

Codex Standards in the WHO South-East Asia Region



World Health
Organization
REGIONAL OFFICE FOR **South-East Asia**

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Acronyms and abbreviations

BAFRA	Bhutan Agriculture and Food Regulatory Authority
BNCC	Bangladesh National Codex Committee
BSTI	Bangladesh Standards and Testing Institution
CAC	Codex Alimentarius Commission
CCAFRICA	Coordinating Committee for Africa
CCASIA	Coordinating Committee for Asia
CCASIA	FAO/WHO Regional Coordinating Committee for Asia
CCCF	Codex Committee on Contaminants in Foods
CCCPC	Codex Committee on Cocoa Products and Chocolate
CCCPL	Codex Committee on Cereals, Pulses and Legumes
CCFA	Codex Committee on Food Additives
CCFFP	Codex Committee on Fish and Fishery Products
CCFFV	Codex Committee on Fresh Fruits and Vegetables
CCFH	Codex Committee on Food Hygiene
CCFH	Codex Committee on Food Hygiene
CCFICS	Codex Committee on Food Import and Export Inspection and Certification Systems
CCFL	Codex Committee on Food Labelling
CCFO	Codex Committee on Fats and Oils
CCGP	Codex Committee on General Principles
CCGP	Codex Committee on General Principles
CCLAC	Coordinating Committee for Latin America and the Caribbean
CCMAS	Codex Committee on Methods of Analysis and Sampling
CCMH	Codex Committee on Meat Hygiene
CCMMP	Codex Committee on Milk and Milk Products
CCMPH	Codex Committee on Meat Hygiene
CCNEA	Coordinating Committee for Near East
CCNFSDU	Codex Committee on Nutrition and Foods for Special Dietary Uses
CCNMW	Codex Committee on Natural Mineral Waters
CCP	Codex contact point
CCPFV	Codex Committee on Processed Fruits and Vegetables
CCPR	Codex Committee on Pesticide Residues
CCRVDF	Codex Committee on Residues of Veterinary Drugs in Foods
CCRVDF	Codex Committee on Residues of Veterinary Drugs in Foods
CCS	Codex Committee on Sugars
CCSCH	Codex Committee on Spices and Culinary Herbs
CCVP	Codex Committee on Vegetable Proteins
EMRL	extraneous maximum residue limit
EU	European Union

FAO	Food and Agriculture Organization
FDA	Food and Drug Administration (Myanmar)
FSSAI	Food Safety and Standards Authority of India
GFSA	General Standard for Food Additives
GSCTFF	General Standard for Contaminants and Toxins in Food and Feed
IGO	international governmental organization
IPPC	International Plant Protection Convention
MDG	Millennium Development Goal
MFDA	Maldives Food and Drug Authority
MoAF	Bhutan Ministry of Agriculture and Forests
MoH&FW	Ministry of Health and Family Welfare
MRL	maximum residue level/limit
NCC	national Codex committee
NCCP	national Codex contact point
NCCP	national Codex contact point
NCD	noncommunicable disease
NGO	nongovernmental organization
OECD	Organisation for Economic Co-operation and Development
OIE	World Organization for Animal Health
OWG	Open Working Group of the General Assembly on Sustainable Development Goals
RCC	regional coordinating committee
RCP	recommended code of practice
RMR	risk management recommendation
SDG	Sustainable Development Goal
SEA	South-East Asia
STAN	standard
TF	task force
TFAF	Task Force on Animal Feeding
TFAMR	Task Force on Antimicrobial Resistance
TFFBT	Task Force on Food Derived from Biotechnology
TFFJ	Task Force on Fruit and Vegetable Juices
TFPHQFF	Task Force for the Processing and Handling of Quick Frozen Foods
ToR	terms of reference
TWG	technical working group
UHC	universal health coverage
UN	United Nations
UNECE	United Nations Economic Commission for Europe
WHO	World Health Organization
WTO	World Trade Organization

Executive summary

The Codex Alimentarius Commission (CAC), the joint body of the World Health Organization (WHO) and Food and Agriculture Organization (FAO) of the United Nations (UN), is responsible for implementing the Joint FAO/WHO Food Standards Programme and is the intergovernmental body mandated to develop codes of food and related texts that are part of the *Codex Alimentarius* (Food Code). As on September 2017, the CAC had 188 Codex Members – 187 Member States and one Member Organization, the European Union (EU).

The *Codex Alimentarius* includes standards for all the principal foods, whether processed, semi-processed or raw, for distribution to consumers. The standards can be classified into two types. The standards that are of a general nature and applicable to all food types are called *horizontal standards* and the commodity standards, which lay down the requirements for individual (types of) foods, are called *vertical standards*. Thus, the horizontal standards include standards/guidelines/codes of practice for food hygiene, food additives, residues of pesticides and veterinary drugs, contaminants, labelling and presentation, methods of analysis and sampling, and import and export inspection and certification. The commodity or vertical standards (e.g. milk products, meat, fruits and vegetables, processed food, etc.) are for individual food commodities that contain the specific requirements of the product.

Out of the 11 countries of WHO South-East Asia (SEA) Region,^a all are members of the CAC except Timor-Leste. A study was commissioned by the WHO Regional Office for South-East Asia to prepare a status report on the implementation and adoption of Codex texts in Member States of the Region. The study covered the following points:

1. Classify horizontal and vertical Codex standards into two: those that focus on the food safety aspects and those that are qualitative but also impact health standards.
2. Map these horizontal and vertical food safety and quality standards as adopted by countries in the SEA Region.
3. The output would be a status report on the implementation of Codex texts in the Region in the context of food safety and noncommunicable diseases.
4. The findings of the study can be utilized by the Regional Office to undertake tailor-made modular capacity-building initiatives for successful application of Codex texts at the country level.

The information on the above points was collected electronically from all Member States except Timor-Leste through emails (the Democratic People's Republic of Korea and Myanmar did not respond to email queries). Information was also gathered from resources in the public domain on the Internet.

A well-established Codex structure in a country accomplishes two goals. First, it ensures that the work being done by the Codex is made known to all stakeholders in the country and can be implemented as per the national priorities. Second, a strong Codex structure at the national level helps a country to participate actively in Codex work by sending relevant experts as delegates to the various committee meetings; sending comments on agenda points that are of relevance to them; and finally, actively participate in the Codex work by sending new work proposals to various committees. National Codex contact points (NCCPs) have been identified and designated in Member States of the SEA Region. However, the range of their activities varies considerably, depending largely on the level of technical capacity and availability of resources, which are often limited in several Member States.

a Bangladesh, Bhutan, Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand and Timor-Leste

Almost all Member States in the Region have initiated a harmonization exercise to align their national food standards with the Codex standards. However, the number of standards taken up for adoption/adaptation after harmonization varies considerably. Member States that have set up strong Codex systems are able to utilize Codex work more effectively. They are using the Codex texts, albeit differently. Some of the texts have been adopted as such, others have been adapted according to national priorities, and some of them are referred to on a case-by-case basis. Thus, the level of adoption/adaptation of Codex standards in the WHO SEA Region varies considerably.

While addressing the issue of noncommunicable diseases (NCDs), Member States may need to focus more on standards for harmonization or adoption in specific areas where standards have been developed:

- Nutrition and labelling
- Food hygiene
- Codes of practice on the reduction of aflatoxins/mycotoxins in food and feed
- Vertical standards that impact NCDs.

The *General standard for the labelling of prepackaged foods* has been implemented by all Member States of the Region. The areas of nutrition and food labelling have benefited from development of Codex food standards and harmonization efforts to shape food and nutrition labelling requirements internationally. Another area that Member States need to focus on is food hygiene. Most Member States have implemented the *Codex General principles of food hygiene* in their national food control systems as such or with modifications. However, they need to focus more on the implementation of the recommended codes of practice (RCPs) for the reduction of aflatoxins/mycotoxins in various food products.

For effective participation in Codex activities, it is important to build the capacity of personnel and allocate resources. There has to be a long-term engagement with Codex work. It is important to identify those Codex committees that are relevant to national priorities and the outcomes of these committees, and build core competencies by identifying experts and research institutes working in that area, and focusing on data collection.

It is better to follow a scalable and modular approach to institutionalizing Codex work in the overall national framework for food control and particularly food standardization programmes. Apart from tailormade capacity-building programmes, there may be a need to harness information and communication technology (ICT) in a more focused manner to spread awareness about NCDs and their relationship to unhealthy diets.

1. Introduction

1.1 Background

The WHO Regional Office for South-East Asia commissioned a study covering Member States of the Region with a focus on the following points:

1. Classify horizontal and vertical Codex standards into two: one that focuses on the food safety aspects and the other on those that are qualitative but also impact health standards.
2. Map these horizontal and vertical food safety and quality standards as adopted by Member States in the Region.
3. The output would be a status report on the implementation of Codex texts in the Region in the context of food safety and noncommunicable diseases (NCDs).
4. The findings of the study can be utilized by the Regional Office to undertake tailormade modular capacity-building initiatives for successful application of Codex texts at the country level.

Codex Alimentarius Commission (CAC). The Codex Alimentarius Commission (CAC) is a joint body of the World Health Organization (WHO) and Food and Agriculture Organization (FAO) of the United Nations (UN). It is responsible for implementing the Joint FAO/WHO Food Standards Programme and is the intergovernmental body mandated to develop codes of food and related texts that are part of the *Codex Alimentarius*. As on September 2017, the CAC had 188 Codex Members – 187 Member States and one Member Organization, the European Union (EU). There are presently 219 Codex observers – 56 international governmental organizations (IGOs), 147 nongovernmental organizations (NGOs) and 16 UN agencies.

The Latin term “*Codex Alimentarius*” means “Food Code”. Thus, the *Codex Alimentarius* is a collection of internationally adopted food standards and related texts presented in a uniform manner and developed by CAC. The main function of CAC is to adopt standards by following a transparent, inclusive and consensus-based process embedded in science. The work of CAC is relevant to Member States as it is based on the scientific principles of risk analysis;¹ has a consensus-based approach; is easy to harmonize as national legislation; covers a wide range of products, codes of practice, maximum residue level (MRL), etc.²

1.2 Research methodology

As part of the study, apart from the secondary research, the national Codex contact points (NCCPs) of all Member States except Timor-Leste, which is not member of CAC, were contacted through email to share the following details:

- ◉ Have the *Codex Alimentarius* standards been adopted in your country?
- ◉ If they have been adopted, were they adopted per se or after harmonization?
- ◉ Can the details of the adopted texts be shared? If the information is available on the website, the URL of the same can be shared.

2. Codex Alimentarius Commission (CAC) and its standard-setting process

2.1 Introduction

2.1.1 Birth of the Codex Alimentarius Commission

In February 1961, the Director-General of FAO, Mr BR Sen, actively entered into a discussion with WHO, United Nations Economic Commission for Europe (UNECE), the Organisation for Economic Co-operation and Development (OECD), and the Council of the Codex Alimentarius Europaeus, with a proposal that would lead to the establishment of a Joint FAO/WHO Food Standards Programme. In November 1961, the eleventh session of the conference of FAO passed a resolution by which the Codex Alimentarius Commission (CAC) was established.³

The Joint FAO/WHO Food Standards Conference convened in Geneva in 1962 established the framework for cooperation between the two agencies. CAC would be responsible for implementing the Joint FAO/WHO Food Standards Programme and this was endorsed in May 1963 at the sixteenth World Health Assembly. Thus, CAC was established in recognition of the importance of food standards for good health. It is the intergovernmental body mandated to develop codes of food and related texts that are part of the Codex Alimentarius. The Commission held its first session at the FAO headquarters in Rome in June–July 1963.³

2.1.2 Mandate of the Codex Alimentarius Commission

According to the Article 1⁴ of the statutes of the Codex, the mandate of CAC is as follows:

- ◉ to protect the health of consumers and ensure fair practices in the food trade;
- ◉ to promote coordination of all food standards work undertaken by IGOs and NGOs;
- ◉ to determine priorities, and initiate and guide the preparation of the draft standards through and with the aid of appropriate organizations;
- ◉ to finalize the elaborated standards and publish them in *Codex Alimentarius* either as regional or worldwide standards; and
- ◉ to amend the published standards, as appropriate, in the light of developments.

