WORLD HEALTH ORGANIZATION
Regional Office for the Eastern Mediterranean
ORGANISATION MONDIALE DE LA SANTE
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Mission to Assess the Food Safety System of Iraq

Iraq, 27-31 January 2019

Contents

Abbreviations

CDC	Communicable Diseases Center
COSQC	Central Organization for Standards and Quality Control
CPHL	Central Public Health Laboratory
CVL	Central Veterinary Laboratory
EMRO	Eastern Mediterranean Regional Office
FBD	Foodborne Diseases
FBO	Food Businesses Operator
GMP	Good Manufacturing Practice
HACCP	Hazard Analysis and Critical Control Point system
MOHE	Ministry of Health and Environment
MOA	Ministry of Agriculture
MOP	Ministry of Planning
NCCF	National Consultative Council for Food
SOP	Standard Operating Procedure
WHO	World Health Organization

Executive Summary

Following the initiative of the Eastern Mediterranean Regional Office (EMRO) of the World Health Organization (WHO) to organize a mission to assess food safety systems in 16 Member States of EMRO, the Government of Iraq requested WHO to assess its national food safety system and to make recommendations for improvement.

The Ministry of Health and Environment (MOHE) of Iraq coordinated the WHO mission, which took place from 27 to 31 January 2019. An international team was convened by EMRO to undertake the mission and consisted of Dr Philippe Verger, Technical Officer in Food Safety, Center for Environmental Health Activities, EMRO/WHO, Mr. Soren Bo Madsen, Technical Officer, Department of Food Safety and Zoonoses, FOS/WHO HQ and Drs Mohamed Al-Khraishah and Gerald Moy, WHO Consultants. The mission team also participated in a workshop on 30 and 31 January 2019 organized by the MOHE in cooperation with WHO to review the mission's preliminary recommendations and to develop concrete actions to implement those recommendations. The final recommendations of the mission are:

1. Inter-sectoral coordination
    a. Facilities for information sharing should be established through a multi-sectoral coordination mechanism. Any identified gaps and overlaps by institutions responsible for parts of the food chain should be addressed. WHO does not recommend any particular institutional structure for national food safety systems, but recommends a focus on the functionality of the design chosen.
    b. The National Consultative Council for Food (NCCF) should be used as a forum for inter-sectorial coordination and for establishing mechanisms for information sharing among agencies and sectors. A review of the mandate of the council should be considered and, if required, the mandate should be expanded.
    c. The National Codex Committee should be reinvigorated. The committee should evaluate the coverage and effectiveness of existing legislation and be tasked to propose amendments and revisions where needed. Food business associations should be invited to represent the private food sector on the committee.

2. Laws, regulations and implementation of food safety policy
    a. The current Public Health Law from 1981 should be updated. This would present an opportunity to modernize and adapt sections relevant to food safety to provide the legal basis for a risk-based approach to food safety.
    b. Efforts should be made to clearly define and formulate the legal responsibilities of food business operators (FBOs) for assuring safe food in an updated law. Currently, this responsibility is defined only vaguely leading to disproportionate resources being spent on clarifying individual cases by the NCCF.
    c. The 226 existing cases decided by the council should be reviewed to identify broad policies as well as issues in need of further clarification

d. Provisions for traceability and market recall of food products should be included in an updated law
e. The standards, guidelines and codes of practice of Codex Alimentarius should be used as regulatory models for updated legislation and as guidance when no national legislation exists. The World Trade Organization uses Codex standards for reference in international trade disputes

3. Emergency preparedness and response
    a. A national laboratory network should be established with the participation of all food safety laboratories from all relevant sectors with the mandate to exchange relevant data for surveillance and monitoring purposes. This would improve preparedness and the ability to respond in a timely and effective manner to food safety events.
    b. The available laboratory accreditation scheme of the Minister of Planning should be used to raise confidence in analytical test results for all government laboratories.
    c. Experts in academia should be identified for consultation and activation in case of food safety emergencies as part of enhancing preparedness.
    d. National preparedness for chemical food safety events should be improved.

4. Foodborne disease surveillance and response
    a. Exchange of data (outbreak, surveillance and monitoring data) between components of the MOHE, such as Centers for Disease Control (CDC), auditing departments and relevant laboratories, should be facilitated to enhance preparedness, detection and response to food safety events and to assess changes in the prevalence of pathogens and/or contaminants in foods.
    b. Relevant MOHE components should join and participate actively in international networks for surveillance of foodborne disease (especially outbreaks) and food safety risk management (e.g., International Health Regulations (IHR), International Food Safety Authorities Network (INFOSAN), Rapid Alert System for Food and Feed (RASFF)).
    c. The surveillance system should be reviewed and updated to ensure that outbreaks of foodborne diseases are communicated to the food auditing department for follow up action and to inform policy for inspections.

