines of communication should cover both routine data sharing of accurate, current information and incident management (rapid alert/early warning) and the development of enforcement policies and procedures. The DLS should actively participate with other organisations in standard setting for products of animal origin through clearly established communication and collaboration procedures.

## **2. Delivery of Official Controls**

After agreement between the Competent Authorities has been reached with regard to responsibility, each competent authority will then need to ensure the delivery of official controls within their mandate.

### **2.1 Structure and management of the Competent Authority**

As mentioned above, according to CAC/GL 82-2013, there must be '...clarity on the roles and responsibilities of all participants in the national food control system.'



In order to achieve the effective delivery of official controls, each competent authority will need to develop and characterise the appropriate institutional structure to reflect their duties. This should describe the management and delivery of controls. The roles and responsibilities of staff at each level need to be clearly defined so that delivery targets can be developed accordingly. This will enable monitoring, review and evaluation.

The institutional structure should allocate who, at each level, has responsibility for which controls. This responsibility can be divided into:

- Management responsibility, including monitoring and review
- Field operations such as inspection, sampling, testing, audit, verification etc
- Administrative actions such as registration of premises, maintaining licencing records and other databases.

#### **Recommendations:**

- ✓ An organizational chart should be developed for each competent authority, specifically for the DLS, indicating the roles and scope at each level in the hierarchy i.e. at the Headquarters, Division, District and Upazila levels.
- ✓ The organisational chart should describe the job functions and scope and, where necessary, include the required qualifications and expertise.

## **2.2 Enforcement and compliance policy**

It is the responsibility of the Competent Authority to enforce legislation and take action when non-compliance is identified. Enforcement actions taken by the Competent Authorities should reflect the risk to public health and, ideally, be dissuasive and effective. To ensure enforcement action is carried out in a consistent and transparent manner, the DLS, as Competent Authority, should develop enforcement policies which clarify the responses to be taken when non-compliance is identified

The DLS, as the Competent Authority, may wish to consider existing best practice when developing their enforcement policy, using the full range of responses as described in the Hierarchy of Enforcement or VADE (voluntary, assisted, directed and enforced) principles.

The enforcement policies should cover incident management such as food borne outbreaks, emergency situations and food recalls in addition to routine premises, processes and product-based noncompliance.

The enforcement policies developed within the DLS should be consistent with and complementary to those in use in the other Competent Authorities with responsibility for Products of Animal Origin (see lines of communication, above)

#### **Recommendations:**

- ✓ The DLS, as Competent Authority, should develop an Enforcement Policy that explains the correct course of action to be followed when noncompliance is identified. Policies should:
  - reflect the risk to public health,

- follow best practice using the hierarchy of enforcement or VADE
  - not contradict the policies in other Competent Authorities
  - explain the management responsibility and correct lines of communication to be followed in the event of an emergency or major food incident.
- ✓ Competent Authorities should cooperate in developing enforcement policies relating to Products of Animal Origin to ensure there is no conflict of interests or inconsistency of approach across the sector.

## 2.3 Materials and guidance

### Control Officials

The DLS, as Competent Authority, is responsible for establishing, implementing and enforcing the regulatory requirements that are relevant to its area of responsibility. This means developing operating procedures which describe the way official controls should be delivered. Official food controls should be delivered consistently and transparently in the section of the food chain which is their area of responsibility. To ensure this food control officials will need support materials such as inspection protocols or sampling forms to ensure the consistent and comprehensive collection of data. They will also need guidance, especially relating to compliance and enforcing.

#### Recommendations:

- ✓ The DLS, as Competent Authority, should develop written protocols which describe the procedures to be followed, to include:
  - how and when official controls will be delivered according to their area of responsibility. This should explain how to carry out actions such as inspection, sampling, verification, audit and all other official controls described in the relevant legislation.
  - who is responsible (cross referenced to the organisational chart) for the delivery of the various official controls
  - how compliance is to be determined, including against which standards it will be measured
  - how to carry out the enforcement actions which must be taken when noncompliance is identified. This should be cross referenced to the enforcement policy and reflect its contents.
- ✓ The DLS, as Competent Authority should also develop documents explaining
  - the standards to be used when evaluating compliance
  - the enforcement policy and how to use it
  - actions to be taken in emergency or major incidents
  - administrative procedures to be used for recording official controls and compliance

## Food Business Operator

The Food Business Operator has the primary responsibility for producing safe food by complying with the relevant requirements. Educational information and guidance documents should be developed by the DLS, as Competent Authority (up to the level applicable), in conjunction with the Food Business Operators, to improve compliance in the sector. These can contribute to the enforcement policy, forming an educational approach when non-compliance is identified.

### Recommendations:

- ✓ The DLS, as Competent Authority, should lead, with relevant stakeholders, on the development of guidance documents and training materials for the Food Business Operators handling POA.

## 3. Staff competence

The successful implementation of any food control system depends on having competent officials. CAC/GL 82-2013 specifies that implementation of a national food control system requires the necessary human resources with appropriate training. The Delivery of Official Food Controls is a specialist area of expertise. Officials with qualifications in food science, food technology, food chemistry, food processing will not have received the relevant training in the delivery of official food controls, especially in enforcement and identification of non-compliance, as these do not form part of the syllabus in traditional food related qualifications. Many Veterinary qualifications also omit the enforcement aspect, concentrating solely on disease identification in the process of ante and post mortem inspection.

Special training programmes should be developed for Food Control Officials which explain the delivery of official controls, the legal underpinning and the process of enforcement. These training programmes are typically delivered by a training provider such as a University using specialist staff and accredited by the Competent Authority (e.g. the DLS) or other professional organisation. Many countries specify successful acquisition of such an accredited qualification as a requirement for employment and authorisation by a CA.

As the area of food safety is not a static field, Officials working in the CA must keep up to date in their areas of competence, receiving additional post qualification training as needed on emerging hazards and relevant developments.

### Recommendation:

- ✓ A bespoke training programme should be developed to ensure all food control officials are properly educated in the delivery of official food controls. This should include understanding of the legal framework and enforcement processes as well as the underpinning science. Annex I lists an outline syllabus that could form the basis of such training.
- ✓ Each competent authority should develop programmes of Continuing Professional Development for their staff covering the relevant developments in food and food safety. If appropriate, the requirement for a minimum amount of CPD per annum can

be included in job descriptions. The DLS should initiate such a programme for their staff.

## 4. Review and monitoring

The main aim of a national food control system is to protect public health from hazards associated with the food chain. This will be achieved by developing specific objectives within related policies such as a National Food Safety Policy, a National Livestock Policy, an Enforcement policy etc which have relevance to the delivery of Official Food Controls.

The effectiveness of the National Food Control System can (and should) be measured by regularly assessing the achievements of the CA's against these objectives. The Codex document: Principles and Guidelines for Monitoring The Performance of National Food Control Systems, CXG 91-2017, provides guidance on how to establish performance monitoring within a National Food Control System.

Monitoring should take place at all levels, with the national CA taking responsibility for analysing and evaluating the assessments. Assessment criteria should be clearly defined and measured, including the relevant timescale for evaluation. Assessment criteria may include achievement of pre-determined targets, cost benefits, efficiency, collection of sampling and surveillance data etc.

### **Recommendation:**

- ✓ A monitoring system should be established, according to the principles set out in CXG 91-2017 to evaluate how well the DLS and its staff are achieving the food safety objectives set out in the relevant national policies.
- ✓ The outcomes of the monitoring should be evaluated and used as a basis for review of the national food control system to highlight where development and improvement is required.

## **SUPPORTING ORGANISATIONS**

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Supporting Organisations are those which support the CA in the delivery of official food controls but do not themselves have responsibility for delivery or enforcement powers. Recommendations for supporting organisations is beyond the remit of this policy document. However, there are two supporting organisations that are critical to the operationalisation of controls for POA, so brief comments are included below. The two critical supporting organisations are the Official Laboratories and Academic institutions.

### **Official Laboratories**

As described in the accompanying Food safety Investment plan, Livestock Policy and AMR Policy,

Bangladesh needs a comprehensive system of Official Laboratories which can provide data and advice for the CA's. This capacity should provide at LEAST

- accreditation and adoption of the relevant international standards on methods of analysis
- reliable and accurate laboratory analyses, tests, diagnosis and advice relating to food and feed samples taken in Bangladesh.
- Examination and where necessary typing (using internationally recognised typing techniques) of food and faecal samples relating to outbreaks of food borne illness
- advice on and participation in surveillance programmes, including planned food sampling programmes.

The laboratories must operate to international standards, using a sufficient number of suitably trained and qualified staff. A Laboratory Information System (LIMS) must be developed to facilitate centralisation and evaluation of data and rapid data sharing in the case of emergencies or serious incidents.

### **Academic Institutions**

The competence of officials is critical to the consistent and comprehensive delivery of Official Food Controls. Food Control Officials need formal training and assessment in key areas, at LEAST as listed in annex 1. This is normally best delivered as a combination of formal academic training, usually delivered at undergraduate level by an accredited University, and practical training carried out in the field. This training must be specifically designed and delivered by competent staff, who themselves have expertise in enforcement and good knowledge of the contents of relevant legislation and standards. Qualifications such as degrees in Food Processing, Food Technology, Food Science, Veterinary Medicine, while excellent in themselves do not provide sufficient training in enforcement for a graduate to undertake a role in the CA as a Food Control Official. Bangladesh needs a specialist training programme, preferably accredited by the relevant CA (e.g the DLS) or other appropriate International organisation, which will ensure all Food Control Officials have the minimum basic training required to protect public health through the accurate and consistent delivery of food controls. Once the basic training programme has been implemented successfully, Continuing Professional Development programmes can be developed as appropriate.

The Bangladesh Veterinary Council plays an important role in determining professional competence as well as professional/ethical behaviour of the Veterinarians and veterinary auxiliaries (para-professionals). These officials form a significant number of food control officers in the early stages of the food chain dealing with products of animal origin. It is recommended that the DLS collaborate and consult with the BVC in regard to CPD for food control officials. It may be appropriate for the BVC to include a requirement for CPD in the continuing registration for Veterinarians and veterinary auxiliaries (para-professionals).

## **1. Comments on Supporting Organisations**

### **Laboratories**

Bangladesh needs a comprehensive system of Official Laboratories, operating to international standards with a sufficient number of suitably trained and qualified staff which can provide data and advice for the CA's, including the DLS, as well as support in the case of emergencies or serious incidents.