2.1.3 Purpose and scope

CAC publishes the *Codex Alimentarius* for international food standards, guidelines and codes of practice to protect the health of consumers, and ensure fair practices in the food trade. The publication is intended to guide and promote the elaboration and establishment of definitions and requirements for food to assist in their harmonization in international trade. CAC also promotes coordination of all food standards work undertaken by IGOs and NGOs.⁵

The *Codex Alimentarius* includes standards for all principal foods, whether processed, semi-processed or raw, for distribution to the consumer.

The standards can be classified into two types. The standards that are of a general nature and applicable to all food types are called horizontal standards. The commodity standards that lay down the requirements for individual (types of) food are called vertical standards. The *Codex Alimentarius* includes standards/guidelines/codes of practice for food hygiene, food additives, residues of pesticides and veterinary drugs,

contaminants, labelling and presentation, methods of analysis and sampling, and import and export inspection and certification, which are the horizontal standards. The commodity/vertical standards are for individual food commodities and products (e.g. milk, meat, fruits and vegetables, processed food, etc.) , and contain the specific requirements of the products.

2.1.4 The interface between Codex standards and national law

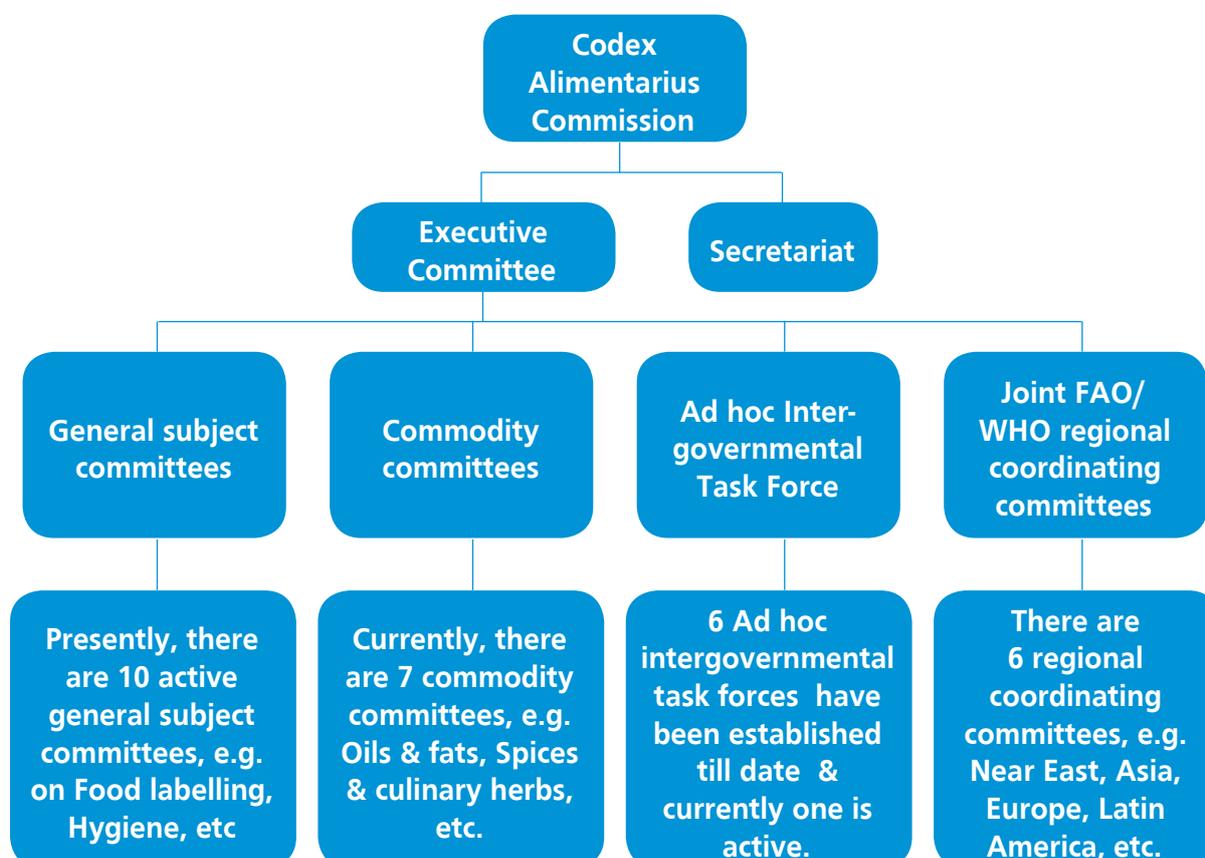
Codex standards and related texts are not a substitute for, or alternative to, national legislation and are voluntary in nature.² Food producers/processors/industries have to follow the laws and/or regulations of the country, and it is up to each government whether or not to introduce Codex standards and related texts into their legislation and/or regulations. It may, however, be beneficial for countries to introduce Codex standards and texts into their system as they contain requirements aimed at ensuring safe food based on sound science, wholesome food products free from adulteration and correctly labelled for presentation to the consumer. A Codex standard for any food or foods is drawn up in accordance with the format for Codex commodity standards and contains, as appropriate, the sections listed therein.⁶

2.1.5 Structure of CAC

CAC consists of the following (Fig. 1):²

1. The Commission
2. Executive Committee
3. Codex subsidiary bodies
4. Codex Secretariat

Fig. 1. Organizational structure of the Codex Alimentarius Commission



2.16 Codex standards and World Trade Organization

In 1995, with the formation of the World Trade Organization (WTO) and accession to its various agreements, the Codex standards, guidelines and codes of practice, and the Codex texts became a reference for food safety in the WTO Agreement on Sanitary and Phytosanitary measures (SPS Agreement). *Codex Alimentarius* is one of the “three sisters” for human health, which includes the World Organization for Animal Health (OIE) for animal health issues and the International Plant Protection Convention (IPPC) for plant health.⁷ Codex standards have become international benchmarks against which national regulations and other measures are evaluated within the context of WTO Agreements and are considered to be consistent with the WTO Agreement on Technical Barriers to Trade (TBT).

2.2 Subsidiary bodies in CAC

There are two kinds of subsidiary bodies in CAC:

1. the Codex committees, which prepare draft standards for submission to the Commission; and
2. the Joint FAO/WHO regional coordinating committees (RCCs), through which regions or groups of countries coordinate food standards activities.

CAC may also approve a third type of subsidiary body called a Codex Ad hoc Intergovernmental Task Force, which is a Codex committee with limited terms of reference and established for a fixed period of time.

The Rules of Procedure of CAC apply, *mutatis mutandis*, to the Codex committees, RCCs and ad hoc intergovernmental task forces.⁸

2.2.1 General subject and commodity Codex committees

As indicated in Table 1, the Codex committees are further divided into the general subject committees and commodity committees.

2.2.1.1 General subject committees

The work of general subject committees has relevance for all commodity committees, and applies across all of these. They are sometimes also referred to as horizontal committees and the standards developed by them are generally referred to as “horizontal standards” as these standards apply transversely.² These texts deal with hygienic practices, labelling, additives, inspection and certification, nutrition, contaminants and residues of veterinary drugs and pesticides. These committees develop concepts and principles that can be applied to foods in general. However, the Codex Committee on General Principles (CCGP) deals with such procedural and general matters as are referred to it by CAC.

As of September 2017, the following ten general subject committees were functioning:

- Codex Committee on Contaminants in Foods (CCCF)
- Codex Committee on Food Additives (CCFA)
- Codex Committee on Food Hygiene (CCFH)
- Codex Committee on Food Import and Export Inspection and Certification Systems (CCFICS)
- Codex Committee on Food Labelling (CCFL)
- Codex Committee on General Principles (CCGP)
- Codex Committee on Methods of Analysis and Sampling (CCMAS)

- Codex Committee on Nutrition and Foods for Special Dietary Uses (CCNFSDU)
- Codex Committee on Pesticide Residues (CCPR)
- Codex Committee on Residues of Veterinary Drugs in Foods (CCRVDF).

2.2.1.2 Commodity committees

Commodity committees are responsible for developing Codex commodity standards that refer to a specific product, although increasingly Codex now develops standards for food groups, i.e. one general standard for fruit juices and nectars as opposed to one per fruit.² They are often referred to as “vertical standards”. These committees convene as necessary and go into recess or are abolished when their work is completed. As on September 2017, there were seven active commodity committees as follows:

- Codex Committee on Fresh Fruits and Vegetables (CCFFV)
- Codex Committee on Spices and Culinary Herbs (CCSCH)
- Codex Committee on Fats and Oils (CCFO)
- Codex Committee on Processed Fruits and Vegetables (CCPFV)
- Codex Committee on Sugars (CCS)
- Codex Committee on Milk and Milk Products (CCMMP)
- Codex Committee on Cereals, Pulses and Legumes (CCCPL).

The following commodity committees work through correspondence or are in recess:

- Codex Committee on Cocoa Products and Chocolate (CCCPC)
- Codex Committee on Meat Hygiene (CCMH)
- Codex Committee on Natural Mineral Waters (CCNMW)
- Codex Committee on Vegetable Proteins (CCVP)
- Codex Committee on Fish and Fishery Products (CCFFP).

The commodity committees that have been abolished are as follows:^b

- Codex Committee on Edible Ices (CCIE), at the 22nd session of the Commission (1997)
- Codex Committee on Meat (CCM), at the 16th session of the Commission (1985)
- Codex Committee on Meat and Poultry Products (CCMPP), at the 23rd session of the Commission (1999)
- Codex Committee on Soups and Broths (CCSB), at the 24th session of the Commission (2001).

Membership of Codex committees is open to all the members of CAC whereas membership of RCCs is open only to members of CAC belonging to the region or group of countries concerned. Member States of the WHO SEA Region are members of the FAO/WHO Coordinating Committee for Asia. Section V of the Codex procedural manual lists the subsidiary bodies of the Commission and their terms of reference (ToRs).²

^b The work assigned to them was completed and hence they were abolished. Only those are adjourned *sine die* where there may be a possibility of future work.