5. Food Safety Monitoring and Inspection
    a. End-product testing is currently the focus of most of the analytical work undertaken. Sampling and laboratory analysis should be re-focused to increase emphasis on preventive and risk-based approaches. This will require collection and analysis of data to identify priority food and pathogen/contaminant combinations and, in turn, to enable more targeted inspection and sampling activities based on risk.

b. Requirements for FBOs to use Good Manufacturing Practices (GMPs), Hazard Analysis and Critical Control Point (HACCP) systems and auto-control methods should be established, where appropriate
c. The monitoring of pesticide residues and other chemical contaminants, such as industrial pollutants, heavy metals and mycotoxins, is insufficient in the current programme design. This may be the result of the lack of necessary instrumentation capacity. Procedures to ensure the continuous operation of existing critical instrumentation should be initiated as a matter of priority (see Item 7). The official analytical control programme should focus on food and pathogen/contaminant combinations known to pose a high-risk to health.
d. Consolidating laboratory capacity across present institutional lines should be considered to reduce costs of procurement, operation and maintenance of expensive analytical instrumentation. Optimal performance of many chemical analyses requires a certain (usually high) volume of samples to maintain competence and reduce unit costs.
e. Training of staff, assuring the availability of equipment and documenting procedures for microbiological sampling and the transport for official control should be implemented to ensure that the results of testing laboratories are representative of samples taken at the FBOs' facilities.
f. A computer system for electronic transfer of data from decentral to central level has been acquired. However, the system is not operational due to the insufficiency of internet connections. To allow this system to function as intended, connectivity should be established, which will yield both operational and financial benefits.
g. Risk ranking of food businesses should be undertaken to prioritize inspections, increase attention on problematic sectors and businesses and allow better use of inspection resources.
h. Food inspections at the point of entry should be integrated with customs controls and with those of other ministries for example in the so-called "single window" system.
i. The existing border control system should be reviewed to strengthen food safety controls based on risk and to better utilize available resources.

6. Information and communications
    a. Awareness of good hygienic practices and HACCP among FBOs and food handlers should be raised through the development and dissemination of information and training material.
    b. Food safety information material should be developed or adapted (e.g. WHO's Five Keys to Safer Food) to raise awareness of good food safety practices among the general population through education materials, radio and TV spots, social media etc..

c. A consumer hotline for reporting food safety complaints should be established to collect information on food safety problems and to provide a means for the early detection of food safety events.

7. Human Resources and finances
    a. Policies for staff retention and expedited recruitment should be developed and implemented. Many institutions reported difficulties in retaining staff resulting in a loss of essential skills and institutional memory. Delayed recruitment of new staff can lead to gaps in otherwise established capacities and can also increase the need for external training.
    b. The procurement process of the government should be streamlined to allow institutions to spend their allocated budget in a timely and prudent manner. The lengthy process seems to be a significant factor in reducing the operation of laboratory instrumentation for extended periods of time.

Introduction

Following the initiative of the Eastern Mediterranean Regional Office (EMRO) of the World Health Organization (WHO) to the assessment of food safety systems in 16 Member States in EMRO, the Government of Iraq requested WHO to assess the national food safety system and to make recommendations for its improvement.

The assessment and recommendations are expected to assist Iraq by identifying strengths and weaknesses in its national food safety system and thus focus on priority development actions to improve and strengthen the existing system government in the short- and medium-term. Although assessment has taken a holistic (farm to fork) approach, emphasis has been placed on the public health aspects of national food safety system, in line with the mandate of WHO.

1. Objectives of the Mission

The objectives of the mission were to assess the national food safety system and to make recommendations as to how to strengthen the food safety system in the Iraq. Preliminary recommendations were presented to a workshop of government food safety stakeholders held 30 and 31 January 2019 in the presence of the HE Minister of Health and Environment. The assessment was based on a questionnaire complete by the various agencies and consultations and meetings with stakeholders during the mission's visit. The recommendations address the seven main components of a food safety system. The workshop participants reviewed the preliminary recommendations and offered concrete actions to overcome identified issues.

2. Mission to Iraq

The Ministry of Health and Environment of Iraq coordinated the WHO mission, which took place from 27 to 31 January 2019. An international team was organized by EMRO to undertake the mission and consisted of Dr Philippe Verger, Technical Officer in Food Safety, EMRO/WHO, Mr. Soren Bo Madsen, Technical Officer, Department of Food Safety and Zoonoses, WHO HQ and Drs Mohamed Al-Khraishah and Gerald Moy, WHO Consultants.

The programme of the mission team is given in Annex I. A partial list of persons met is given in Annex II.