### **Academic Institutions**

The relevant Academic institutions should develop a bespoke course for staff delivering Official Control, according to the outline in annex 1. This should be a rigorous programme delivered by competent staff, who themselves have expertise in enforcement and good knowledge of the contents of relevant legislation and standards. Ideally the programme should be accredited by an appropriate organisation, for example the BVC, and required for all Food Control Officials.

## **SUMMARY OF RECOMMENDATIONS**

1. The Component Authorities (Ministry of Food, Ministry of Fish and Livestock, Ministry of Commerce, Ministry of Industries and Ministry of Local Government, Rural Development and Cooperatives)) should establish Memoranda of Understanding setting out which ministry will be responsible for the Delivery of Official Food Controls and for Enforcement in each sector.
  - The MOU's should ensure the full food chain is covered, from farm to table, including imports.
  - Where overlaps occur, the relevant departments (BFSA, DLS and BTSI, City Corporations, Municipalities) should agree joint working practices to ensure no sectors or premises are overlooked and to avoid duplication of effort.
  - Where Enforcement may potentially be carried out by one CA against another ( e.g DLS as inspectors against City Corporation/Municipalities as owners of an abattoir), a process should be developed and described to accommodate this, following the principles in the hierarchy of enforcement or VADE.
  - Formal lines of communication should be established between all the competent authorities. These lines of communication should cover both routine data sharing of accurate, current information and incident management (rapid alert/early warning) and the development of enforcement policies and procedures.
2. An organizational chart should be developed for each competent authority indicating the roles at each level in the hierarchy i.e. at the Headquarters, Division, District and Upazila levels.
3. The organisational chart should describe the job functions and, where necessary, include the required qualifications and expertise.

4. Each Competent Authority should develop an Enforcement Policy that explains the correct course of action to be followed when noncompliance is identified. Policies should:
  - reflect the risk to public health,
  - follow best practice using the hierarchy of enforcement or VADE
  - not contradict the policies in other Competent Authorities
  - explain the management responsibility and correct lines of communication to be followed in the event of an emergency or major food incident.
5. Competent Authorities should cooperate in developing enforcement policies relating to Products of Animal Origin to ensure there is no conflict of interests or inconsistency of approach across the sector.
6. The DLS and other Competent Authorities should develop codes of practice, which describe the procedures to be followed, to include:
  - how and when official controls will be delivered according to their area of responsibility. This should explain how to carry out actions such as inspection, sampling, verification, audit and all other official controls described in the relevant legislation.
  - who is responsible (cross referenced to the organisational chart) for the delivery of the various official controls
  - how compliance is to be determined, including against which standards it will be measured
  - how to carry out the enforcement actions which must be taken when noncompliance is identified. This should be cross referenced to the enforcement policy and reflect its contents.
7. Competent Authorities, especially the DLS, should also develop documents explaining
  - the standards to be used when evaluating compliance
  - the enforcement policy and how to use it
  - actions to be taken in emergency or major incidents
  - administrative procedures to be used for recording official controls and compliance
8. The DLS, as Competent Authority, should develop or oversee the development of guidance and training for the Food Business Operators handling POA.
9. A bespoke training programme should be developed to ensure all food control officials are properly educated in the delivery of official food controls. This should include understanding

of the legal framework and enforcement processes as well as the underpinning science. Annex 1 lists an outline syllabus that could form the basis of such training.

10. The DLS should develop programmes of Continuing Professional Development for their staff covering the relevant developments in food and food safety. If appropriate, the requirement for a minimum amount of CPD per annum can be included in job descriptions.
11. A monitoring system should be established, according to the principles set out in CXG 91-2017 to evaluate how well the DLS as Competent Authority and its staff are achieving the food safety objectives set out in the relevant national policies.
12. The outcomes of the monitoring should be evaluated and used as a basis for review of the national food control system to highlight where development and improvement is required.



## FAO's integrated programme on food control

Module 7

### National Food Control Systems: Components and Operation

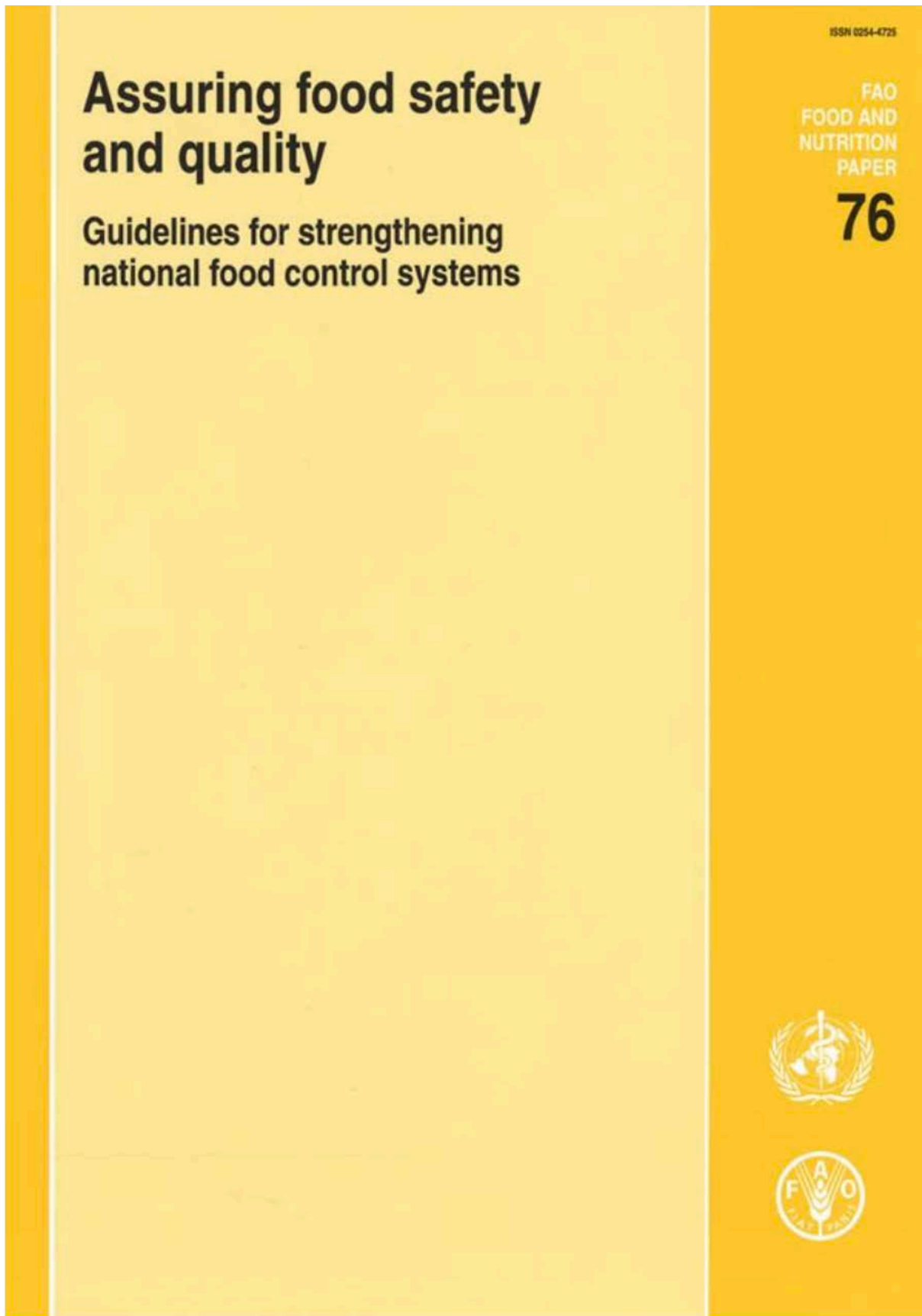
Food Quality and Standards Service  
Food and Nutrition Division

#### 7.3 WHAT IS FOOD CONTROL

Although there are many different definitions of Official Food Control, the one accepted by FAO is "All mandatory activities necessary to assure the quality and safety of food". This definition was published by FAO in the Food and Nutrition Paper (FNP) series on Food Quality Control - Manual 14/11 entitled "Management of Food Control Programmes". Food control is applicable throughout the entire food system. The three basic characteristics of a food control infrastructure include food law and accompanying regulations, a food inspectorate, analytical services and compliance unit, and supporting services (education, information, training and advisory support).

Official food control has its foundation in law. Without the legal framework of the government, there is no credibility for official activities or for those who carry them out. Furthermore, there is no incentive for others to comply with any directive issued by the "unauthorized" agency. While this defines the role of the government in food control, other partners, namely the food industry and the consumer, are also involved.

## **ANNEX 2**



### 3. IMPORTANT FOOD ISSUES

#### 3.1 Food Safety, Quality and Consumer Protection

The terms food safety and food quality can sometimes be confusing. Food safety refers to all those hazards, whether chronic or acute, that may make food injurious to the health of the consumer. It is not negotiable. Quality includes all other attributes that influence a product's value to the consumer. This includes negative attributes such as spoilage, contamination with filth, discoloration, off-odours and positive attributes such as the origin, colour, flavour, texture and processing method of the food. This distinction between safety and quality has implications for public policy and influences the nature and content of the food control system most suited to meet predetermined national objectives.

Food control is defined as:

*....a mandatory regulatory activity of enforcement by national or local authorities to provide consumer protection and ensure that all foods during production, handling, storage, processing, and distribution are safe, wholesome and fit for human consumption; conform to safety and quality requirements; and are honestly and accurately labelled as prescribed by law.*

The foremost responsibility of food control is to enforce the food law(s) protecting the consumer against unsafe, impure and fraudulently presented food by prohibiting the sale of food not of the nature, substance or quality demanded by the purchaser.

Confidence in the safety and integrity of the food supply is an important requirement for consumers. Foodborne disease outbreaks involving agents such as *Escherichia coli*, *Salmonella* and chemical contaminants highlight problems with food safety and increase public anxiety that modern farming systems, food processing and marketing do not provide adequate safeguards for public health. Factors which contribute to potential hazards in foods include improper agricultural practices; poor hygiene at all stages of the food chain; lack of preventive controls in food processing and preparation operations; misuse of chemicals; contaminated raw materials, ingredients and water; inadequate or improper storage, etc.

Specific concerns about food hazards have usually focused on:

Microbiological hazards;

Pesticide residues;

Misuse of food additives;

Chemical contaminants, including biological toxins; and

Adulteration.

The list has been further extended to cover genetically modified organisms, allergens, veterinary drugs residues and growth promoting hormones used in the production of animal products. For more details see Annex 3.

Consumers expect protection from hazards occurring along the entire food chain, from primary producer through consumer (often described as the **farm-to-table** continuum). Protection will only occur if all sectors in the chain operate in an integrated way, and food control systems address all stages of this chain.