Each committee meets once in a year or once in 18 months or 2 years, depending upon its nature, and is hosted by a Member State (**Table 1**), which is called the “host country”. The host country is responsible for the cost of hosting the Committee sessions and provides the chairperson for the Committee.^c

Table 1. Codex committees and the host country, as on September 2017

S. no.	Subsidiary body	Member responsible	Status
General subject committees			
1.	Codex Committee on Contaminants in Foods	The Netherlands	Active
2.	Codex Committee on Food Additives	China	Active
3.	Codex Committee on Food Hygiene	United States of America	Active
4.	Codex Committee on Food Import and Export Certification and Inspection Systems	Australia	Active
5.	Codex Committee on Food Labelling	Canada	Active
6.	Codex Committee on General Principles	France	Active
7.	Codex Committee on Methods of Analysis and Sampling	Hungary	Active
8.	Codex Committee on Nutrition and Foods for Special Dietary Uses	Germany	Active
9.	Codex Committee on Pesticide Residues	China	Active
10.	Codex Committee on Residues of Veterinary Drugs in Foods	United States of America	Active
Commodity committees			
1.	Codex Committee on Fresh Fruits and Vegetables	Mexico	Active
2.	Codex Committee on Spices and Culinary Herbs	India	Active
3.	Codex Committee on Fats and Oils	Malaysia	Active
4.	Codex Committee on Processed Fruits and Vegetables	United States of America	Active
5.	Codex Committee on Sugars	Colombia	Active
6.	Codex Committee on Milk and Milk Products	New Zealand	Active
7.	Codex Committee on Cereals, Pulses and Legumes	United States of America	Active

^c It means that the cost of hosting the meeting, i.e. venue cost and other incidental costs are borne by the host country whenever there is a meeting of the Committee.

S. no.	Subsidiary body	Member responsible	Status
<i>Sine die</i> commodity committees			
1.	Codex Committee on Cocoa Products and Chocolate	Switzerland	<i>Sine die</i> . After completing 19 sessions, the work of the Committee was over and it was adjourned <i>sine die</i> in the year 2003.
2.	Codex Committee on Meat Hygiene	New Zealand	<i>Sine die</i> . The Committee was adjourned <i>sine die</i> at the 28th session of CAC.
3.	Codex Committee on Natural Mineral Waters	Switzerland	<i>Sine die</i> . The Committee was adjourned <i>sine die</i> in the year 2008.
4.	Codex Committee on Vegetable Proteins	Canada	<i>Sine die</i> . After completing its work in five sessions, the Committee was adjourned <i>sine die</i> at the 18th session of CAC.
5.	Codex Committee on Fish and Fishery Products	Norway	<i>Sine die</i> . With the completion of the work assigned to the Committee, it was adjourned <i>sine die</i> at the 39th session of CAC in 2016.

2.2.2 Joint FAO/WHO regional coordinating committees

Membership is open to all Member States and Associate Members of FAO and/or WHO, which are members of CAC within the relevant geographical location. There are six RCCs; the Regional Coordinating Committee for Europe was established in the 1960s, while those for Africa, Asia and Latin America were established in the 1970s. The joint FAO/WHO Regional Coordinating Committee for Asia (CCASIA) was established in the year 1976 and has 23 countries as its members. All countries of the WHO SEA Region are members of CCASIA, except Timor-Leste, which is not member of CAC.

2.2.3 Ad hoc Intergovernmental Task Force

As per Statute 7, CAC may establish an ad hoc intergovernmental task force (TF) for a *specific purpose* and *specified period*. Presently, no TF is active. However, the following TFs were established and then abolished on completion of their assigned work as per their TORs:

- Task Force on Animal Feeding (TFAF): 1999–2004 and 2011–2013. It was hosted by Denmark (2000–2004) and Switzerland (2011–2013).

- Task Force on Foods Derived from Biotechnology (TFFBT): It was hosted by Japan in two spells: 1999–2003 and 2004–2008.
- Task Force on Fruit and Vegetable Juices (TFFJ): Brazil was the host country for the Task Force from 1999 to 2005.
- Task Force on the Processing and Handling of Quick Frozen Foods (TFPHQFF): Thailand was the host country from 2006 to 2008.
- Task Force on Antimicrobial Resistance (TFAMR): The Republic of Korea was the host country from 2006 to 2011.

Task Force on Antimicrobial Resistance

The 39th session of the CAC (2016) decided to establish a Task Force on Antimicrobial Resistance (TFAMR) to develop science-based guidance on the management of foodborne antimicrobial resistance.⁸ The objective was to take full account of the WHO Global Action Plan on Antimicrobial Resistance, in particular objectives 3 and 4, the work and standards of relevant international organizations, such as FAO, WHO and OIE, and the One Health approach, to ensure that Member States have the necessary guidance to enable coherent management of antimicrobial resistance along the food chain. It will be hosted by the Republic of Korea and has the following ToRs:

- to review and revise, as appropriate, the Code of Practice to Minimize and Contain Antimicrobial Resistance (CAC/RCP 61-2005) to address the entire food chain, in line with the mandate of Codex;
- to consider the development of guidance on integrated surveillance of antimicrobial resistance, taking into account the guidance developed by the WHO Advisory Group on Integrated Surveillance of Antimicrobial Resistance (AGISAR) and relevant OIE documents.

It is mandated that the Task Force shall complete its work within three (maximum four sessions), starting in 2017.

2.3 Codex Alimentarius or Food Code

The *Codex Alimentarius* or food code is a collection of standards and related texts for all principal foods, processed, semi-processed or raw, and also includes provisions for food additives, food hygiene, residues of pesticides and veterinary drugs in foods, contaminants, labelling, methods of analysis and sampling, and import and export inspection and certification. These standards are organized as standards (STAN), recommended codes of practice (RCPs), guidelines and other recommendations.

2.3.1 Horizontal standards and vertical standards

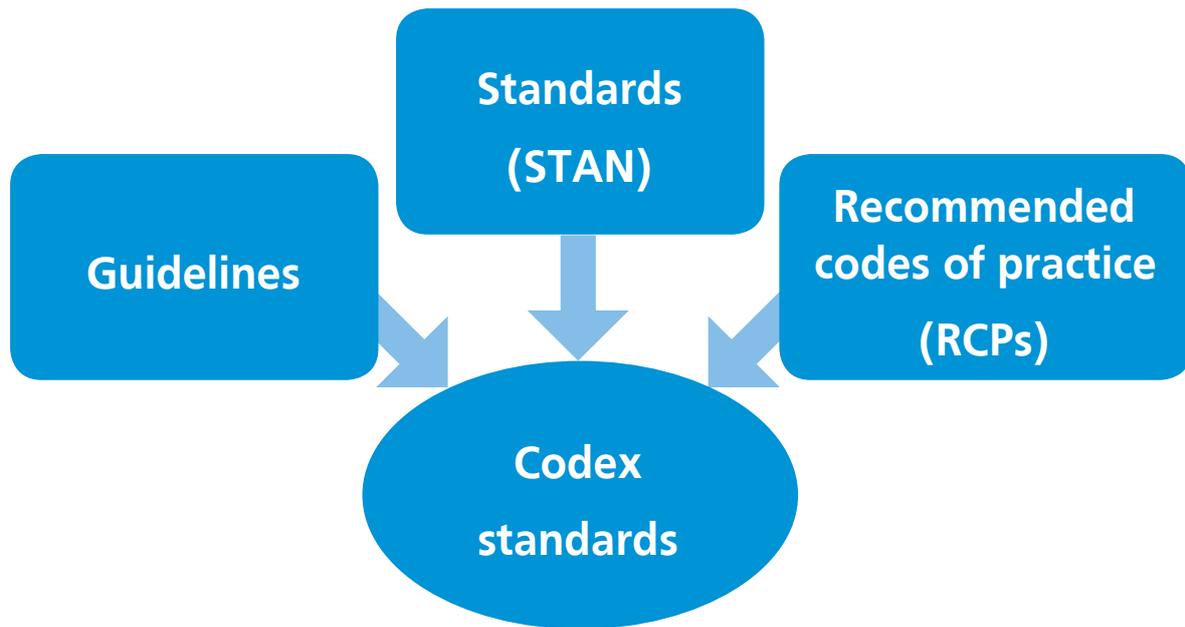
The horizontal standards are elaborated through the ten general subject committees, which are also referred to as the horizontal committees.

2.3.1 Mapping of Codex standards

The Codex standards can be divided into three broad categories:

1. guidelines,
2. RCPs, and
3. standards, as illustrated in Fig. 2.

Fig. 2. Types of Codex standards



2.3.1.1 Guidelines

As per the *Codex Alimentarius*, the Codex guidelines fall into two categories:

1. principles that set out policy in certain key areas; and
2. guidelines for the interpretation of these principles or for the interpretation of provisions of the Codex general standards.

Free-standing Codex principles set out the principles for key policy areas. These cover:

- addition of essential nutrients to foods;
- food import and export inspection and certification;
- establishment and application of microbiological criteria for foods;
- conduct of microbiological risk assessment; and
- risk analysis of foods derived from modern biotechnology.

Interpretative Codex guidelines include guidelines on food labelling, especially with respect to the regulation of claims made on the labels, and are interpretative in nature. This group includes guidelines for nutrition and health claims; conditions for production, marketing and labelling of organic foods; and foods claimed to be *halal*. Therefore, some of these guidelines interpret the provisions of the Codex Principles for Food Import and Export Inspection and Certification, and guidelines on the conduct of safety assessments of foods from DNA-modified plants and microorganisms.⁹ There are guidelines developed by the subject as well as the commodity committees, and some by the RCCs as per their mandate. The clear mandate of the subsidiary committees ensures that there is no overlap in the work of the committees.

The mandate of CAC is to protect the health of consumers and ensure fair practices in the food trade. Therefore, the Codex texts have to focus on both the food safety and quality aspects. Nevertheless, certain standards, being horizontal in nature, are more focused on food safety, whereas others are vertical standards and focused on quality parameters.

Some of these horizontal and vertical standards may help in controlling NCDs. Tables 2 and 3 map these Codex standards into vertical as well as horizontal standards, whether their focus is on food safety or quality or both, and further emphasize whether they may impact NCDs.

General subject committees, also known as “horizontal” committees, develop all-embracing concepts and principles that apply to foods in general. These Committees develop standards, maximum limits for additives and contaminants, codes of practice or other guidelines for either general application or, in specific cases, where the development of a complete commodity standard is not required. The responsibility for developing standards for specific foods or classes of food lies with the commodity committees or “vertical committees”.