3. Methodology

An adapted version of the "Food Safety Needs Assessment Tool" was used as the basis for the assessment of the national food safety system. This was sent to the Director of the Central Public Health Laboratory of the MOHE to be complete in cooperation with agencies with activities related food safety. The mission sought to verify this information, clarify ambiguities and identify potential challenges.

4. Major Observations

4.1 Inter-sectoral coordination

This component concerns mechanisms for cross-sectoral and multi-disciplinary information and data sharing, along with analysis, so that well informed decisions can be taken, for both routine risk management and response to outbreaks and emergency events.

The main national authorities in food safety are:

- Ministry of Health and Environment (MOHE)
- Ministry of Agriculture (MOA) and
- Central Organization for Standardization and Quality Control (COSQC).

The main insufficiencies noted are:

- Legal and organizational barriers prevent effective information sharing.
- The mandate National Food Safety Consultative Council (NFSCC) has been limited to specific cases.
- The National Codex Committee does not operate to its full potential

4.2 Legislation, regulations and implementation of policy

This component covers legislation and regulations to establish and delegate roles and responsibilities within the food safety system. These laws and regulations provide the mandate for activities in the other food safety system components. This component also concerns food safety policy as well as risk management, risk assessment and risk communication activities, and determines the nature and range of actions that responsible authorities are mandated to carry out.

The main food safety legislation in Iraq is the MOHE Public Health Law of Iraq that dates from 1981. It includes limited provisions for food safety and legislation and gives the COSQC the authority to establish food standards. A partial list of food legislation in Iraq is given in Annex III.

The laws and regulations on food safety in Iraq remain fragmented among multiple government agencies. Most food safety legislation is in need of updating. They lack risk-based regulation of food safety, traceability and recall authority. Also, there are no clear responsibilities for stakeholders (Food Business Operators) along the food chain, including producers, importers, processors, distributors and retailers. Modern principles, such as risk analysis, transparency, and precaution, are not integrated into the existing legislative framework.

4.3 Emergency preparedness and response

This component concerns the capacity of an existing public health emergency plan to respond to food safety emergency events, such as outbreaks and food recalls. Planning is essential as well

as testing of the plan in trial runs. Responses should be underpinned by the coordination mechanisms reviewed under the first component 'Inter-sectoral coordination'. This component is also in integral part of the countries obligations to develop core capacities under the International Health Regulations (IHR) adopted by the World Health Assembly in 2005.

The mobilization of staff and laboratory resources was effective in addressing a recent food safety emergency. However, food safety emergency preparedness remains deficient. For example, no INFOSAN Emergency Contact Point has been designated. In addition, the capacity for analysis of chemicals and viruses is limited or nonexistent.

4.4 Foodborne disease surveillance and exposure monitoring

This component concerns surveillance for potential foodborne disease in humans, and includes the supporting laboratory capacity, epidemiological studies, and outbreak investigations. In addition to the diseases caused by microbial hazards, it will include surveillance for acute chemical poisoning. For most chemical contaminants, health outcomes resulting from chronic exposure are multi-factorial with long onset times. For these hazards, exposure monitoring, such as total diet studies[1], can assess the risk to the population of chemicals in diet, including certain nutrients.

Basic foodborne disease surveillance has been established in Iraq, along with resources to support activities. The list of foodborne diseases under surveillance is limited. An assessment of chemical hazards in the diet has not been performed.

The MOHE in Iraq oversees public health surveillance and the Communicable Diseases Center (CDC) coordinates, among other tasks, surveillance of foodborne diseases. The mission team was informed that outbreak control teams have been established by the CDC, including participation from food inspection units, when investigating outbreaks of foodborne diseases.

Little accreditation of analytical methods in Iraq is exists. Only one visited laboratory had accreditation for three microbiological methods. Participation in international networks on surveillance is limited. Analytical results from human, food and animal surveillance are not routinely shared. Analytical results are not collated and analyzed to direct and focus food safety policy on priority areas.

4.5 Food safety implementation, product monitoring and inspection

This component includes implementation of food safety programmes to reduce or eliminate priority hazards in foods and, in some cases, to change practices that contribute to the risk of foodborne disease. Monitoring of food products plays an important role in assuring that products conform to existing standards and practices. Inspection provides assurance that basic Good Manufacturing and Good Hygienic Practices (GMP and GHP) is observed and, in the case of potentially hazardous foods, that in-process food safety assurance systems are in place and are functioning properly.

[1] https://www.who.int/foodsafety/publications/tds_guidance/en/

Areas of responsibility are not clear and coordination between involved institutions is inadequate. The focus on end-product testing is not effective in assuring food safety. The lack of delegated authority to adapt to emerging risks or new knowledge is a constraint. The use of third-party certification for food imports is not subject to government oversight.

4.6 Information and Communication

This component includes the provision of food safety information to consumers, institutions and industry, such as the promotion of food hygiene measures. A radio and other means of communication are available. However, food safety messages targeted at food handlers and consumers have not been developed.