As no mandatory activity of this nature can achieve its objectives fully without the cooperation and active participation of all stakeholders e.g. farmers, industry, and consumers, the term **Food Control System** is used in these Guidelines to describe the integration of a mandatory regulatory approach with preventive and educational strategies that protect the whole food chain. Thus an ideal food control system should include effective enforcement of mandatory requirements, along with training and education, community outreach programmes and promotion

## ANNEX 3

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### Suggested Outline Content for Bespoke Training Programme for Food Control Officials, Basic Level.

#### 1. Organisations responsible for Food Safety

- a. Government Agencies and Competent Authorities covering Food Safety in Bangladesh
- b. the responsibilities of the different Competent Authorities in Bangladesh and how the agreements, MOU and communication processes ensure complete coverage from farm to table
- c. relevant international organisations such as World Organisation for Animal Health (WOAH), Codex Alimentarius, World Health Organisation (WHO) etc, their contribution to food safety globally, the content of the main guidance documents issued by these organisations and how these are relevant in Bangladesh.

#### 2. Principle and supplementary food safety legislation in force in Bangladesh

- a. the content of the relevant legislation and standards to be used in the delivery of official controls in Bangladesh
- b. the legal proceedings and implications of enforcement and delivery of official controls.
- c. the distinction between unsafe/unfit and natural substance and quality with regard to food and how the relevant legislation applies in specific examples.

#### 3. Principles and practices for food control

- a. the Control Practices listed in the relevant Bangladesh legislation such as Inspection, audit, verification, sampling, surveillance etc
- b. procedures for the delivery of the controls listed above

#### 4. Enforcement/compliance

- a. how to assess non-compliance
- b. enforcement options and their application to ensure compliance using risk based principles to protect public health

- c. principles of risk underpinning the Hierarchy of enforcement or VADE
- d. the content and application of any relevant Codes of Practice or other guidance developed by the CA in Bangladesh to assist in the deliver of offici l controls.
- e. how to co operate with Food Control Offici ls in other CA to ensure public health is fully protected.
- f. emergency arrangements for local, regional, national and international incidents, including recall procedures

## 5. Food management systems

- a. current and emerging food safety management systems, including HACCP
- b. quality assurance programmes and Good Practices (such as Good Agricultural Practice, Good Manufacturing Practices, Good Hygiene Practices etc)
- c. the difference between Food Safety Management Systems, Quality Assurance and Good Practices and their appropriate application in the food chain.
- d. offici l certifi ation systems and their application in Bangladesh

## 6. Product labelling

- a. the content of the relevant legislation and standards to be used in the labelling of food in Bangladesh
- b. shelf life determination and the relationship with composition, storage and packaging

## 7. Imported food and feed controls

- a. the legislative and public health requirements regarding the control of imported food and feed products, including any specific p ocedures that apply to imported POA or the countries of origin
- b. how to inspect imported foods and determine compliance, including documentary, identity and physical checks
- c. the procedures to be followed when non compliance is identified in impor ed food

## 8. Food borne hazards

- a. the microbiological, chemical and physical hazards associated with the production, processing, distribution and sale of animals and food

- b. the risk to human and animal health and to the environment created by the hazards covered above
- c. the common procedures used to control the hazards referred to above including
  - i. cleaning and disinfection
  - ii. pest control
  - iii. hygienic practices
  - iv. equipment and premises design

## 9. Food microbiology

- a. the microorganisms that inhabit or contaminate food, including those causing food poisoning or spoilage
- b. the microorganisms used in production and processing of food (e.g. yoghurt, cheese)
- c. Relationship of food composition (salt, fat, pH, water, etc) and thermal processing requirements to the microbial flora found in food
- d. the microbiological standards that apply in Bangladesh

## 10. Food technology

- a. the current and emerging developments in food technology and their impact on public health.
- b. the core principles of the common processes, particularly thermal processes, used in food manufacture
- c. the food safety and hygiene issues relating to each of these processes and how these are controlled to protect public health.

## 11. Food sampling

- a. the rationale and practice of sampling techniques for food safety
- b. techniques for sampling foods and raw materials according to contaminant and food stuff
- c. the standards applicable in Bangladesh to be used when interpreting sampling results
- d. sampling plans and surveillance
- e. the contribution of official laboratories to the delivery of official controls, including how to

correctly use the data provided by these support organisations.

## 12. Consumer protection

- a. the public health and consumer impact of food fraud
- b. The legislative framework that applies to consumer protection in Bangladesh and how it can be used in relation to misrepresentation, labelling, composition, adulteration.

## PRINCIPLES AND GUIDELINES FOR NATIONAL FOOD CONTROL SYSTEMS

CAC/GL 82-2013

### SECTION 1 INTRODUCTION

1. This document is intended to provide practical guidance to assist the national government, and their competent authority<sup>1</sup> in the design, development, operation, evaluation and improvement of the national food control system. It highlights the key principles and core elements of an efficient and effective food control system. It is not intended that the guidance results in “one system” being appropriate to all circumstances. Rather, various approaches may be used, as appropriate to the national circumstances, to achieve an effective national food control system.
2. While the focus of the Principles and Guidelines for National Food Control Systems is on the production, packing, storage, transport, handling and sale of foods within national borders, the document is consistent with and should be read in conjunction with relevant Codex texts. Codex texts of particular relevance include the *Principles for Food Import and Export Inspection and Certification* (CAC/GL 20-1995), the *Guidelines for the Design, Operation, Assessment and Accreditation of Food Import and Export Inspection and Certification* (CAC/GL 26-1997), the *Guidelines for Food Import Control Systems* (CAC/GL 47-2003) and the *Guidelines for the Exchange of Information between countries on rejections of imported foods* (CAC/GL 25-1997). Reference to these texts relating to food import and export control is important since, while the national food control system is ultimately responsible for the safety of food offered within its border, in today's global market, much food is sourced from outside the country; hence, properly designed import and export control systems, as part of the overall national food control system, are essential.
3. In addition, the relevant chapters of the World Organisation for Animal Health (OIE) Terrestrial Animal Health Code and Aquatic Animal Health Code are valuable resources for member governments and organizations. Documents and guidance material developed by FAO and WHO may also be useful resources<sup>2</sup>.
4. A competent authority may apply these principles and guidelines, where appropriate, according to their particular situations.
5. When developing a national food control system national governments, and their competent authority should ensure that the objectives of the system are addressed as outlined in the principles below and should allow for flexibility and modification as required to ensure the objectives can be achieved.

### SECTION 2 OBJECTIVE OF A NATIONAL FOOD CONTROL SYSTEM

6. The objective of a national food control system is to protect the health of consumers and ensure fair practices in the food trade.

### SECTION 3 PRINCIPLES OF A NATIONAL FOOD CONTROL SYSTEM

7. A national food control system should be based on the following principles:

#### PRINCIPLE 1 PROTECTION OF CONSUMERS

8. National food control systems should be designed, implemented and maintained with the primary goal to protect consumers. In the event of a conflict with other interests, precedence should be given to protecting the health of consumers.

#### PRINCIPLE 2 THE WHOLE FOOD CHAIN APPROACH

9. The national food control system should cover the entire food chain from primary production to consumption.

#### PRINCIPLE 3 TRANSPARENCY

10. All aspects of a national food control system should be transparent and open to scrutiny by all stakeholders, while respecting legal requirements to protect confidential information as appropriate. Transparency considerations apply to all participants in the food chain and this can be achieved through clear documentation and communication.

#### PRINCIPLE 4 ROLES AND RESPONSIBILITIES

11. All participants in a national food control system should have specific roles and responsibilities clearly defined.
12. Food business operators<sup>3</sup> have the primary role and responsibility for managing the food safety of their products and for complying with requirements relating to those aspects of food under their control.
13. The national government (and in some cases a competent authority) has the role and responsibility to establish and maintain up to date legal requirements. The competent authority has the responsibility to ensure the effective operation of the national food control system.
14. Consumers also have a role in managing food safety risks under their control and where relevant should be provided with information on how to achieve this.



15. Academics and scientific institutions have a role in contributing to a national food control system, as they are a source of expertise to support the risk based and scientific foundation of such a system.

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<sup>1</sup> Throughout the document "competent authority" refers to one or more competent authorities as appropriate

<sup>2</sup> <http://www.fao.org/food/food-safety-quality/publications-tools/food-safety-publications/en/>

<sup>3</sup> For the purpose of this document food business operator includes producers, processors, wholesalers, distributors, importers, exporters and retailers

#### **PRINCIPLE 5 CONSISTENCY AND IMPARTIALITY**

16. All aspects of a national food control system should be applied consistently and impartially. The competent authority and all participants acting in official functions should be free of improper or undue influence or conflict of interest.

#### **PRINCIPLE 6 RISK BASED, SCIENCE BASED AND EVIDENCE BASED DECISION MAKING**

17. A competent authority should make decisions within a national food control system based on scientific information, evidence and/or risk analysis principles<sup>4</sup> as appropriate.

#### **PRINCIPLE 7 COOPERATION AND COORDINATION BETWEEN MULTIPLE COMPETENT AUTHORITIES**

18. The competent authorities within a national food control system should operate in a cooperative and coordinated manner, within clearly assigned roles and responsibilities, for the most effective use of resources in order to minimise duplication and/or gaps and to facilitate information exchange.

#### **PRINCIPLE 8 PREVENTIVE MEASURES**

19. To prevent and when necessary to respond to food safety incidents a national food control system should encompass the core elements of prevention, intervention and response.

#### **PRINCIPLE 9 SELF ASSESSMENT AND REVIEW PROCEDURES**

20. The national food control system should possess the capacity and capability to undergo continuous improvement and include mechanisms to evaluate whether the system is able to achieve its objective.

#### **PRINCIPLE 10 RECOGNITION OF OTHER SYSTEMS (INCLUDING EQUIVALENCE)**

21. Competent authorities should recognise that food control systems or their components although designed and structured differently may be capable of meeting the same objective. This recognition can apply at the national and international level. The concept of recognition of systems, including equivalence<sup>5</sup>, should be provided for in the national food control system.

#### **PRINCIPLE 11 LEGAL FOUNDATION**

22. The government within each country should have in place fundamental legal structures to enable the establishment of food laws and competent authorities, so that they can develop, establish, implement, maintain and enforce a national food control system.

#### **PRINCIPLE 12 HARMONISATION**

23. When designing and applying a food control system, the competent authority should consider Codex standards, recommendations and guidelines whenever appropriate as elements of their national food control system to protect the health of consumers and ensure fair practices in the food trade. Standards, recommendations or guidelines from other international inter-governmental organisations whose membership is open to all countries may also be useful.