Table 2. Guidelines developed by (1) subject committees, (2) commodity committees and (3) regional coordinating committees

S. NO.	NUMBER	NAME OF THE GUIDELINE	CODEX COMMITTEE	YEAR OF ADOPTION	FOCUS ON
Guidelines developed by subject committees					
1	CAC/GL 1-1979	<i>General guidelines on claims</i>	Codex Committee on Food Labelling (CCFL)	1991	Food safety (FS) and noncommunicable diseases (NCDs)
2	CAC/GL 2-1985	<i>Guidelines on nutrition labelling</i>	CCFL	2016	FS & NCDs
3	CAC/GL 23-1997	<i>Guidelines for use of nutrition and health claims</i>	CCFL	2013	FS & NCDs
4	CAC/GL 24-1997	<i>General guidelines for use of the term halal</i>	CCFL	1997	FS & food quality (FQ)
5	CAC/GL 32-1999	<i>Guidelines for the production, processing, labelling and marketing of organically produced foods</i>	CCFL	2013	FS & FQ
6	CAC/GL 76-2011	<i>Compilation of Codex texts relevant to the labelling of foods derived from modern biotechnology</i>	CCFL	2011	FS
7	CAC/GL 21-1997	<i>Principles and guidelines for the establishment and application of microbiological criteria related to foods</i>	Codex Committee on Food Hygiene (CCFH)	2013	FS
8	CAC/GL 30-1999	<i>Principles and guidelines for the conduct of microbiological risk assessment</i>	CCFH	2014	FS

S. NO.	NUMBER	NAME OF THE GUIDELINE	CODEX COMMITTEE	YEAR OF ADOPTION	FOCUS ON
9	CAC/GL 61-2007	<i>Guidelines on the application of general principles of food hygiene to the control of Listeria monocytogenes in ready-to-eat foods</i>	CCFH	2009	FS
10	CAC/GL 63-2007	<i>Principles and guidelines for the conduct of microbiological risk management</i>	CCFH	2008	FS
11	CAC/GL 69-2008	<i>Guideline for the validation of food safety control measures</i>	CCFH	2008	FS
12	CAC/GL 73-2010	<i>Guidelines on the application of general principles of food hygiene to the control of pathogenic Vibrio species in seafood</i>	CCFH	2010	FS
13	CAC/GL 78-2011	<i>Guidelines for the control of Campylobacter and Salmonella in chicken meat</i>	CCFH	2011	FS
14	CAC/GL 79-2012	<i>Guidelines on the application of general principles of food hygiene to the control of viruses in food</i>	CCFH	2012	FS
15	CAC/GL 85-2014	Guidelines for the Control of <i>Taenia saginata</i> in Meat of Domestic Cattle	CCFH	2014	FS
16	CAC/GL 88-2016	<i>Guidelines on the application of general principles of food hygiene to the control of foodborne parasites</i>	CCFH	2016	FS
16	CAC/GL 8-1991	<i>Guidelines for formulated complementary foods for older infants and young children</i>	Codex Committee on Nutrition and Foods for Special Dietary Uses (CCNFSDU)	2013	FS & NCDs

S. NO.	NUMBER	NAME OF THE GUIDELINE	CODEX COMMITTEE	YEAR OF ADOPTION	FOCUS ON
17	CAC/GL 9-1987	<i>General principles for the addition of essential nutrients to food</i>	CCNFSDU	1991	FS
18	CAC/GL 10-1979	<i>Advisory lists of nutrient compounds for use in foods for special dietary uses intended for infants and young children</i>	CCNFSDU	2009	FS
19	CAC/GL 55-2005	<i>Guidelines for vitamin and mineral food supplements</i>	CCNFSDU	2005	FS & FQ
20	CAC/GL 19-1995	<i>Guidelines for the exchange of information in food control emergency situations</i>	Codex Committee on Food Import and Export Inspection and Certification Systems (CCFICS)	2013	FS
21	CAC/GL 20-1995	<i>Principles for food import and export certification and inspection</i>	CCFICS	1995	FS
22	CAC/GL 25-1997	<i>Guidelines for the exchange of information between countries on rejections of imported food</i>	CCFICS	1997	FS
23	CAC/GL 26-1997	<i>Guidelines for the design, operation, assessment and accreditation of food import and export inspection and certification systems</i>	CCFICS	2010	FS
24	CAC/GL 34-1999	<i>Guidelines for the development of equivalence agreements regarding food imports and export inspection and certification systems</i>	CCFICS	1999	FS
25	CAC/GL 38-2001	<i>Guidelines for design, production, issuance and use of generic official certificates</i>	CCFICS	2009	FS
26	CAC/GL 47-2003	<i>Guidelines for food import control systems</i>	CCFICS	2006	FS

S. NO.	NUMBER	NAME OF THE GUIDELINE	CODEX COMMITTEE	YEAR OF ADOPTION	FOCUS ON
27	CAC/GL 53-2003	<i>Guidelines on the judgement of equivalence of sanitary measures associated with food inspection and certification systems</i>	CCFICS	2008	FS
28	CAC/GL 60-2006	<i>Principles for traceability/product tracing as a tool within a food inspection and certification system</i>	CCFICS	2006	FS
29	CAC/GL 82-2013	<i>Principles and guidelines for national food control systems</i>	CCFICS	2013	FS
30	CAC/GL 27-1997	<i>Guidelines for the assessment of the competence of testing laboratories involved in the import and export control of foods</i>	Codex Committee on Methods of Analysis and Sampling (CCMAS)	2006	FS
31	CAC/GL 28-1995	<i>International harmonized protocol for the proficiency testing of (chemical) analytical laboratories</i>	CCMAS	1997	FS
32	CAC/GL 37-2001	<i>Harmonized IUPAC guidelines for the use of recovery information in analytical measurement</i>	CCMAS	2001	FS
33	CAC/GL 49-2003	<i>Harmonized IUPAC guidelines for single-laboratory validation of methods of analysis</i>	CCMAS	2003	FS
34	CAC/GL 50-2004	<i>General guidelines on sampling</i>	CCMAS	2004	FS
35	CAC/GL 54-2004	<i>Guidelines on measurement uncertainty</i>	CCMAS	2011	FS
36	CAC/GL 64-1995	<i>Protocol for the design, conduct and interpretation of method-performance studies</i>	CCMAS	1997	FS

S. NO.	NUMBER	NAME OF THE GUIDELINE	CODEX COMMITTEE	YEAR OF ADOPTION	FOCUS ON
37	CAC/GL 65-1997	<i>Harmonized guidelines for internal quality control in analytical chemistry laboratories</i>	CCMAS	1997	FS
38	CAC/GL 70-2009	<i>Guidelines for settling disputes on analytical (test) results</i>	CCMAS	2009	FS
39	CAC/GL 72-2009	<i>Guideline on analytical terminology</i>	CCMAS	2009	FS
40	CAC/GL 83-2013	<i>Principles for the use of sampling and testing in international food trade</i>	CCMAS	2013	FS
41	CAC/GL 74-2010	<i>Guidelines on performance criteria and validation of methods for detection, identification and quantification of specific DNA sequences and specific proteins in foods</i>	CCMAS	2010	FS
42	CAC/GL 3-1989	<i>Guidelines for simple evaluation of dietary exposure to food additives</i>	Codex Committee on Food Additives (CCFA)	2014	FS
43	CAC/GL 36-1989	<i>Class names and the international numbering system for food additives</i>	CCFA	2014	FS
44	CAC/GL 66-2008	<i>Guidelines for the use of flavourings</i>	CCFA	2008	FS
45	CAC/GL 75-2010	<i>Guidelines on substances used as processing aids</i>	CCFA	2010	FS
46	CAC/GL 33-1999	<i>Recommended methods of sampling for pesticide residues for the determination of compliance with MRLs</i>	Codex Committee on Pesticide Residues (CCPR)	1999	FS
47	CAC/GL 40-1993	<i>Guidelines on good laboratory practice in pesticide residue analysis</i>	CCPR	2010	FS

S. NO.	NUMBER	NAME OF THE GUIDELINE	CODEX COMMITTEE	YEAR OF ADOPTION	FOCUS ON
48	CAC/GL 41-1993	<i>Analysis of pesticide residues: portion of commodities to which Codex MRLS apply and which is analyzed</i>	CCPR	2010	FS
49	CAC/GL 56-2005	<i>Guidelines on the use of mass spectrometry (MS) for identification, confirmation and quantitative determination of residues</i>	CCPR	2005	FS
50	CAC/GL 59-2006	<i>Guidelines on estimation of uncertainty of results</i>	CCPR	2011	FS
51	CAC/GL 84-2012	<i>Principles and guidance on the selection of representative commodities for the extrapolation of maximum residue limits for pesticides to commodity groups</i>	CCPR	2012	FS
52	CAC/GL 62-2007	<i>Working principles for risk analysis for food safety for application by governments</i>	CCGP	2007	FS
53	CAC/GL 71-2009	<i>Guidelines for the design and implementation of national regulatory food safety assurance programmes associated with the use of veterinary drugs in food producing animals</i>	Codex Committee on Residues of Veterinary Drugs in Foods (CCRVDF)	2014	FS
Guidelines developed by commodity committees					
54	CAC/GL 17-1993	<i>Guideline procedures for the visual inspection of lots of canned foods for unacceptable defects</i>	Codex Committee on Processed Fruits and Vegetables (CCPFV)	1993	FS
55	CAC/GL 51-2003	<i>Guidelines for packing media for canned fruits</i>	CCPFV	2013	FS

S. NO.	NUMBER	NAME OF THE GUIDELINE	CODEX COMMITTEE	YEAR OF ADOPTION	FOCUS ON
56	CAC/GL 31-1999	<i>Guidelines for the sensory evaluation of fish and shellfish in laboratories</i>	Codex Committee on Fish and Fishery Products (CCFFP)	1999	FS & FQ
57	CAC/GL 48-2004	<i>Model certificate for fish and fishery products</i>	CCFFP	2004	FS
58	CAC/GL 13-1991	<i>Guidelines for the preservation of raw milk by use of the lactoperoxidase system</i>	Codex Committee on Milk and Milk Products (CCMMP)	1991	FS
59	CAC/GL 67-2008	<i>Model export certificate for milk and milk products</i>	CCMMP	2010	FS
60	CAC/GL 4-1989	<i>General guidelines for the utilization of vegetable protein products (VPP) in foods</i>	CCVP	1989	FS
61	CAC/GL 14-1991	<i>Guide for the microbiological quality of spices and herbs used in processed meat and poultry products</i>	CCPMPP	1991	FS
Guidelines developed by ad hoc intergovernmental task forces					
62	CAC/GL 77-2011	<i>Guidelines for risk analysis of foodborne antimicrobial resistance</i>	Task Force on Antimicrobial Resistance (TFAMR)	2011	FS
63	CAC/GL 80-2013	<i>Guidelines on the application of risk assessment for feed</i>	Intergovernmental Task Force on Animal Feeding (TFAF)	2013	FS
64	CAC/GL 81-2013	<i>Guidance for governments on prioritizing hazards in feed</i>	TFAF	2013	FS
65	CAC/GL 44-2003	<i>Principles for the risk analysis of foods derived from modern biotechnology</i>	Task Force on Food Derived from Biotechnology (TFFBT)	2011	FS
66	CAC/GL 45-2003	<i>Guideline for the conduct of food safety assessment of foods derived from recombinant-DNA plants</i>	TFFBT	2008	FS

S. NO.	NUMBER	NAME OF THE GUIDELINE	CODEX COMMITTEE	YEAR OF ADOPTION	FOCUS ON
67	CAC/GL 46-2003	<i>Guideline for the conduct of food safety assessment of foods produced using recombinant-DNA microorganisms</i>	TFFBT	2003	FS
68	CAC/GL 68-2008	<i>Guideline for the conduct of food safety assessment of foods derived from recombinant-DNA animals</i>	TFFBT	2008	FS
Guidelines developed by the joint regional coordinating committees					
69	CAC/GL 22R-1997	<i>Regional guidelines for the design of control measures for street-vended foods (Africa)</i>	Coordinating Committee for Africa (CCAFRICA)	1999	FS
70	CAC/GL 43R-2003	<i>African regional guidelines for Codex contact points and national Codex committees</i>	CCAFRICA	2003	FS
71	CAC/GL 57R-1999	Regional guidelines for Codex Contact Points and National Codex Committees (Asia)	Coordinating Committee for Asia (CCASIA)	1999	General
72	CAC/GL 58R-2005	<i>Regional Guidelines for Codex contact points and national Codex committees (Near East)</i>	Coordinating Committee for Near East (CCNEA)	2005	General

2.3.1.2 Recommended codes of practice

Hazard analysis and critical control point

Codex codes of hygienic practices define the production, processing, manufacturing, transport and storage practices for individual foods or groups of foods that are considered essential to ensure the safety and suitability of food for consumption. For food hygiene, the basic text is the *Codex General principles of food hygiene*, which introduced the use of the hazard analysis and critical control point (HACCP) in the management of food safety. Some important RCPs developed by CCCF focus on the codes of practice for the prevention and reduction of aflatoxins and mycotoxins in certain categories of food and feed, which may have an important role in controlling NCDs.