4.7 Human and financial resources

This component addresses the existing food safety system human resources, as well as mechanisms to increase capacity of human resources (particularly through on-the-job training). The component also addresses the availability of in-country formally qualifying food safety training and requirements for training of food handlers. It will also assess the adequacy of available financial resources where possible.

The procurement of spare parts and expendables is a slow and difficult process so that essential laboratory instrumentation is not operational.

High turnover of staff has resulted in gaps of expertise and loss of institutional memory. Recruitment of new staff is lengthy and may result in the need for external training.

5. Workshop of government food safety stakeholders

The mission team participated in a workshop of government food safety stakeholder held in the presence of the Minister of Health and Environment, 30-31 January 2019 at the Hotel Al Rasheed in Baghdad. The team presented their preliminary recommendations for comment and the participants offer concrete suggestions for the implementation of those recommendation. The team also presented the comments on the status of the Iraqi progress in meeting the food safety requirements of the IHR and suggestions for short-term improvements.

The participants in the workshop of government food safety stakeholders are provided in Annex IV. A separate report of the workshop will be prepared.

6. Recommendations

8. Inter-sectoral coordination
    a. Facilities for information sharing should be established through a multi-sectoral coordination mechanism. andAny identified gaps and overlaps by institutions responsible for parts of the food chain should be addressed. WHO does not recommend any particular institutional structure for national food safety systems, but recommends a focus on the functionality of the design chosen.

b. The National Consultative Council for Food (NCCF) should be used as a forum for inter-sectorial coordination and for establishing mechanisms for information sharing among agencies and sectors. A review of the mandate of the council should be considered and, if required, the mandate should be expanded.
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departments and relevant laboratories, should be facilitated to enhance preparedness, detection and response to food safety events and to assess changes in the prevalence of pathogens and/or contaminants in foods.

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g. Risk ranking of food businesses should be undertaken to prioritize inspections, increase attention on problematic sectors and businesses and allow better use of inspection resources.
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c. A consumer hotline for reporting food safety complaints should be established to collect information on food safety problems and to provide a means for the early detection of food safety events.

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a. Policies for staff retention and expedited recruitment should be developed and implemented. Many institutions reported difficulties in retaining staff resulting in a loss of essential skills and institutional memory. Delayed recruitment of new staff can lead to gaps in otherwise established capacities and can also increase the need for external training.
b. The procurement process of the government should be streamlined to allow institutions to spend their allocated budget in a timely and prudent manner. The lengthy process seems to be a significant factor in reducing the operation of laboratory instrumentation for extended periods of time.

ANNEX I

Programme of Mission Team

(Insert)

ANNEX II

Partial List of Persons Met

	Name	Department
	HE Dr Ala Alwan	Minister of Health and Environment
	Dr Hazem Al-Jomily	Technical Secretary General, MOHE
	Dr Shaker Mohsin	CDC
	Dr Adnan Nawar Khistawi	CDC, Surveillance Section
	Dr Wafa Husseini	Head, CPHL
	Haider Qasim Shindahk	CPHL
	Lailah Abbas Ali	CPHL
	Bayan Hassem Hadi	CPHL
	Farah Alsindy	CPHL
	Dr Aseel ayad Naji	Audit Dept. Head, Technical Section
	Dr Suha Jaryan	Audit Dept. Food Sampling Section
	Dr Wafaa Ahmed	Audit Dept. Manager, Factory Section
	Dr Mohammad Jaber	Member of the NCCF
	Dr Huda Naiem	Audit Dept
	Dr Deiaa	Head, CVL, Member NCCF
	Dr Aseel Ayat	Codex Focal Point, COSQC
	Dr Ban	Director, COSQC
	Dr Saad Ali Hussein	Director, National Institute of Nutrition
	Dr Zaid Akram	TQCSI-Iraq
	Dr Hisham Ahmad	CDC

ANNEX III

Partial List of Food Legislation in Iraq

- Public Health Law No. 89 of 1981
- Quarantine Law No. 76 of 2012
- COSQC Law No. 54 of 1979
- The special mandate to the Ministry of Trade (1988) to build up a central laboratory to test conformity of food commodities to the Iraqi food standards among the imported food and delegate to this laboratory all the duties and responsibilities of the CPHL as stated in the Article (26) of the Public Health Law No. 89 of 1981, and in charge the MOHE to supervise and control the test performed in this laboratory. The COSFQC maintain the control of the imported food testing for conformity to the national standard adopted.
- Animal Slaughter Control Law No. 22 of 1972
- Animal Health Law No.32 of 2013
- Regulations of Food Sampling Procedures
- Regulations of Food Businesses Licensing

Annex IV

Participants in the Workshop of Government Food Safety Stakeholders

(Insert)