#### **PRINCIPLE 13 RESOURCES**

24. A national food control system should have sufficient resources to enable it to meet the system's objectives.

### **SECTION 4 FRAMEWORK FOR THE DESIGN AND OPERATION OF THE NATIONAL FOOD CONTROL SYSTEM**

25. The national food control system of a country will be based on that country's particular governmental or constitutional arrangements and institutions, (e.g. presence or absence of sub national governments), national goals and objectives.

26. The competent authority has a pivotal role in the national food control system, in that the competent authority:

- Provides leadership and coordination for the national food control system;
- Designs, develops, operates, evaluates and improves the national food control system;
- Establishes, implements and enforces science and risk based regulatory requirements that encourage and promote positive food safety outcomes;
- Establishes, implements and enforces regulatory requirements supporting fair practices in the food trade;
- Establishes and maintains arrangements with supporting organizations such as officially recognised inspection, audit, certification and accreditation bodies, where appropriate;
- Advances and fosters knowledge, science, research and education regarding food safety;
- Engages with stakeholders to ensure transparency and to obtain their views; and

- Where appropriate, establishes and maintains arrangements with other countries e.g. cooperation programs, equivalence agreements etc.

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<sup>4</sup> In accordance with members obligations under the World Trade Organisation Agreements, risk analysis frameworks adopted by national governments in the context of a national food control system should be consistent with the Codex *Working Principles for Risk Analysis for Food Safety for Application by Governments* (CAC/GL 62-2007) and relevant risk analysis policies developed by the World Organisation for Animal Health (OIE).

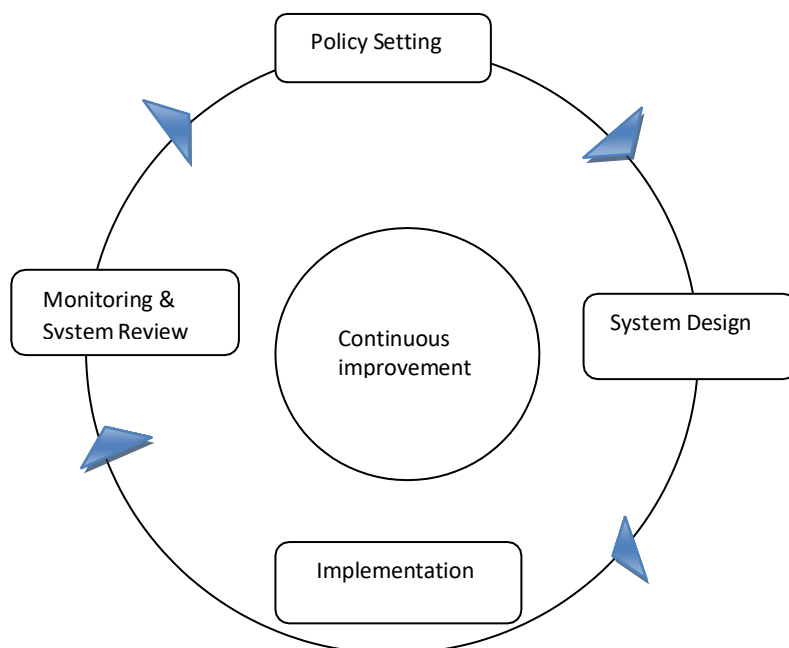
<sup>5</sup> *Guidelines for the development of equivalence agreements regarding food import and export inspection and certification systems* (CAC/GL 34-1999) and *Guidelines on the judgement of equivalence of sanitary measures associated with food inspection and certification systems* (CAC/GL 53-2003).

27. Where there is more than one competent authority their roles and responsibilities should be clearly defined and their activities coordinated to the greatest extent possible to minimise gaps and overlaps.

28. The design and implementation of a national food control system should follow a logical and transparent process. This should include the consistent application of a systematic framework for the identification, evaluation and, as necessary, control of food safety risks associated with existing, new or re-emerging hazards.

29. In developing a national food control system the competent authority, in consultation with stakeholders, should adopt the following framework, which will reflect the principles of a national food control system and are described in Section 3 this document.

#### **Framework for the development of a national food control system**



#### **SECTION 4.1 POLICY SETTING**

30. Policy setting is the process by which the goals and objectives for the national food control system are established by governments, along with the commitment to a course of action to achieve those goals and objectives. It should also include the identification and clear articulation of expected outcomes. Policy decisions guide subsequent actions, including the establishment of legislation and regulations.

31. Public policy decisions should take into account a broad range of factors and require a careful assessment of options. Governments should consider, among other things, stakeholder interests, how the food control system will relate to international and national standards, assessment of risks and/or benefits, effectiveness and efficiency of various controls and methods of oversight, existing and planned government structures, coordination among authorities along the food chain, technical and scientific information, the roles of government and food business operators, and best practices/models.

32. The competent authority should actively engage stakeholders, including food business operators and consumers, in the setting of policy.

33. National goals and priorities will ensure consumer protection by taking into account amongst other things, food production and consumption patterns, risk profile and consumer concerns in relation to food safety and fair practices in the food trade and also the preparedness and capability of the country.

34. When establishing a national food control system countries should identify the main objectives to be addressed through the system for the short, medium and long term. The main objectives should be aligned with and assist in implementing the principles outlined in Section 3. Consideration should be given to the development of a national food control strategy, which will aid clarification of the objectives to be addressed set priorities and support system design.

35. Once public policy goals and desired outcomes for the national food control system are established, they should be clearly articulated and described in order to effectively guide subsequent actions.

36. A national food control system should possess three main characteristics which, among other things, can be used in self-assessment or other evaluation to determine if the system is fully functional and effective:

i) **Characteristic 1 Situational awareness** means that a national food control system avails itself of accurate and current information on the entire food chain.

ii) **Characteristic 2 Pro-activity** means that a national food control system is capable of identifying existing or emerging hazards before they materialise as risks in the food production and/or processing chain and at the early stages rather than in the end product. Early warning and/or rapid alert systems, traceability and contingency planning for managing and preparing for potential food safety incidents should be an inherent part of a pro-active control system.

iii) **Characteristic 3 Continuous Improvement** means that a national food control system should possess the capability to learn through a process of review and reform utilising mechanisms that check and evaluate whether the system is able to achieve its objectives.

37. Legislation<sup>6</sup> should clearly reflect the intended policy objective and be commensurate with the risks they are intended to mitigate. Legislation should, where appropriate take into account relevant scientific information and focus on prevention and outcomes and thereby allowing flexibility and innovation.

38. In order to reflect national policies and strategies legislation should, amongst other things:

- Frame the structure of the national food control system and its goals and objectives;
- Provide clarity on the roles and responsibilities of participants in the national food control system, i.e. the central government, the competent authority (or of each competent authority where there is more than one), third party<sup>7</sup> providers (where these are used), food business operators and other stakeholders as appropriate;
- Set out the overarching objectives of the national food control system and any specific or lower order objectives that relate to participants or sectors;
- Clearly define obligations for food business operators and other participants in the food chain to establish and monitor controls; and
- Clearly define obligations on food businesses to place only safe food on the market and apply fair practices in trade.

39. The legislation should provide the competent authority with the range of powers and mechanisms sufficient to manage and operate the national food control system. These authorities may include and are not limited to the following:

- Establish standards or other management options to prevent and control food borne hazards such as disease-causing organisms, contaminants, veterinary drug and pesticide residues;
- Establish, monitor and enforce national standards;
- Recognise other competent authorities' standards at the appropriate stage(s) in the food chain;
- The establishment of cooperative arrangements with other government entities;
- Establish approaches to ensure the safety and safe use of inputs to the food chain, such as food additives, pesticides, veterinary drugs;
- Recognise and/or harmonize with Codex standards;
- Perform audits, verification, inspections and investigations, gather evidence, collect and analyze samples and otherwise verify compliance with standards and requirements;
- Consider official recognition of inspection, audit, certification and accreditation bodies;
- Enforce legislation and take proportionate, dissuasive and effective action in case of non-compliance with requirements including, as appropriate, investigations and application of sanctions and penalties;
- Ensure that risks associated with non-compliant foods are evaluated and the appropriate action taken; e.g. disposal, treated appropriately or redirected.
- Ensure the integrity, impartiality and independence of officially recognized inspection, audit, certification and accreditation;
- Enable traceability/product tracing; and
- Ensure that unsafe food is prevented from entering the market or is withdrawn and dealt with appropriately.

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<sup>6</sup> Legislation as defined in *Guidelines for Food Import Control Systems* (CAC/GL 47-2003)

<sup>7</sup> *Guidelines for Food Import Control Systems* (CAC/GL 47-2003) paragraph 8

40. Legislation may also include provisions, as appropriate, for the registration of establishments, establishment approval, licensing or registration of traders, equipment design approval, penalties in the event of non-compliance and charging of fees or levies.

41. The competent authority should, engage with stakeholders including the food business operators and consumers, in the development of new legislation, and when making regulatory changes. The competent authority should also disseminate the legislation.

#### **SECTION 4.2 SYSTEM DESIGN**

42. When designing a national food control system countries should ensure the main objectives as defined in the policy are addressed as well as how to incorporate the principles in Section 3.

43. The design of a food control system should take into account the following elements:

- Existing or necessary regulatory and legislative framework (laws, regulations, guidance);
- How the national food control system relates to international and national standards including food import and export system requirements;
- The recognition of other food control systems, including equivalence<sup>8</sup>;
- The level and method of oversight including control programs from primary production through manufacturing to transportation and distribution;
- How issues and risks are managed;
- Enforcement and compliance programs;
- Coordination and communication between authorities with control responsibilities in different parts of the food chain and with the public health authorities;
- Clearly defined roles and responsibilities;
- Access to adequate laboratory capacity and capability;
- Staff competence and training;
- The resources needed to meet the objectives of the national food control system, their allocation and how the system is to be funded;
- Surveillance, investigation, emergency preparedness and response to food borne and food related incidents;
- Assessment and evaluation;
- Stakeholder engagement;
- International communication and harmonization; and
- Periodic review and continuous improvement.

44. Consideration should be given to the development and implementation of a standardised approach to risk management incorporating the *Working principles for risk analysis for food safety for application by governments* (CAC/GL 62-2007).

45. An appropriate system design should consider a range of factors including (but not limited to) product risk, current scientific information, industry based controls and system review findings. It should also provide for flexibility in the application of control measures to reflect variations in these factors.