Table 3. Recommended codes of practice (RCPs) developed by Codex subject as well as commodity committees

S. NO.	NUMBER	NAME OF THE RCP	CODEX COMMITTEE	YEAR OF ADOPTION	FOCUS ON
RCPs developed by Codex subject committees ^d					
1	CAC/RCP 1-1969	<i>General principles of food hygiene</i>	Codex Committee on Food Hygiene (CCFH)	2013	Food safety (FS)
2	CAC/RCP 15-1976	<i>Code of hygienic practice for eggs and egg products</i>	CCFH	2007	FS
3	CAC/RCP 23-1979	<i>Code of hygienic practice for low-acid and acidified low-acid canned foods</i>	CCFH	1993	FS
4	CAC/RCP 30-1983	<i>Code of hygienic practice for the processing of frog legs</i>	CCFH	1983	FS
5	CAC/RCP 39-1993	<i>Code of hygienic practice for precooked and cooked foods in mass catering</i>	CCFH	1993	FS
6	CAC/RCP 40-1993	<i>Code of hygienic practice for aseptically processed and packaged low-acid foods</i>	CCFH	1993	FS
7	CAC/RCP 42-1995	<i>Code of hygienic practice for spices and dried aromatic herbs</i>	CCFH	2014	FS
8	CAC/RCP 46-1999	<i>Code of hygienic practice for refrigerated packaged foods with extended shelf-life</i>	CCFH	1999	FS
9	CAC/RCP 47-2001	Code of hygienic practice for the transport of food in bulk and semi-packed food	CCFH	2001	FS
10	CAC/RCP 48-2001	<i>Code of hygienic practice for bottled/ packaged drinking waters (other than natural mineral waters)</i>	CCFH	2001	FS

^d The Codex database does not have information on the adoption of its standards by various countries, as Codex standards are voluntary in nature.

S. NO.	NUMBER	NAME OF THE RCP	CODEX COMMITTEE	YEAR OF ADOPTION	FOCUS ON
11	CAC/RCP 53-2003	<i>Code of hygienic practice for fresh fruits and vegetables</i>	CCFH	2013	FS
12	CAC/RCP 57-2004	<i>Code of hygienic practice for milk and milk products</i>	CCFH	2009	FS
13	CAC/RCP 66-2008	<i>Code of hygienic practice for powdered formulae for infants and young children</i>	CCFH	2009	FS
14	CAC/RCP 45-1997	<i>Code of practice for the reduction of aflatoxin B1 in raw materials and supplemental feeding stuffs for milk-producing animals</i>	Codex Committee on Food Hygiene (CCCF)	1997	FS & noncommunicable diseases (NCDs)
15	CAC/RCP 49-2001	<i>Code of practice concerning source directed measures to reduce contamination of foods with chemicals</i>	CCCF	2001	FS & NCDs
16	CAC/RCP 50-2003	<i>Code of practice for the prevention and reduction of patulin contamination in apple juice and apple juice ingredients in other beverages</i>	CCCF	2003	FS & NCDs
17	CAC/RCP 51-2003	<i>Code of practice for the prevention and reduction of mycotoxins contamination in cereals</i>	CCCF	2014	FS& NCDs
18	CAC/RCP 55-2004	<i>Code of practice for the prevention and reduction of aflatoxin contamination in peanuts</i>	CCCF	2004	FS & NCDs
19	CAC/RCP 56-2004	<i>Code of practice for the prevention and reduction of lead contamination in foods</i>	CCCF	2004	FS & NCDs

S. NO.	NUMBER	NAME OF THE RCP	CODEX COMMITTEE	YEAR OF ADOPTION	FOCUS ON
20	CAC/RCP 59-2005	<i>Code of practice for the prevention and reduction of aflatoxin contamination in tree nuts</i>	CCCF	2010	FS & NCDs
21	CAC/RCP 60-2005	<i>Code of practice for the prevention and reduction of tin contamination in canned foods</i>	CCCF	2005	FS & NCDs
22	CAC/RCP 62-2006	<i>Code of practice for the prevention and reduction of dioxin and dioxin-like PCB contamination in food and feeds</i>	CCCF	2006	FS & NCDs
23	CAC/RCP 63-2007	<i>Code of practice for the prevention and reduction of ochratoxin A contamination in wine</i>	CCCF	2007	FS & NCDs
24	CAC/RCP 64-2008	<i>Code of practice for the reduction of 3-monochloropropane-1,2-diol (3-MCPD) during the production of acid-hydrolyzed vegetable protein (acid-HVPs) and products that contain acid- HVPs</i>	CCCF	2008	FS & NCDs
25	CAC/RCP 65-2008	<i>Code of practice for the prevention and reduction of aflatoxin contamination in dried figs</i>	CCCF	2008	FS & NCDs
26	CAC/RCP 67-2009	<i>Code of practice for the reduction of acrylamide in foods</i>	CCCF	2009	FS & NCDs
27	CAC/RCP 68-2009	<i>Code of practice for the reduction of contamination of food with polycyclic aromatic hydrocarbons (PAH) from smoking and direct drying processes</i>	CCCF	2009	FS & NCDs

S. NO.	NUMBER	NAME OF THE RCP	CODEX COMMITTEE	YEAR OF ADOPTION	FOCUS ON
28	CAC/RCP 69-2009	<i>Code of practice for the prevention and reduction of ochratoxin A contamination in coffee</i>	CCCF	2009	FS & NCDs
29	CAC/RCP 70-2011	<i>Code of practice for the prevention and reduction of ethyl carbamate contamination in stone fruit distillates</i>	CCCF	2011	FS & NCDs
30	CAC/RCP 72-2013	<i>Code of practice for the prevention and reduction of ochratoxin A contamination in cocoa</i>	CCCF	2013	FS & NCDs
31	CAC/RCP 73-2013	<i>Code of practice for the reduction of hydrocyanic acid (HCN) in cassava and cassava products</i>	CCCF	2013	FS & NCDs
32	CAC/RCP 74-2014	<i>Code of practice for weed control to prevent and reduce pyrrolizidine alkaloid contamination in food and feed</i>	CCCF	2014	FS & NCDs
33	CAC/RCP 19-1979	<i>Code of practice for radiation processing of food</i>	Codex Committee on Food Additives (CCFA)	2003	FS
34	CAC/RCP 20-1979	<i>Code of ethics for international trade in food including concessional and food aid transactions</i>	Codex Committee on General Principles (CCGP)	2010	FS
35	CAC/RCP 61-2005	<i>Code of practice to minimize and contain antimicrobial resistance</i>	Codex Committee on Residues of Veterinary Drugs in Foods (CCRVDF)	2005	FS
RCPs developed by Codex commodity committees					
36	CAC/RCP 2-1969	<i>Code of hygienic practice for canned fruit and vegetable products</i>	Codex Committee on Processed Fruits and Vegetables (CCPFV)	1969	FS
37	CAC/RCP 3-1969	<i>Code of hygienic practice for dried fruits</i>	CCPFV	1969	FS

S. NO.	NUMBER	NAME OF THE RCP	CODEX COMMITTEE	YEAR OF ADOPTION	FOCUS ON
38	CAC/RCP 4-1971	<i>Code of hygienic practice for desiccated coconut</i>	CCPFV	1971	FS
39	CAC/RCP 5-1971	<i>Code of hygienic practice for dehydrated fruits and vegetables including edible fungi</i>	CCPFV	1971	FS
40	CAC/RCP 6-1972	<i>Code of hygienic practice for tree nuts</i>	CCPFV	1972	FS
41	CAC/RCP 22-1979	<i>Code of hygienic practice for groundnuts (peanuts)</i>	CCPFV	1979	FS
42	CAC/RCP 33-1985	Code of hygienic practice for collecting, processing and marketing of natural mineral waters	Codex Committee on Natural Mineral Waters (CCNMW)	2011	FS
43	CAC/RCP 36-1987	<i>Code of practice for the storage and transport of edible oils and fats in bulk</i>	Codex Committee on Fats and Oils (CCFO)	2013	FS
44	CAC/RCP 44-1995	<i>Code of practice for the packaging and transport of fresh fruit and vegetables</i>	Codex Committee on Fresh Fruits and Vegetables (CCFFV)	2004	FS
45	CAC/RCP 52-2003	<i>Code of practice for fish and fishery products</i>	Codex Committee on Fish and Fishery Products (CCFFP)	2013	FS
46	CAC/RCP 58-2005	<i>Code of hygienic practice for meat</i>	Codex Committee on Meat Hygiene (CCMPH)	2005	FS
RCPs developed by ad hoc Codex intergovernmental task forces					
47	CAC/RCP 8-1976	<i>Code of practice for the processing and handling of quick frozen foods</i>	Task Force for the Processing and Handling of Quick Frozen Foods (TFPHQFF)	2008	FS
48	CAC/RCP 54-2004	<i>Code of practice on good animal feeding</i>	Task Force on Animal Feeding (TFAF)	2008	FS

S. NO.	NUMBER	NAME OF THE RCP	CODEX COMMITTEE	YEAR OF ADOPTION	FOCUS ON
RCPs established by regional coordinating committees (RCCs)					
49	CAC/RCP 43R-1995	<i>Regional code of hygienic practice for the preparation and sale of street foods (Latin America and the Caribbean)</i>	Coordinating Committee for Latin America and the Caribbean (CCLAC)	2001	FS
50	CAC/RCP 71R-2013	<i>Regional code of practice for street-vended foods (Near East)</i>	Coordinating Committee for Near East (CCNEA)	2013	FS

2.3.1.3 Standards

Codex standards usually relate to product characteristics and may deal with all government-regulated characteristics appropriate to the commodity, or only one characteristic. The vertical or commodity standards apply to individual food items. Around 196 vertical standards have been developed under the *Codex Alimentarius*.^e There are different Codex commodity committees that develop vertical standards for food products. However, certain commodity or vertical standards have been developed by general subject committees that are global in nature, and certain standards developed by FAO/WHO RCCs, which are regional standards.

Table 4. Standards developed by Codex subject as well as commodity committees

S. No.	STANDARD	NUMBER	FOCUS ON
A. Vertical standards developed by commodity committees			
Standards for cocoa and its products			
1	<i>Standard for cocoa butter</i>	CODEX STAN 86-1981, Rev. 1-2001	Food quality (FQ)
2	<i>Standard for chocolate</i>	CODEX STAN 87-1981, Rev. 1 - 2003	FQ & noncommunicable diseases (NCDs)
3	<i>Standard for cocoa powders (cocoas) and dry mixtures of cocoa and sugars</i>	CODEX STAN 105-1981	FQ
4	<i>Standard for cocoa (cacao) mass (cocoa/ chocolate liquor) and cocoa cake</i>	CODEX STAN 141-1983	FQ
Standards for cereals and millets			
5	<i>Standard for gari</i>	CODEX STAN 151-1985	FQ
6	<i>Standard for wheat flour</i>	CODEX STAN 152-1985	FQ
7	<i>Standard for maize (corn)</i>	CODEX STAN 153-1985	FQ
8	<i>Standard for whole maize (corn) meal</i>	CODEX STAN 154-1985	FQ

^e All the standards are relevant in the WHO South-East Asia Region but again, their adoption varies from country to country. No country has adopted all the Codex standards per se.

9	<i>Standard for degermed maize (corn) meal and maize (corn) grits</i>	CODEX STAN 155-1985	FQ
10	<i>Standard for whole and decorticated pearl millet grains</i>	CODEX STAN 169-1989	FQ
11	<i>Standard for pearl millet flour</i>	CODEX STAN 170-1989	FQ
12	<i>Standard for certain pulses</i>	CODEX STAN 171-1989	FQ
13	<i>Standard for sorghum grains</i>	CODEX STAN 172-1989	FQ
14	<i>Standard for sorghum flour</i>	CODEX STAN 173-1989	FQ
15	<i>Standard for edible cassava flour</i>	CODEX STAN 176-1989	FQ
16	<i>Standard for durum wheat semolina and durum wheat flour</i>	CODEX STAN 178-1991	FQ
17	<i>Standard for rice</i>	CODEX STAN 198-1995	FQ
18	<i>Standard for wheat and durum wheat</i>	CODEX STAN 199-1995	FQ
19	<i>Standard for peanuts</i>	CODEX STAN 200-1995	FQ
20	<i>Standard for oats</i>	CODEX STAN 201-1995	FQ
21	<i>Standard for couscous</i>	CODEX STAN 202-1995	FQ
22	<i>Standard for instant noodles</i>	CODEX STAN 249-2006	FQ
Standards for fish and fishery products			
23	<i>Standard for canned salmon</i>	CODEX STAN 3-1981	FQ
24	<i>Standard for quick frozen finfish, eviscerated or uneviscerated</i>	CODEX STAN 36-1981	FQ
25	<i>Standard for canned shrimps or prawns</i>	CODEX STAN 37-1981	FQ
26	<i>Standard for canned tuna and bonito</i>	CODEX STAN 70-1981	FQ
27	<i>Standard for canned crab meat</i>	CODEX STAN 90-1981	FQ
28	<i>Standard for quick frozen shrimps or prawns</i>	CODEX STAN 92-1981	FQ
29	<i>Standard for sardines and sardine-type products</i>	CODEX STAN 94-1981	FQ
30	<i>Standard for quick frozen lobsters</i>	CODEX STAN 95-1981	FQ
31	<i>Standard for canned finfish</i>	CODEX STAN 119-1981	FQ
32	<i>Standard for quick frozen blocks of fish fillets, minced fish flesh and mixtures of fillets and minced fish flesh</i>	CODEX STAN 165-1989	FQ
33	<i>Standard for quick frozen fish sticks (fish fingers), fish portions and fish fillets – breaded or in batter</i>	CODEX STAN 166-1989	FQ
34	<i>Standard for salted fish and dried salted fish of the Gadidae family of fishes</i>	CODEX STAN 167-1989	FQ
35	<i>Standard for dried shark fins</i>	CODEX STAN 189-1993	FQ
36	<i>General standard for quick frozen fish fillets</i>	CODEX STAN 190-1995	FQ

37	<i>Standard for quick frozen raw squid</i>	CODEX STAN 191-1995	FQ
38	<i>Standard for crackers from marine and freshwater fish, crustaceans and molluscan shellfish</i>	CODEX STAN 222-2001	FQ
39	<i>Standard for boiled dried salted anchovies</i>	CODEX STAN 236-2003	FQ
40	<i>Standard for salted Atlantic herring and salted sprat</i>	CODEX STAN 244-2004	FQ
41	<i>Standard for sturgeon caviar</i>	CODEX STAN 291-2010	FQ
42	<i>Standard for live and raw bivalve molluscs</i>	CODEX STAN 292-2008	FQ
43	<i>Standard for fish sauce</i>	CODEX STAN 302-2011	FQ
44	<i>Standard for smoked fish, smoke-flavoured fish and smoke-dried fish</i>	CODEX STAN 311-2013	FQ
45	<i>Standard for live abalone and for raw fresh chilled or frozen abalone for direct consumption or for further processing</i>	CODEX STAN 312-2013	FQ
46	<i>Standard for fresh and quick frozen raw scallop products</i>	CODEX STAN 315-2014	FQ
Standards for fresh fruits and vegetables			
47	<i>Standard for pineapple</i>	CODEX STAN 182-1993	FQ
48	<i>Standard for papaya</i>	CODEX STAN 183-1993	FQ
49	<i>Standard for mangoes</i>	CODEX STAN 184-1993	FQ
50	<i>Standard for nopal</i>	CODEX STAN 185-1993	FQ
51	<i>Standard for prickly pear</i>	CODEX STAN 186-1993	FQ
52	<i>Standard for carambola</i>	CODEX STAN 187-1993	FQ
53	<i>Standard for baby corn</i>	CODEX STAN 188-1993	FQ
54	<i>Standard for litchi</i>	CODEX STAN 196-1995	FQ
55	<i>Standard for avocado</i>	CODEX STAN 197-1995	FQ
56	<i>Standard for mangosteens</i>	CODEX STAN 204-1997	FQ
57	<i>Standard for bananas</i>	CODEX STAN 205-1997	FQ
58	<i>Standard for limes</i>	CODEX STAN 213-1999	FQ
59	<i>Standard for pummelos (Citrus grandi)</i>	CODEX STAN 214-1999	FQ
60	<i>Standard for guavas</i>	CODEX STAN 215-1999	FQ
61	<i>Standard for chayotes</i>	CODEX STAN 216-1999	FQ
62	<i>Standard for Mexican limes</i>	CODEX STAN 217-1999	FQ
63	<i>Standard for ginger</i>	CODEX STAN 218-1999	FQ
64	<i>Standard for grapefruits (Citrus paradisi)</i>	CODEX STAN 219-1999	FQ
65	<i>Standard for longans</i>	CODEX STAN 220-1999	FQ
66	<i>Standard for tannia</i>	CODEX STAN 224-2001	FQ
67	<i>Standard for asparagus</i>	CODEX STAN 225-2001	FQ

68	<i>Standard for Cape gooseberry</i>	CODEX STAN 226-2001	FQ
69	<i>Standard for pitahayas</i>	CODEX STAN 237-2003	FQ
70	<i>Standard for sweet cassava</i>	CODEX STAN 238-2003	FQ
71	<i>Standard for oranges</i>	CODEX STAN 245-2004	FQ
72	<i>Standard for rambutan</i>	CODEX STAN 246-2005	FQ
73	<i>Standard for table grapes</i>	CODEX STAN 255-2007	FQ
74	<i>Standard for tomatoes</i>	CODEX STAN 293-2008	FQ
75	<i>Standard for apples</i>	CODEX STAN 299-2010	FQ
76	<i>Standard for bitter cassava</i>	CODEX STAN 300-2010	FQ
77	<i>Standard for tree tomatoes</i>	CODEX STAN 303-2011	FQ
78	<i>Standard for chilli peppers</i>	CODEX STAN 307-2011	FQ
79	<i>Standard for pomegranates</i>	CODEX STAN 310-2013	FQ
80	<i>Standard for passion fruits</i>	CODEX STAN 316-2014	FQ
81	<i>Standard for durian</i>	CODEX STAN 317-2014	FQ
82	<i>Standard for okra</i>	CODEX STAN 318-2014	FQ
Standards for fats and oils			
83	<i>Standard for edible fats and oils not covered by individual standards</i>	CODEX STAN 19-1981	FQ & NCDs
84	<i>Standard for olive oils and olive pomace oils</i>	CODEX STAN 33-1981	FQ & NCDs
85	<i>Standard for named vegetable oils</i>	CODEX STAN 210-1999	FQ & NCDs
86	<i>Standard for named animal fats</i>	CODEX STAN 211-1999	FQ & NCDs
87	<i>Standard for fat spreads and blended spreads</i>	CODEX STAN 256-2007	FQ & NCDs
Standards for milk and milk products			
88	<i>General standard for use of dairy terms</i>	CODEX STAN 206-1999	Food safety (FS) & FQ
89	<i>Standard for milk powders and cream powder</i>	CODEX STAN 207-1999	FS & FQ
90	<i>Standard for cheeses in brine (group standard)</i>	CODEX STAN 208-1999	FQ
91	<i>Group standard for unripened cheese including fresh cheese</i>	CODEX STAN 221-2001	FQ
92	<i>Standard for fermented milks</i>	CODEX STAN 243-2003	FQ
93	<i>Standard for a blend of evaporated skimmed milk and vegetable fat</i>	CODEX STAN 250-2006	FQ & NCDs
94	<i>Standard for a blend of skimmed milk and vegetable fat in powdered form</i>	CODEX STAN 251-2006	FQ & NCDs
95	<i>Standard for a blend of sweetened condensed skimmed milk and vegetable fat</i>	CODEX STAN 252-2006	FQ & NCDs
96	<i>Standard for dairy fat spreads</i>	CODEX STAN 253-2006	FQ & NCDs

97	<i>Standard for Mozzarella</i>	CODEX STAN 262-2006	FQ
98	<i>Standard for Cheddar</i>	CODEX STAN 263-1966	FQ
99	<i>Standard for Danbo</i>	CODEX STAN 264-1966	FQ
100	<i>Standard for Edam</i>	CODEX STAN 265-1966	FQ
101	<i>Standard for Gouda</i>	CODEX STAN 266-1966	FQ
102	<i>Standard for Havarti</i>	CODEX STAN 267-1966	FQ
103	<i>Standard for Samsøe</i>	CODEX STAN 268-1966	FQ
104	<i>Standard for Emmental</i>	CODEX STAN 269-1967	FQ
105	<i>Standard for Tilsiter</i>	CODEX STAN 270-1968	FQ
106	<i>Standard for Saint-Paulin</i>	CODEX STAN 271-1968	FQ
107	<i>Standard for Provolone</i>	CODEX STAN 272-1968	FQ
108	<i>Standard for cottage cheese incl. creamed cottage cheese</i>	CODEX STAN 273-1968	FQ
109	<i>Standard for Coulommiers</i>	CODEX STAN 274-1969	FQ
110	<i>Standard for cream cheese</i>	CODEX STAN 275-1973	FQ
111	<i>Standard for Camembert</i>	CODEX STAN 276-1973	FQ
112	<i>Standard for Brie</i>	CODEX STAN 277-1973	FQ
113	<i>Standard for extra hard grating cheese</i>	CODEX STAN 278-1978	FQ
114	<i>Standard for butter</i>	CODEX STAN 279-1971	FQ
115	<i>Standard for milk fat products</i>	CODEX STAN 280-1973	FQ
116	<i>Standard for evaporated milks</i>	CODEX STAN 281-1971	FQ
117	<i>Standard for sweetened condensed milks</i>	CODEX STAN 282-1971	FQ
118	<i>General standard for cheese</i>	CODEX STAN 283-1978	FQ
119	<i>Standard for whey cheeses</i>	CODEX STAN 284-1971	FQ
120	<i>Standard for cream and prepared creams</i>	CODEX STAN 288-1976	FQ
121	<i>Standard for whey powders</i>	CODEX STAN 289-1995	FQ
122	<i>Standard for edible casein products</i>	CODEX STAN 290-1995	FQ
Standards for packaged and mineral water			
123	<i>Standard for natural mineral waters</i>	CODEX STAN 108-1981	FQ
124	<i>General standard for bottled/package drinking waters (other than natural mineral waters)</i>	CODEX STAN 227-2001	FQ
Standards for processed fruits and vegetables			
125	<i>Standard for preserved tomatoes</i>	CODEX STAN 13-1981	FQ
126	<i>Standard for canned applesauce</i>	CODEX STAN 17-1981	FQ
127	<i>Standard for edible fungi and fungus products</i>	CODEX STAN 38-1981	FQ
128	<i>Standard for dried edible fungi</i>	CODEX STAN 39-1981	FQ