46. Development of an effective method of data collection across the food chain is important for situational awareness, performance measurement and continuous review and system improvement. For instance, surveillance and monitoring programs can be used to target priority risks.

47. The competent authority should utilise findings from laboratories to monitor trends in the food chain and assist in compliance and enforcement. Laboratory access and capacity should be commensurate with the need to address priority food risks.

48. The national food control system should be fully documented and publicly available, to ensure its transparency and consistent application of control measures, including a description of its scope and operation, and a clear description of the roles and responsibilities of all parties.

49. National food control systems should be designed to ensure administrative procedures are in place for documentation of control programs and their findings.

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<sup>8</sup> *Guidelines on the judgement of equivalence of sanitary measures associated with food inspection and certification systems* (CAC/GL 53-2003)

50. Control programs<sup>9</sup> should be based on risk and designed to take into account a number of factors<sup>10</sup> including but not limited to:

- Food safety hazards associated with different products and the risk to human health posed by the food or food related products;
- Risk of unfair practices in the food trade associated with different products, such as potential fraud or deception of consumers;
- Information that may be available from a range of sources including government, academia, scientific institutions and industry data;
- Statistical data on production, trade and consumption;
- Results of previous controls including analytical results;
- The effectiveness and reliability of controls including those of food business operators;
- Knowledge of operators at various stages of the food chain typical and atypical use of products, raw materials and by-products; structure of production and supply chains; production technologies, processes and practices; relevant product tracing information; and
- Epidemiological data on food borne disease.

51. In the absence of risk analysis data control programs should be based on technical and scientific data developed from current knowledge and practice.

52. Control programs should be applied at the point or points in the production or supply chain where hazards can be most effectively or efficiently controlled taking into account the available resources and capability. Control programs amongst other things may cover, as appropriate:

- Establishments, installations, equipment, personnel and material;
- Products, from raw material to the final products, including intermediate products;
- Preventative controls including Good Agricultural Practice GAP, Good Manufacturing Practices (GMP), Good Hygiene Practices (GHP) and Hazard Analysis Critical Control Point (HACCP) principles;
- Means of distribution; and
- Human resources, infrastructure and confidentiality.

53. Control programs should be designed to include the following elements but not limited to:

- Inspection, verification and audit including on-site visits;
- Market surveillance;
- Sampling and analysis;
- Examination of written and other records;
- Documentation of observations and of findings; and
- Examination of the results of any verification systems operated by the establishment.

54. Where quality assurance systems are used by food business operators, the national food control system should take them into account where such systems relate to protecting consumer health and ensuring fair practices in the food trade. The competent authority should encourage, as appropriate, the use of Good Laboratory Practices (GLP)<sup>11</sup> GAP, GMP, GHP and HACCP approach in accordance with *General Principles of Food Hygiene* (CAC/RCP 1-1969).

55. The system design should provide for the capability to evaluate the effectiveness of the national food control system. Verifying the effectiveness of the national food control system should be targeted at the most appropriate stages of the food chain, based on risk analysis conducted in accordance with internationally accepted methodology<sup>12</sup>.

56. A national food control system should be subject to regular review of results obtained so that it can be continuously improved to reflect changes in product risk, the production environment (including technology), increased scientific knowledge, and level of confidence in industry, to ensure the objective of the national food control system is met in an efficient and effective manner.

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<sup>9</sup> Control program is the collective actions and activities in place to manage specific food safety hazards and assure the quality and safety of food and fair practices in the food trade.

<sup>10</sup> Effective use of these factors provides for system characteristics 1 and 2 as described in paragraph 36.

<sup>11</sup> Guidance on laboratory competency is available in the *Guidelines for the assessment of the competence of testing laboratories involved in the import and export of food* (CAC/GL 27-1997) and *International harmonised protocol for the proficiency testing of (chemical) analytic laboratories* (CAC/GL 28-1997) may be useful.

<sup>12</sup> *Working Principles for Risk Analysis for Food Safety for Application by Governments* (CAC/GL 62-2007)

57. Compliance and enforcement<sup>13</sup> programs should be designed to provide the ability for the competent authority to take corrective action to ensure the situation is remedied where the food business operators are not meeting their obligations or a product or process is found not to be in conformity. Programs should be designed to:

- Be proportionate to the degree of public health risk or potential fraud or deception of consumers;
- Encourage acceptance of responsibility and compliance by all participants; and
- Provide for a full range of responses from provision of information or education material, imposing of corrective actions, setting of sanctions.
- Take into account repeated non-conformity by food business operators.

58. The competent authority and any officially recognised bodies undertaking compliance and enforcement activities on behalf of the competent authority should be resourced sufficiently and transparently to enable the national food control programs to achieve its objectives without compromising the programs integrity and independence. Third party providers may be approved and/or authorised to implement the national food control system and the competent authority must have capacity to supervise and control third party providers.

59. The design and implementation of a national food control system should be on a scale appropriate to the resources available, while allowing for appropriate expansion. Resources should be prioritized to maximise protection of public health. Resource allocations made in the context of a national food control system may, dependant on the above be attributed to:

- Training and basic infrastructure;
- Suitably qualified personnel of relevant disciplinary backgrounds
- Reliable transportation systems and equipment to perform inspection, audit and verification services and transmission of samples to laboratories; and
- Information, communication and technology (ICT) systems;

60. The design of a national food control system should incorporate timely access to adequate information relating to the surveillance, investigation and response to food borne illness and food related incidents. Such information can identify the risks or issues that need to be addressed and also whether or not the controls or measures in place are effective.

61. In order to respond to food safety emergencies, consideration should be given to the establishment of a national food safety emergency plan with establishment of a coordination arrangement with links to public health authorities, law enforcement agencies, food recall systems, risk assessment specialists, food business operators, and others. Traceability/product tracing systems<sup>14</sup> provides for the timely identification of the sources for emergencies and allowing effective recall of affected products.

62. The national food control system should have procedures covering the prompt removal of unsafe food<sup>15</sup>. Setting up these procedures is the primary responsibility of food business operators and they should ensure that products that are deemed to be unsafe should be recalled, appropriately dealt with to ensure consumer protection. The competent authority should ensure appropriate consumer notification is carried out when distribution has occurred.

63. Recall systems and other market withdrawal systems should be a coordinated effort between the competent authority and food business operators and be effective and enforceable. If the competent authority requires or requests a recall, operators should have an affirmative duty to give effect to established procedures to recover recalled products and to destroy or dispose of them properly. National laws should include penalties or sanctions for companies that fail to comply with recall requests.

64. In order to promote consumer confidence in food safety and ensure fair practices in the food trade, the competent authority should be clear and transparent in their communications relating to all aspects of the national food control system for which they are responsible, including the development, implementation and enforcement of the requirements.

65. Communication among public health (food safety), agriculture and other relevant authorities, consumers and consumer organizations, and food business operators should be an ongoing function of a competent authority with responsibility for a national food control system.

66. Consideration should be given to the development of communication programs to provide outreach and education programs and information exchange on food safety risks and mitigation steps which may be taken to reduce these risks, amongst regulators, food business operators, consumers and academia.

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<sup>13</sup> Compliance and enforcement refers to the range of controls, procedures or other interventions undertaken by a competent authority or a third party on its behalf when monitoring or verifying food business operator compliance with official requirements including but not limited to, instigating any corrective measures to achieve compliance.

<sup>14</sup> *Principles for Traceability/product tracing as a tool within a food inspection and certification system* (CAC/GL 60-2006)

<sup>15</sup> *Principles for traceability/product tracing as a tool within a food inspection and certification system* (CAC/GL 60-2006) and OIE Terrestrial Animal Health Code, Chapter 4.1. General principles on identification and traceability of live animals

67. When developing an educational program the relevant authorities should clearly identify the target audience, the priority content and the strategies to be implemented. The educational materials developed should use language suitable for the intended audience. Basic elements of food safety educational activities should be widely disseminated, preferably using mass communication.

68. Where appropriate, the competent authority should utilize the *Principles and Guidelines for the Exchange of Information in Food Safety Emergency Situations* (CAC/GL 19-1995), the International Health Regulations (IHR), OIE disease notification requirements, IPPC regulations and the International Food Safety Authorities Network (INFOSAN), for national and international emergency notification and response.

#### **SECTION 4.3 IMPLEMENTATION**

69. Following the design or modification of the national food control system the competent authority should prepare an implementation plan including the sequence for different elements of design suitable with their preparedness and capability. This will require engagement and analysis by a variety of experts, disciplines and all stakeholders. The competent authority's plan may include;

- Priorities and time frames for implementation;
- Deliverables;
- Responsibilities for implementation;
- Allocation of resources for personnel and infrastructure;
- Training and operation manuals; and
- Stakeholder engagement.

70. Guidance and instructions relating to the national food control system, control programs and compliance and enforcement, including legal requirements should be developed for competent authority staff and food business operators to ensure;

- That all participants are fully aware of the objectives of the system and what is expected from them;
- Uniform application of legislation; and
- That they have the necessary resources (human, material and financial resources) available to carry out their tasks.

71. Programs and training manuals should be developed and maintained to ensure consistent application of requirements. This material should include as appropriate and not limited to:

- An organizational chart of the official control system;
- Roles of each level in the hierarchy (including other relevant jurisdictions; i.e. State, Provincial);
- Job functions and qualifications as appropriate;
- Operating procedures including methods of audit, verification, inspection and control, sampling plans, and testing;
- Relevant legislation and requirements;
- Processes and procedures relating to compliance and enforcement;
- Arrangements for coordination with relevant competent authorities and stakeholders;
- Relevant information about food contamination and food control;
- Procedures for dealing with food safety emergencies and conducting food recalls and investigations;
- Relevant information on staff training; and
- Formal review process of the national food control system.

72. National food control systems should be supported by training programs designed to ensure that all appointed officers (e.g. inspectors or verifiers), analysts, and other individuals carrying out technical and/or professional duties receive the training required to adequately perform their work assignments and to maintain their professional competence and ensure consistent application of requirements.

73. The competent authority should ensure that sufficient guidance, training and awareness programs targeted at all relevant stakeholders are in place to facilitate effective notification of suspect cases of food related illnesses or health hazards detected in the food chain. Administrative procedures or contingency plans (as appropriate) should provide guidance on initiating coordination mechanisms when involvement of several competent authorities is required to resolve the incident. Rapid alert systems and response should be designed and implemented for this purpose.