129	<i>Standard for quick frozen peas</i>	CODEX STAN 41-1981	FQ
130	<i>Standard for canned pineapple</i>	CODEX STAN 42-1981	FQ
131	<i>Standard for quick frozen strawberries</i>	CODEX STAN 52-1981	FQ
132	<i>Standard for processed tomato concentrates</i>	CODEX STAN 57-1981	FQ
133	<i>Standard for canned raspberries</i>	CODEX STAN 60-1981	FQ
134	<i>Standard for canned pears</i>	CODEX STAN 61-1985	FQ
135	<i>Standard for canned strawberries</i>	CODEX STAN 62-1981	FQ
136	<i>Standard for table olives</i>	CODEX STAN 66-1981	FQ
137	<i>Standard for raisins</i>	CODEX STAN 67-1981	FQ
138	<i>Standard for quick frozen raspberries</i>	CODEX STAN 69-1981	FQ
139	<i>Standard for quick frozen peaches</i>	CODEX STAN 75-1981	FQ
140	<i>Standard for quick frozen bilberries</i>	CODEX STAN 76-1981	FQ
141	<i>Standard for quick frozen spinach</i>	CODEX STAN 77-1981	FQ
142	<i>Standard for canned fruit cocktail</i>	CODEX STAN 78-1981	FQ
143	<i>Standard for canned tropical fruit salad</i>	CODEX STAN 99-1981	FQ
144	<i>Standard for quick frozen blueberries</i>	CODEX STAN 103-1981	FQ
145	<i>Standard for quick frozen leek</i>	CODEX STAN 104-1981	FQ
146	<i>Standard for quick frozen broccoli</i>	CODEX STAN 110-1981	FQ
147	<i>Standard for quick frozen cauliflower</i>	CODEX STAN 111-1981	FQ
148	<i>Standard for quick frozen Brussels sprouts</i>	CODEX STAN 112-1981	FQ
149	<i>Standard for quick frozen green and wax beans</i>	CODEX STAN 113-1981	FQ
150	<i>Standard for quick frozen French fried potatoes</i>	CODEX STAN 114-1981	FQ
151	<i>Standard for pickled cucumbers</i>	CODEX STAN 115-1981	FQ
152	<i>Standard for dried apricots</i>	CODEX STAN 130-1981	FQ
153	<i>Standard for unshelled pistachio nuts</i>	CODEX STAN 131-1981	FQ
154	<i>Standard for quick frozen whole kernel corn</i>	CODEX STAN 132-1981	FQ
155	<i>Standard for quick frozen corn-on-the-cob</i>	CODEX STAN 133-1981	FQ
156	<i>Standard for quick frozen carrots</i>	CODEX STAN 140-1983	FQ
157	<i>Standard for dates</i>	CODEX STAN 143-1985	FQ
158	<i>Standard for canned chestnuts and chestnut purée</i>	CODEX STAN 145-1985	FQ
159	<i>Standard for canned mangoes</i>	CODEX STAN 159-1987	FQ
160	<i>Standard for mango chutney</i>	CODEX STAN 160-1987	FQ
161	<i>Standard for desiccated coconut</i>	CODEX STAN 177-1991	FQ

162	<i>Standard for kimchi</i>	CODEX STAN 223-2001	FQ
163	<i>Standard for aqueous coconut products: coconut milk and coconut cream</i>	CODEX STAN 240-2003	FQ
164	<i>Standard for canned bamboo shoots</i>	CODEX STAN 241-2003	FQ
165	<i>Standard for canned stone fruits</i>	CODEX STAN 242-2003	FQ
166	<i>Standard for certain canned citrus fruits</i>	CODEX STAN 254-2007	FQ
167	<i>Standard for pickled fruits and vegetables</i>	CODEX STAN 260-2007	FQ
168	<i>Standard for jams, jellies and marmalades</i>	CODEX STAN 296-2009	FQ
169	<i>Standard for certain canned vegetables</i>	CODEX STAN 297-2009	FQ
Standards for sugars and honey			
170	<i>Standard for honey</i>	CODEX STAN 12-1981	FQ
171	<i>Standard for sugars</i>	CODEX STAN 212-1999	FQ
Standards for soups			
172	<i>Standard for bouillons and consommés</i>	CODEX STAN 117-1981, Rev. 2-2001	FQ
Standards for vegetable proteins			
173	<i>Standard for wheat protein products</i>	CODEX STAN 163-1987, Rev.1-2001	FQ
174	<i>General standard for vegetable protein products</i>	CODEX STAN 174-1989	FQ
175	<i>Standard for soy protein products</i>	CODEX STAN 175-1989	FQ
Standards for meat products			
176	<i>Standard for corned beef</i>	CODEX STAN 88-1981	FQ
177	<i>Standard for luncheon meat</i>	CODEX STAN 89-1981	FQ
178	<i>Standard for cooked cured ham</i>	CODEX STAN 96-1981	FQ
179	<i>Standard for cooked cured pork shoulder</i>	CODEX STAN 97-1981	FQ
180	<i>Standard for cooked cured chopped meat</i>	CODEX STAN 98-1981	FQ
Standards for fruit juices and nectars developed by the Ad hoc Intergovernmental Task Force on Fruit and Vegetable Juices (TFFJ)			
181	<i>General standard for fruit juices and nectars</i>	CODEX STAN 247-2005	FQ
B. Vertical standards developed by subject committees			
Standard for food grade salt			
182	<i>Standard for food grade salt</i>	CODEX STAN 150-1985	FQ
Standards for nutrition and foods for special dietary uses			
183	<i>Standard for special dietary foods with low-sodium content</i>	CODEX STAN 53-1981	FQ & NCDs
184	<i>Standard for infant formula and formulas for special medical purposes intended for infants</i>	CODEX STAN 72-1981	FQ & NCDs

185	<i>Standard for canned baby foods</i>	CODEX STAN 73-1981	FQ & NCDs
186	<i>Standard for processed cereal-based foods for infants and young children</i>	CODEX STAN 74-1981, Rev. 1-2006	FQ & NCDs
187	<i>Standard for foods for special dietary use for persons intolerant to gluten</i>	CODEX STAN 118-1981	FQ
188	<i>Standard for follow-up formula</i>	CODEX STAN 156-1987	FQ
189	<i>Standard for formula foods for use in weight control diets</i>	CODEX STAN 181-1991	FQ & NCDs
190	<i>Standard for formula foods for use in very low energy diets for weight reduction</i>	CODEX STAN 203-1995	FQ & NCDs
Standards developed by the Committee on Food Labelling			
191	<i>General standards for the labelling of pre-packaged foods</i>	CODEX STAN 1/1985	FS & NCDs
192	<i>General standard for the labelling of and claim for pre-packaged foods for special dietary uses</i>	CODEX STAN 146-1985	FS & NCDs
193	<i>General standard for food additives sold as such</i>	CODEX STAN 107-1981	FS
194	<i>Standard for labelling and claims for foods for special medical purposes</i>	CODEX STAN 180-1991	FS & NCDs
C. Standards developed by regional coordinating committees			
195	<i>Standard for fresh fungus "Chanterelle"</i>	CODEX STAN 40R-1981	FQ
196	<i>Regional standard for canned humus with tehena</i>	CODEX STAN 257R-2007	FQ
197	<i>Regional standard for canned fowl medames</i>	CODEX STAN 258R-2007	FQ
198	<i>Regional standard for tehena</i>	CODEX STAN 259R-2007	FQ
199	<i>Regional standard for harissa (red hot pepper paste)(Near East)</i>	CODEX STAN 308R-2011	FQ
200	<i>Regional standard for halwa tehenia (Near East)</i>	CODEX STAN 309R-2011	FQ
201	<i>Regional standard for date paste (Near East)</i>	CODEX STAN 314R-2013	FQ
202	<i>Regional Standard for Gochujang</i>	CODEX STAN 294R-2009	FQ
203	<i>Regional standard for fermented soybean paste</i>	CODEX STAN 298R-2009	FQ
204	<i>Regional Standard for edible sago flour (Asia)</i>	CODEX STAN 301R-2011	FQ
205	<i>Regional standard for chili sauce (Asia)</i>	CODEX STAN 306R-2011	FQ
206	<i>Regional standard for tempe</i>	CODEX STAN 313R-2013	FQ

207	<i>Regional standard for culantro coyote (LAC)</i>	CODEX STAN 304R-2011	FQ
208	<i>Regional standard for lucuma (LAC)</i>	CODEX STAN 305R-2011	FQ
209	<i>General standards for food additives (CODEX STAN 192-1995)The General standard for food additives (GSFA) is the single authoritative reference point for food additives. The GSFA is one of the most important general standards in the Codex. It contains both general and commodity-specific provisions. The "Codex General Standard for Food Additives" (GSFA, Codex STAN 192-1995) sets forth the conditions under which permitted food additives may be used in all foods, whether or not they have previously been standardized by Codex.</i>		FS
210	<i>General methods of analysis for contaminants (CODEX STAN 228-2001)Codex Stan 228 has been developed by the Codex Committee on Methods of Analysis and Sampling (CCMAS) in the year 2001. The standard is a precise table of the methods that may be used for analysing contaminants in all foods.</i>		FS
211	<i>Recommended methods of analysis and sampling (CODEX STAN 234-1999)Codex Stan 234 was developed by the Codex Committee on Methods of Analysis and Sampling (CCMAS). It was adopted by CAC in 1999 and has thereafter been amended after every session of CAC. The Standard is divided into two parts: Part A is the Methods of analysis for commodity categories and Part B is the Methods of sampling for commodity categories. Under Part A, individual methods are prescribed for analysis of various provisions in the commodity categories, whereas Part B covers the methods of sampling to be followed for various commodity categories.</i>		FS
212	<i>General standard for contaminants and toxins in food and feed (CODEX STAN 193– 1995) The General standard for contaminants and toxins in food and feed or the GSCTFF contains the main principles recommended by the Codex Alimentarius in dealing with contaminants and toxins in food and feed. It lists the maximum levels and associated sampling plans of contaminants and natural toxicants in food and feed, which are recommended by CAC to be applied to commodities moving in international trade. This Standard includes only maximum levels of contaminants and natural toxicants in feed in cases where the contaminant in feed can be transferred to food of animal origin and can be relevant for public health.</i>		FS

213	<p><i>Maximum residue limits (MRLs) for pesticides (CAC/MRL 1)</i>The CAC/MRL 1 prescribes the MRLs for pesticides in foods. The MRLs have been compiled in an online database titled “Codex pesticide residues in foods”, which is available on the Codex website. In the database, a user can obtain information on Codex MRLs and Codex extraneous maximum residue limits (EMRLs) both for pesticide/commodity combinations. Names and definitions of commodities are found in the Codex classification of foods and animal feeds. The foods listed shall not contain more than the MRL or EMRL (in mg/kg) of the pesticide residue (defined in each individual case in the definition of residue) at: (a) the point of entry into a country; or (b) at the point of entry into trade channels within a country. This maximum limit shall not be exceeded at any time thereafter. The MRLs and EMRLs apply to the residue content of the final sample representative of the lot, and of the portion of the commodity that is analysed. Similar to the GSFA, the MRLs are represented in two ways in the database: (a) commodity category-wise; and (b) A to Z pesticide-wise.</p>	FS
214	<p><i>Maximum residue limits (MRLs) and risk management recommendations (RMRs) for residues of veterinary drugs in foods (CAC/MRL 2-2015)</i>This general standard for MRLs of veterinary drugs in foods is another important horizontal standard. The standard prescribes MRLs for various veterinary drugs in foods. The standard is also updated every year after the CAC meeting with necessary amendments that have been approved. As of July 2014, the Standard contains MRLs for 59 veterinary drugs and RMRs for 8 veterinary drugs. RMRs are simply the risk management measures that competent authorities can take to reduce the usage of harmful drugs in food-producing animals.</p>	FSFS