74. Food business operators should also be encouraged to develop or access training and education programs relevant to their activities and responsibilities. Such programs can include formal education and/or academic studies, industry training organisation courses or individual business staff training

75. Where a competent authority intends to use third party<sup>16</sup> providers to implement controls, before being authorised the third party provider should be assessed against objective criteria to ensure their competency. The ongoing performance of officially authorised bodies should be regularly assessed by the competent authority. The competent authority should initiate procedures to correct deficiencies and, as appropriate, enable withdrawal of official authorisation.

76. Competent authorities should utilize laboratories that are authorised or accredited under officially recognized programs to ensure that adequate quality controls are in place to provide for the reliability of test results. Internationally recognized and validated analytical methods should be used wherever available and Good Laboratory Practices should be adhered to.

77. Competent authorities should ensure that authorised or accredited laboratories<sup>17</sup> participate in regular proficiency testing. Such testing may be organised nationally or internationally and reference laboratory may have a role in organising proficiency testing programs.

78. Where appropriate, the competent authority should provide access to educational information on food safety risks and mitigation steps, which may be taken to reduce these risks.

79. As appropriate, the competent authority should:

- Communicate food safety issues and concerns with (relevant competent authorities) trading partners;
- Participate in bilateral exchange with (relevant competent authorities) trading partners and international organisations related to food safety regulations and their enforcement;
- Communicate and collaborate with international organisations, such as FAO and WHO through International Food Safety Authorities Network (INFOSAN), WHO in accordance with the International Health Regulations (2005) and OIE as appropriate, in cases where food(s) implicated in incidents or outbreaks of food borne illness may be circulating in international trade and.
- Have in place a process for engagement with stakeholders including food business operators, consumers and other interested parties.

80. The competent authority should implement a range of food control activities, including inspections, audits, verification and surveillance to ensure that food business operators meet their responsibilities and are in compliance with requirements. Detailed procedures should be developed to articulate the key tasks and responsibilities of verification of compliance and the consequences of non-compliance, including repeated non-compliance.

81. Where a product or process is found not to be in conformity, the competent authority should take action to ensure that the operator remedies the situation. The resulting measures should take into account any repeated non-conformity of the same product or process to ensure that any action is proportionate: to the degree of public health risk, potential fraud or deception of consumers. As an example to illustrate this point the specific measures that may be applied in continuous cases of non-conformity may include:

- Increased intensity of audits and/ or inspection and/or monitoring of products and/or processes; identified as being not in conformity and/or the undertakings concerned; and
- In the most serious or persistent cases, de-registration of the producer and/or processor or closure of the relevant establishment.

#### **SECTION 4.4 MONITORING AND SYSTEM REVIEW**

82. The effectiveness and appropriateness of the national food control system should be regularly assessed against the objective of the system, effectiveness of control programs, as well as against legislative and other regulatory requirements. Criteria for assessment should be established, clearly defined and documented, and may also include cost benefits and efficiency.

83. Control programs should be subject to ongoing monitoring to ensure that its objectives are being achieved at all stages of the food chain, including production, manufacture, importation, processing, storage, transportation, distribution and trade. The assessment of control programs should cover issues such as:

- Effectiveness of control procedures;
- Suitability in achieving objectives;
- Whether the program has covered relevant stages in the production chain, taking into account risk factors; and
- Consideration of emerging trends.

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<sup>16</sup> *Guidelines for Food Import Control Systems* (CAC/GL 47-2003) paragraph 8

<sup>17</sup> Guidance on laboratory competency is available in the *Guidelines for the assessment of the competence of testing laboratories involved in the import and export of food* (CAC/GL 27-1997) and the *International harmonised protocol for the proficiency testing of (chemical) analytic laboratories* (CAC/GL 28- 1997) may be useful.

84. A national food control system should be regularly reviewed to contribute to the systems improvement, in response to foreexample, control program data, non-compliances, food safety incidents, scientific research, and history of conformance, external and self-reviews of the system and changes to product risk or the production environment. Such reviews may take place at the level of system or program design or implementation as appropriate.

85. The review of food-related non-compliances and/or incidents is an opportunity to learn which can be used as a feedback loop for the planning process by the competent authority. A competent authority should use these opportunities to engage in continuous improvement by assessing an incident from first signal through response and incorporating lessons learned in the design and planning phase.

86. Competent authorities should ensure that the response system in regards to food safety and related events is effective, with clear communication between competent authorities, food business operators and consumers. These systems should be periodically tested to ensure that the communication and response systems work effectively.

87. Competent authorities and/or national governments should periodically review their surveillance systems with respect to their capacity to recognize emergencies rapidly. Elements of review include:

- Links between the symptomatic food borne illness surveillance system and the food monitoring system;
- Data on the symptoms and effects of chronic exposure to food borne contamination;
- Systems to allow rapid detection of contamination incidents to ensure prompt public alerts; and
- Links with the veterinary public health sector.

88. Particular attention should be paid to early warning mechanisms, coordination between competent authorities, communication to stakeholders and the use and effectiveness of contingency planning. Corrective action should be taken as appropriate.

89. A competent authority should utilize information gained from the surveillance of food borne illness as a risk management tool in the operation of their food control systems. Food recalls and adjustments to food production and processing operations, including emergency responses, may be based on information obtained from food borne disease information and food monitoring systems. Food borne illness and outbreak information should be used to inform the risk analysis activities of competent authorities.

90. The results of the evaluations<sup>18</sup>, including the results of self-assessment and audits should also be taken into account in further improvement of the system, and corrective actions should be taken into account as appropriate.

91. Any review and continuous improvement of the national food control system should be communicated effectively and efficiently to ensure that clear exchange of information and engagement between all stakeholders in the national food control system occurs. Following any review, all related documentation, procedures and guidance should be reviewed and updated if necessary to reflect any changes.

92. Competent authorities should consider the results of monitoring and review processes and take preventive or corrective action or improve the system as appropriate.

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<sup>18</sup> For example, the OIE Tool for the Evaluation of Performance of Veterinary Services (OIE PVS Tool) provides for independent evaluation of the performance of veterinary services. The OIE PVS tool could be used to evaluate the veterinary public health related elements of the national food control system.

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## PRINCIPLES AND GUIDELINES FOR MONITORING THE PERFORMANCE OF NATIONAL FOOD CONTROL SYSTEMS

**CXG 91-2017**

**Adopted in 2017**

## SECTION 1 INTRODUCTION

1. An effective national food control system (NFCS) is essential for ensuring the safety and suitability of food for consumers and ensuring fair practices. An effective NFCS may employ different approaches, core elements, and components, as appropriate to the national circumstances, and as described in the *Principles and Guidelines for National Food Control Systems* (CXG 82-2013).
2. The policy setting, design, implementation and other technical components of the NFCS should operate effectively over the course of time, and have the capacity and capability to undergo continuous improvement. As scientific and technical advances occur, it is important that the NFCS demonstrates its ability to adapt.
3. The monitoring and system review function of the NFCS calls on the competent authority<sup>1</sup> to regularly assess the effectiveness and appropriateness of the NFCS in achieving its objectives of protecting the health of consumers and ensuring fair practices in the food trade.<sup>2</sup> The evidence generated through monitoring and system review informs the policy setting, system design, and implementation functions of the NFCS.
4. This document presents a performance monitoring framework to support the monitoring and system review function of the NFCS as described in section 4.4 of CXG 82-2013. The guidance is not intended to be used as a basis for comparing systems or imposing barriers to trade.
5. Many strategies for performance monitoring exist, but there is no guidance specific to performance monitoring for an NFCS. This document seeks to fill this gap.
6. Other assessment tools, like the FAO/WHO food control system assessment tool, can be used in conjunction with performance monitoring to provide a comprehensive view of the NFCS.

## SECTION 2 PURPOSE OF GUIDANCE

7. This document describes a logical framework of planning, monitoring, and system review steps for performance monitoring of an NFCS and establishes a common understanding of performance monitoring principles, terminology, and best practices.
8. The guidance is intended to support self-assessment of countries NFCS.
9. This guidance focuses on planning steps within the performance monitoring framework that establish a foundation for assessing the effectiveness of the NFCS and for facilitating continuous improvement as appropriate.
10. A competent authority can use this framework to implement monitoring and system review, or incorporate this approach to make existing processes more robust.

## SECTION 3 DEFINITIONS<sup>3</sup>

**Activity:** Actions taken or work performed through which inputs are mobilized to produce specific outputs.

**Assessment:** A process of determining the presence or absence of a certain condition or component, or the degree to which a condition is fulfilled.

**Effectiveness:** The extent to which NFCS objectives or related outcomes were achieved, or, are expected to be achieved, taking into account their relative importance.

**Indicator:** Quantitative variable or qualitative factor that provides a simple and reliable means to measure achievement, to reflect the changes connected to activities, or to help assess the performance of a program or system.

**Inputs:** The financial, human, technical and material resources used for activities.

**Outcome:** Intended effects or results that contribute to achieving the NFCS Objectives. Outcomes may be categorized at different levels, such as ultimate, high-level, intermediate, preliminary, or initial.

**Outputs:** The products and services which result from activities; may also include changes resulting from activities which are relevant to the achievement of outcomes.

**Performance monitoring:** A continuous or ongoing process of collecting and analyzing data to compare how well the stated objectives and outcomes of the NFCS are achieved.

<sup>1</sup> Throughout the document “competent authority” refers to one or more competent authorities.

<sup>2</sup> Throughout this document, the term “Objectives” refers to the NFCS Objectives *Principles and Guidelines for National Food Control Systems* (CXG 82-2013).

<sup>3</sup> Most definitions were adapted from OECD. 2002. “Glossary of Key Terms in Evaluation and Results-Based Management.” Paris: OECD/DAC.

## SECTION 4 PRINCIPLES OF THE PERFORMANCE MONITORING FRAMEWORK

11. In a comprehensive approach, a competent authority would monitor its performance across all components of the NFCS. However, depending on the priorities and capabilities of the competent authority, it may be more practical and affordable to apply the performance monitoring framework in a phased or targeted approach. A targeted approach is application of performance monitoring to specific programs or components of the NFCS. A phased approach is a gradual expansion of the performance monitoring framework as capacity within a country grows.
12. Regardless of whether it is used in a comprehensive, phased, or targeted approach, the performance monitoring framework is characterized by the following principles:

### **Principle 1                      Relevancy**

13. It is customized to the unique needs and structure of the NFCS, and uses information collected from within and outside the system to identify gaps, optimize operations, and promote continuous improvement.

### **Principle 2                      Transparency**

14. It is open to consultation and review by relevant national stakeholders during multiple stages of the process, while respecting legal requirements to protect confidential information as appropriate.

### **Principle 3                      Efficiency and Reliability**

15. It should operate within its current capacity to remain practicable and affordable. It builds on existing data collection and program management and utilizes appropriate external data sources to assess the performance of its NFCS. Attention should be given to the quality and reliability of the data.

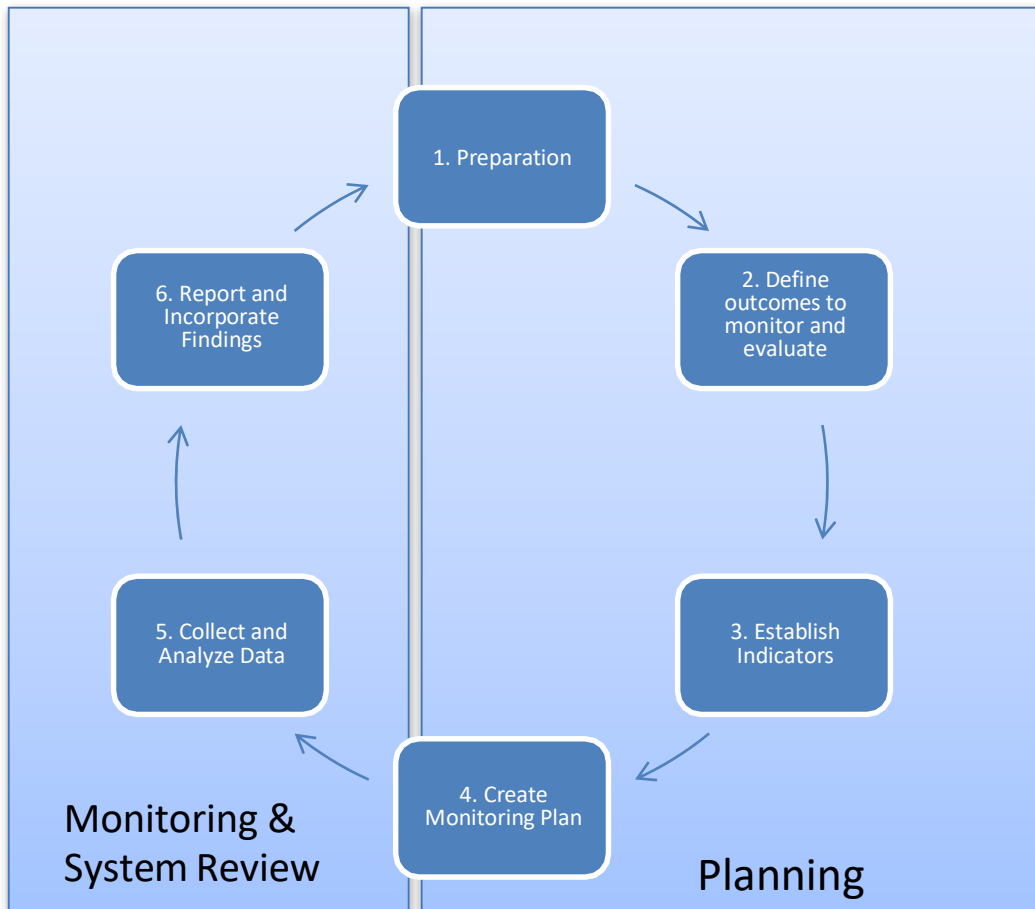
### **Principle 4                      Responsiveness**

16. It is adaptive to changes to the NFCS and the environment in which it operates and accommodates revisions to both the outcomes sought, associated activities, and the indicators applied.

## SECTION 5                      PERFORMANCE MONITORING FRAMEWORK FOR AN NFCS

17. Countries should have established an NFCS or components of an NFCS prior to using this framework.
18. The performance monitoring framework presents a cyclical process (refer fig 1) that includes three broad tasks: planning, monitoring, and system review. Performance monitoring is an on-going process, where each step feeds into the next step in the cycle and will be revisited over time.
  - Through the planning steps, the competent authority identifies specific and related outcomes through which the NFCS contributes to its objectives and identifies indicators that can measure progress toward the outcomes. The planning steps establish a foundation for monitoring and system review.
  - Through the monitoring steps, the competent authority collects data and generates the information necessary.
  - Through the system review steps, the competent authority uses information generated through the monitoring steps to assess the effectiveness and appropriateness of the NFCS. This can confirm that the relevant component(s) are operating as intended, and facilitate continuous improvement as necessary.

**Figure 1: Performance Monitoring Framework**



**SECTION 5.1 PLANNING STEPS**

- 19. The planning steps are arranged in logical order, in which a preceding step supports or enables the next step. For example, it is necessary to identify the intended outcomes (step 2) before identifying indicators to measure progress toward those outcomes (step 3).
- 20. Upon completion of these steps, the competent authority will have clearly defined the specific outcomes that the NFCS is designed to achieve and developed a plan for monitoring progress towards achieving these outcomes.

**Step 1: Preparation**

- 21. Effective performance monitoring requires organisational commitment, established processes, and sufficient resources and technical capacity. The first step of the performance monitoring framework is to conduct an assessment to determine the competent authority’s current capacity for monitoring and system review. The following paragraphs may assist the competent authority in assessing their readiness to design and implement a performance monitoring framework.
- 22. Organizational commitment is essential for ensuring that monitoring and system review are prioritized and resourced as an integral component of the NFCS. The following questions can help the competent authority to assess the level of organizational commitment to monitoring and system review:
  - What are the legislative or policy objectives of the NFCS and how does the competent authority support those objectives?
  - How does the competent authority intend to support performance monitoring at various levels of the NFCS?
  - How does the competent authority intend to use performance monitoring data (e.g. to assess the effectiveness of the NFCS and take preventive or corrective action or improve the system as appropriate)?

23. Established processes for data collection and program management can be used for monitoring and system review. The following questions can help the competent authority to assess established processes that support monitoring and system review:
- What types of data are currently being collected?
  - How is the data used (i.e. what types of information is being generated and for what purpose)?
  - What are the existing processes for data collection and analysis?
  - What are the existing processes for ensuring data quality?
  - What are the existing processes for reporting data on results or progress toward goals or objectives?
  - How is data currently being used to assess the effectiveness of different programs or components?
24. Monitoring and system review requires sufficient financial and human resources with relevant expertise to support the collection and use of data. The following questions can help the competent authority to assess existing resources and technical capacity:
- What resources (financial, human, technical and material) are available to support monitoring and system review? How can existing resources be leveraged if necessary?
  - Does the competent authority have access to individuals with expertise in strategic planning, performance management, program management, analysis, and data management?
25. If the competent authority lacks sufficient capacity or resources to monitor performance of the entire NFCS, the competent authority may implement monitoring and system review in a phased or targeted approach, beginning with a limited number of priority components. The competent authority may use CXG 82-2013 in conjunction with national goals to identify priority components for a phased or targeted approach.
26. If the competent authority decides to implement monitoring and system review in a phased or targeted approach, the competent authority should consider steps to address these challenges to enable comprehensive performance monitoring at a later date.
- If there is insufficient human resource capacity, the competent authority should develop a plan to develop capacity where necessary, setting the shortest possible deadlines for completion.
  - If there are insufficient financial resources available, the competent authority should seek out additional funding from national or international sources, setting the shortest possible deadlines for completion.
27. On a regular basis, the competent authority should revisit the above assessment. As capacity for monitoring and system review improves, or becomes available, the competent authority may consider a more comprehensive approach.

## **Step 2: Define Outcomes to Monitor and Evaluate**

28. Monitoring and system review should go beyond measuring the outputs of activities and focus on measuring intended effects or outcomes. Outcomes capture what has to be achieved for success, as opposed to what processes or steps need to be completed. By defining and monitoring outcomes, a competent authority can make more informed decisions and better target its programs and resources to achieve the objectives it is seeking.
29. In addition to capturing what is to be achieved, outcomes should follow SMART criteria.
- Specific: What exactly is going to be achieved?
  - Measurable: Can the outcome be measured through qualitative or quantitative indicators?
  - Attainable: Is the outcome in line with the competent authority's competencies and authorities?
  - Relevant: Will achieving an outcome contribute to achieving the NFCS Objectives?
  - Time-bound: Can a timescale be defined for achieving the outcome?
30. The competent authority should engage relevant stakeholders in a participatory process for the identification and general understanding of the outcomes to be achieved.
31. The starting point for defining outcomes will depend on the competent authority's approach to monitoring and system review. In a comprehensive approach, a competent authority may start by defining an NFCS Objective or a national goal as the highest-level outcome to be achieved. If the competent authority decides to implement monitoring and system review in a phased or targeted approach, it should identify the highest-level outcome that is applicable to their approach.



32. After defining the starting point, the competent authority should ask “How will this be achieved?” to identify the next level of outcomes that contribute to achieving the highest-level outcome. There may be several intermediate or lower-level outcomes that contribute to achieving the highest-level outcome. The competent authority can ensure that all of the relevant outcomes have been identified by asking “What else is necessary?” to achieve the highest-level outcome.
33. This process of asking “How will this be achieved?” and “What else is necessary?” should be repeated for each intermediate and lower-level outcome until no further outcomes can be identified. For outcomes at the lowest-levels, the answer to “How will this be achieved?” will usually be outputs or activities.
34. Through this process, the competent authority will develop an outcome framework that visually reflects the causal or logical processes that contribute to achieving the highest-level outcome. When read from the top down, an outcome framework explains how each outcome will be achieved – by first achieving the outcomes at the next lowest level. When read from the bottom up, it explains why each outcome is important – because it contributes to achieving an outcome at the next highest level. See Appendix A for an example of a simplified outcome framework.
35. There are other approaches that may be used for identifying and visually displaying outcomes and their causal relationships, including logic models, program theories, or theory of changes.
36. Some outcomes may be beyond the full control of the competent authority in that they rely on other government entities or stakeholders to be fully accomplished. Such outcomes can still be monitored if they can be significantly impacted through the competent authority’s activities.
37. After identifying outcomes, the competent authority should map current activities that contribute to achieving the outcomes, assess gaps, and identify additional activities that could further contribute. Once current and potential activities have been identified, a competent authority can prioritize and schedule activities.

### **Step 3: Establish Indicators**

38. Indicators are means for measuring achievement, reflecting changes, or assessing performance. Indicators should be established for each individual outcome.
39. Indicators may also be established for inputs and outputs to allow the competent authority to monitor how specific activities are contributing to specific outcomes. Various tools may be used to manage inputs and outputs, such as budgets, staffing plans, and activity plans.
40. Where there is limited capacity for monitoring and system review, the competent authority may choose to start with a limited number of indicators and increase the number of indicators as capacity expands.
41. As part of a phased or targeted approach, the competent authority may initially establish indicators for which there are existing processes for data collection and analysis or addressing priority components of the NFCS.
42. As the global knowledge base on indicators for NFCSs develops, the competent authority should consider these indicators as appropriate.
43. The process for selecting indicators should build on the review of established data collection processes conducted during the assessment phase.
44. The competent authority should convene a group of technical, substantive, and policy experts to brainstorm potential indicators for each of the outcomes identified in Step 2. Some examples of indicators are included in Appendix B.
45. Indicators may be qualitative or quantitative and should fulfil the following criteria:
  - unambiguous, easy to interpret, monitor and transparent.
  - closely linked to the outcomes (including timing) and meaningful from an organisational perspective.
  - amenable to independent validation and or verification.
  - Obtainable given available resources.
46. Among the many potential indicators that meet these criteria, the competent authority should consider the following information to choose the most direct indicators for which it is technically and financially capable of collecting and analysing data.
  - Frequency of data collection
  - Financial cost of data collection
  - Challenges for data collection or limitations to interpreting the data.

47. Measurement influences behaviour, so it is important to choose indicators that will incentivize the actions that will lead to achieving the intended outcomes.

**Step 4: Create Monitoring Plan**

48. To ensure that indicators are successfully integrated into the monitoring and system review function of a competent authority, a performance monitoring plan (PMP) should be created to provide detailed information on how performance data will be collected and analysed. For each indicator, the PMP should include:
- Explanation or definition of indicator
  - Source of data
  - Frequency of data collection
  - Methods for data collection
  - Methods for ensuring data quality
  - Methods for data analysis
  - Roles and responsibilities for data collection
  - Roles and responsibilities for data analysis
  - Roles and responsibilities for ensuring data quality
  - Baseline data
  - Targets.
49. The competent authority should collect baseline data for each indicator. Baselines establish the current situation and are used as a starting point against which future performance will be measured. Additionally the collection of baseline data under a pilot program can serve to identify indicators that may not work.
50. After baseline data has been collected and as appropriate, the competent authority should establish targets for indicators. A target is a specified result that is to be realized within a specific timeframe. For some indicators, the target might simply be to “increase”, “maintain”, or “decrease” from the baseline.
51. When establishing targets, the competent authority should consider the baseline levels, the desired level of improvement, and the resource levels needed to meet the target.
52. For indicators with long-term targets, it may be helpful to identify sub-targets or milestones.

**SECTION 5.2 MONITORING & SYSTEM REVIEW STEPS**

53. Completing the steps above provides a foundation for making the monitoring and system review steps of the NFCS operational. These system review steps include: data collection, data analysis, reporting findings, and incorporating findings.

**Step 5: Collect and Analyse Data**

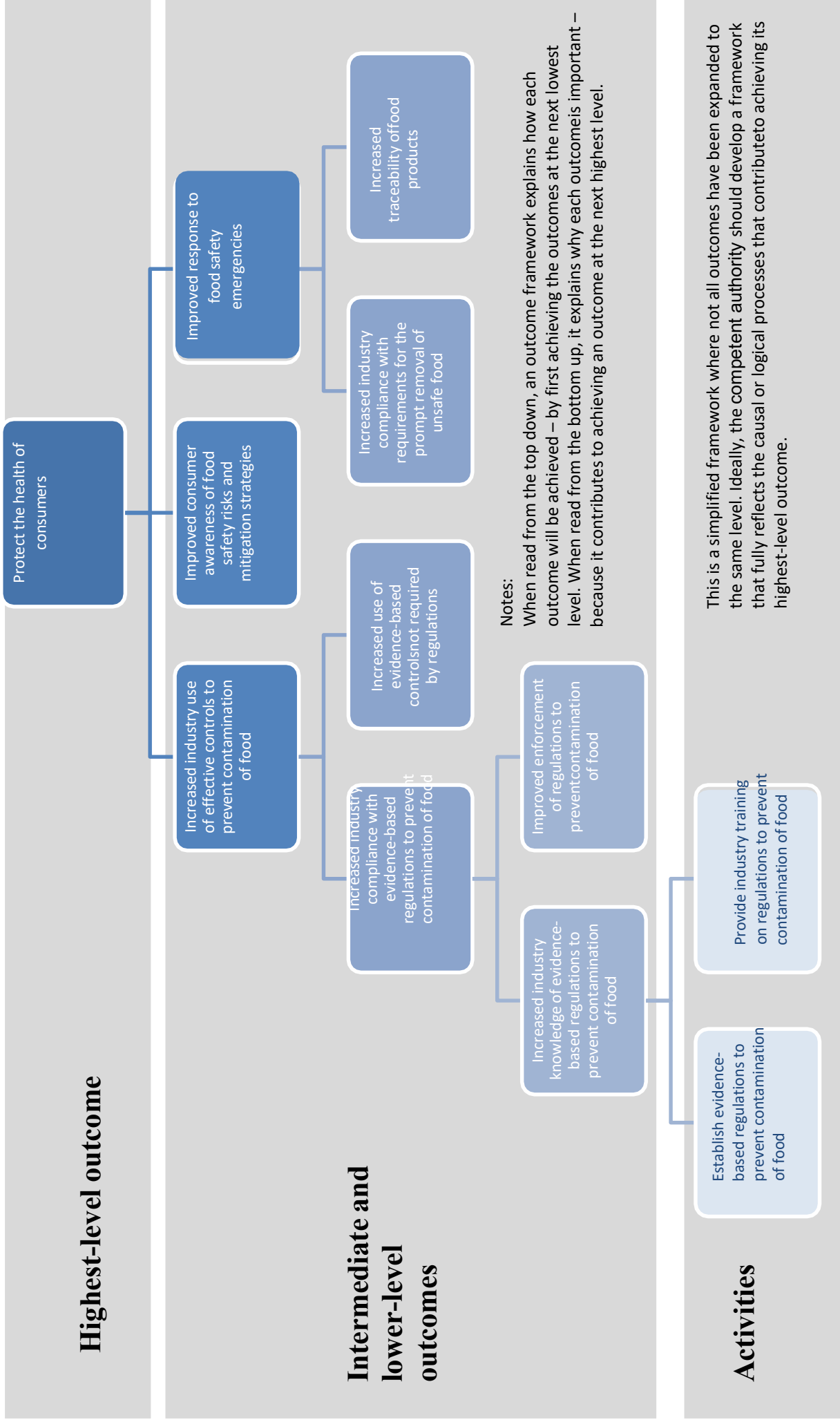
54. The PMP describes roles and responsibilities for data collection and analysis. Often, raw data will need to be managed in order to calculate indicators. Depending on the nature of the indicators, data analysis may include comparing results to baselines and targets and assessing trends over time.

**Step 6: Report and incorporate findings**

55. There are multiple uses for the information produced through monitoring and system review. Performance data should be presented in a clear and understandable format that is targeted to specific audiences and may be presented in various formats as appropriate (e.g. written summaries, executive summaries, oral presentations, visual presentations, dashboards).
56. Monitoring and system review is only useful if the findings are used to inform and influence the policy setting design and implementation of the NFCS. Simply reporting the data is not enough. The competent authority should institute approaches that will ensure the full integration of performance data. Some examples include:
- Conducting formal, regularly scheduled performance review meetings to assess continued appropriateness of activities and relevance of selected outcomes and associated indicators
  - Integrating performance data into resource prioritization and budgeting decisions
  - Identifying and sharing best practices and lessons learned
  - Identifying gaps or problems that could be addressed with capacity building

- Assessing other opportunities within the competent authority to use performance data.
- 57.** When the findings from performance monitoring and systems review reflect unfavourable results, problem-solving methods, such as root cause analysis, may be used to identify corrective actions.
- 58.** As the use of performance data results in changes to policies, system design, or program implementation, the competent authority should revisit the planning steps.
- With any refinement or shift in national strategies or goals for the NFCS, the competent authority should review the outcome framework. Irrelevant outcomes should be discarded and new outcomes should be incorporated as necessary.
  - On a regular basis, the competent authority should also review the indicators used to monitor outcomes to ensure that they are meaningful and appropriate. Indicators that are not meaningful should be discarded and more appropriate indicators should be incorporated as necessary.
  - The PMP should be updated on a regular basis to reflect institutional changes, technological advancements, or evolving methods for data analysis.
- 59.** Findings from monitoring and system review and subsequent changes to the NFCS should be communicated effectively and efficiently to ensure the clear exchange of information and engagement between all relevant stakeholders in the NFCS.

APPENDIX A: ILLUSTRATIVE EXAMPLE OF A SIMPLIFIED OUTCOME FRAMEWORK



**APPENDIX B: ILLUSTRATIVE EXAMPLES OF INDICATORS FOR SELECTED OUTCOMES**

The following table provides illustrative examples of indicators for selected outcomes from Appendix A. When applying the performance monitoring framework, each country will establish indicators specific to their desired outcomes.

Examples of Outcomes	Examples of Indicators
Protect the health of consumers	<ul style="list-style-type: none"> <li>• incidence of foodborne illness (# of cases per 100,000 population) (e.g., Salmonella)</li> <li>• average dietary exposure to chemical contaminants mg/kgbw per day (e.g., organophosphate pesticides)</li> </ul>
Increased industry use of effective controls to prevent contamination of food	<ul style="list-style-type: none"> <li>• percent of samples that test positive for microbial contaminants (e.g., Salmonella spp.)</li> <li>• percent of samples that test positive for chemical contaminants (e.g., organophosphate pesticide residues)</li> </ul>
Increased industry compliance with evidence-based regulations to prevent contamination of food	<ul style="list-style-type: none"> <li>• percent of farms using specified controls to prevent salmonella</li> <li>• percent of inspections for which food producers were found to be compliant with pesticide regulations</li> <li>• percent of inspections for which there is noncompliance by industry</li> </ul>
Increased industry knowledge of evidence-based regulations to prevent contamination of food	<ul style="list-style-type: none"> <li>• percent of food producers that are aware of current evidence-based regulations</li> </ul>
Improved response to food safety emergencies	<ul style="list-style-type: none"> <li>• percent of recalled products that were recovered and destroyed or disposed of properly</li> <li>• average response time between the recognition of a food safety concern and initiation of recall</li> </ul>
Increased traceability of food products	<ul style="list-style-type: none"> <li>• existence of a food traceability tool/mechanisms (yes/no)</li> <li>• percent of domestic food producers with traceability practices</li> <li>• percent of imported foods that are tracked or registered using identifiers (e.g., barcodes, RFID)</li> </ul>

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