3. Codex activities in Member States of the WHO SEA Region

CAC has well-laid-down rules and processes for ensuring participation from its members. With the advent of information technology, the work of sending documents, coordination and collaboration has become much easier. However, the interaction between Member States with the Codex Secretariat has to happen through a designated contact person. At the first session of CAC (1963),¹⁰ each Member State of CAC was requested to notify or confirm to the Secretariat the address of its government's central point of contact for CAC work. In 1999, CAC also adopted the core functions of Codex contact points (CCPs), which lay down the role to be played by the CCPs and are contained in Section VI of the *Codex procedural manual*.⁸

1. Act as the link between the Codex Secretariat and Member States.
2. Coordinate all relevant Codex activities within their own countries.
3. Receive all Codex final texts (standards, codes of practice, guidelines and other advisory texts) and working documents of Codex sessions, and ensure that they are circulated to those concerned within their own countries.
4. Send comments on Codex documents or proposals to CAC or its subsidiary bodies and/or the Codex Secretariat.
5. Work in close cooperation with the national Codex committee, where such a committee has been established. The CCP acts as the liaison point with the food industry, consumers, traders and all others concerned to ensure that the government is provided with an appropriate balance of policy and technical advice upon which to base decisions relating to issues raised in the context of Codex work.
6. Act as a channel for the exchange of information and coordination of activities with other Codex members.
7. Receive the invitation to Codex sessions and inform the relevant chairpersons and the Codex Secretariat of the names of participants from their own countries.
8. Maintain a library of Codex final texts.
9. Promote Codex activities throughout their countries.

The Regional Coordinating Committee of Asia (CAC GL/57-1999) has adopted guidelines for the CCPs and the national Codex committees (NCCs). These guidelines are elaborate and also list under "other activities" the activities that can be undertaken by the NCC (Box 1).

Box 1. Other activities

1. Dissemination of information

Codex standards, codes and important publications should be translated into the local language and distributed to all interested persons, organizations and food manufacturers.

2. Workshops and/or seminars

The NCC should hold workshops and/or seminars in order to promote better understanding of food standards and food safety issues for the food industry. Examples include appropriate quality control in food processing, personal hygiene, good manufacturing practices, the need for proper packaging and labelling to ensure that the “Codex message” is brought to as wide a cross-section of the community as possible.

3. Publications

Publications can also be useful for educating those at the political level and the general public. There are many publications of Codex, FAO and WHO dealing with the subjects of food safety and food standards, but all too often, are not brought to the attention of the food industry or consumers. There may be a need for translation into the local language of some of the important publications, so that the population at large can gain from the knowledge thus made available.

4. Regional cooperation

Ongoing communication and cooperation with other Member States within a Codex region can offer opportunities for joint activities to promote knowledge of Codex, and to share both materials and experience. In this context, there is already good cooperation between most Member States within the existing Codex regions, but the need is ever present to continue to explore ways to enhance that cooperation and exert influence on both the food industry and governments to encourage continued support for the principles of CAC.

5. Attendance at meetings

It is well recognized that attendance at Codex meetings can be costly and difficult to justify in terms of government priorities for the allocation of funds from limited budgets. This problem is even more strongly felt in developing countries. However, given that the food industry and the community as a whole will benefit from the acceptance and application of Codex standards through a better and safer food supply, and through better access to export markets, it may be possible for NCCs to generate alternative funding from industry to send representatives to Codex meetings. Where neither government nor alternative funding sources are available, NCCs should exert whatever influence they can to ensure that written views on the subjects to be discussed are sent to the Codex Secretariat. These will then be brought to the attention of the particular meeting concerned, thereby ensuring that all members’ views are taken into account.

6. Projects and experiments

In case of lack of necessary data for consideration of some draft standards or maximum limits, governments should provide some budget for an experiment or research project, which should be conducted in collaboration with other local organizations, both governmental and private, to obtain sufficient data.

All these guidelines cover the functions and location of the CCPs, including equipment and other requirements. Guidelines also touch upon the composition of the NCC and its functions. The following sections cover the status of setting up of CCPs and NCCs in countries of the WHO SEA Region.

3.1 Bangladesh

Bangladesh Standards and Testing Institution (BSTI) is an autonomous body responsible for developing and promoting standards for food as well as non-food items. BSTI has been designated as the CCP for Bangladesh. The Bangladesh National Codex Committee (BNCC) has been formed in BSTI and the 17-member committee is headed by the Director-General, BSTI. The members of the BNCC are from the BSTI, Ministry of Industries, Ministry of Health and Family Welfare, Institute of Nutrition and Food Science, University of Dhaka, Bangladesh Council of Scientific and Industrial Research, Plant Protection Wing, Department of Agricultural Extension, Bangladesh Fisheries Research Institute, Bangladesh Livestock Research Institute, the Federation of Bangladesh Chambers of Commerce and Industry (FBCCI), Export Promotion Bureau, Bangladesh Agricultural Research Institute, Bangladesh Rice Research Institute, Bangladesh Atomic Energy Commission, Hortex Foundation, Institute of Public Health, Institute of Public Health Nutrition. The Director (Standards), BSTI is the Member secretary.

The main objectives of the BNCC are as follows:

1. to oversee the activities of the technical Committee for the Adoption of Codex Standards as national standards;
2. to ensure safe food for the consumer;
3. to accelerate the export of food and remove technical barriers to trade.

The terms of reference of the BNCC *inter alia* include the following: help the national standards body, i.e. BSTI, in formulating food standards, food quality and food safety; select members to attend the International Food Standardization, i.e. CAC's Technical Committee meeting; collect and study of documents regarding Codex technology, economy, health and its control, and then help BSTI; consult among members of the NCC on the latest Codex information and determination at the national level, among others.

3.2 Bhutan

The Bhutan Agriculture and Food Regulatory Authority (BAFRA) under the Ministry of Agriculture and Forests (MoAF) has been designated as the CCP for Bhutan. As per the provisions of the Food Act of Bhutan, 2005, an NCC has been established at the National Food Quality and Safety Commission. The NCC is chaired by the Secretary, MoAF and the CCP serves as the secretariat. The members of the NCC are representatives of BAFRA, Department of Agriculture, Department of Livestock, the ministry responsible for public health, ministry responsible for trade and industry, ministry responsible for urban affairs, and the Bhutan Chamber of Commerce and Industry. The NCC meets at least twice in a year, and as and when required. The Committee may form temporary subcommittees to provide advice on technical matters to the NCC.

3.3 Democratic People's Republic of Korea¹¹

The Academy of Health and Food Science, Ministry of Public Health, is the CCP. The country has received funds from the Codex Trust Fund (CTF) and the Regional Office to participate in various Codex meetings. The national food category system has been amended and agricultural products have also been classified on the basis of Codex. Steps have been taken to strengthen the national food control system and formulate/update food laws.

3.4 India

The CCP of India is set up at the Food Safety and Standards Authority of India (FSSAI). Earlier, the national CCP (NCCP) of India was located at the Ministry of Health and Family Welfare (MoH&FW). Apart from the NCCP, there is also an NCC that provides strategic direction to the Codex work in the country. It has members drawn from government, public, private and consumer organizations, including research institutes.

For each Codex committee, a parallel Shadow committee in the Indian context has been established by the food authority that works for that particular Codex committee. Shadow committees are committees of the NCC constituted by the respective food authority to review the agenda of CAC and its subsidiary committees, and finalize India's comments on various agenda items.

3.5 Indonesia

The NCC of Indonesia is led by the National Standardization Agency of Indonesia (BSN). The NCC is composed of directors-general from related ministries and agencies that deal with food safety standards and regulations, senior scientists, associations of food producers, consumers' associations and academia. The NCC is active in formulating national policy relating to the handling of Codex in the country, and important issues pertaining to food safety that are under discussion in Codex.

The NCC of Indonesia is supported by the Codex Working Group of Indonesia, which consists of mirror committees hosted by the Ministry of Agriculture, Ministry of Trade, National Agency for Drug and Food Control, Ministry of Marine Affairs, among others. Mirror committees have been constituted along the lines of Codex subsidiary bodies.

3.6 Maldives

Maldives became a member of CAC in 2008 and the NCC of Maldives has members drawn from the Ministry of Health, Maldives Food and Drug Authority (MFDA), Ministry of Economic Development, Ministry of Fisheries and Agriculture, industry associations, among others. The major role of the NCC is to advise the government on the implications of various issues concerning food standardization, food quality and food safety. The Food Control Division under the MFDA is designated as the CCP of Maldives. Five technical working groups (TWGs) have been set up to assist the NCC in the study or consideration of Codex-specific technical matters. These TWGs focus on core issues, the import and export certification system, fish and fishery products, food hygiene and pesticides.

3.7 Myanmar

The Director (Food Safety) at the Food and Drug Administration (FDA), Myanmar is the CCP of Myanmar. The FDA has been upgraded to a directorate-level department, directly under the Ministry of Health & Sports. Three to four meetings are held every year to develop national food standards and guidelines. The CCP is responsible for distribution of Codex material to relevant stakeholders in the country and notifying the stakeholders that Codex standards are the reference standards for food safety and quality. An NCC has not been formed in Myanmar.

3.8 Nepal

The Director-General of the Department of Food Technology and Quality Control under the Ministry of Agriculture Development is the CCP of Nepal and was established in 1983. The NCC of Nepal has been in

existence since 2004 and is chaired by the Secretary, Ministry of Agriculture Development. It has members drawn from government agencies, consumers, industry representatives, academicians and experts.

3.9 Sri Lanka

The NCC in Sri Lanka was established in 2005. The Director of the Department of Environmental, Occupational Health and Food Safety, Ministry of Health is the designated NCCP. National regulations on food safety and food standards have been formulated on the basis of Codex.

3.10 Thailand

Thailand has been a member of CAC since 1963 and has a well-established system for handling Codex work. The NCCP of Thailand is located at the Office of Commodity and System Standards, National Bureau of Agricultural Commodity and Food Standards, Ministry of Agriculture and Cooperatives.

The NCCP has established 17 sub-committees so far to carry out Codex work in the country. The process for carrying out Codex activities is similar to that of other Countries; the sub-committees provide their technical advice on matters, which are then forwarded to the Codex Secretariat by the NCCP. In 2008, Thailand hosted and chaired the meeting of the Ad hoc Task Force on Processing and Handling of Quick Frozen Foods. It has been the coordinator four times.

The NCC has established mirror committees to provide technical assistance in developing national positions for Codex meetings. Just as in other countries, these mirror committees have been established along the lines of the Codex subsidiary bodies and are coordinated by the concerned institutions.

3.11 Timor-Leste

Currently, Timor-Leste is not member of CAC, but is making efforts to introduce Codex systems in the country.

4. Research

4.1 Research methodology and findings

As part of the study, apart from the secondary research, the NCCPs of all Member States in the Region except Timor-Leste, which is not member of CAC, were contacted through email to answer three questions regarding adoption of Codex standards in their respective countries.^f All Member States in the Region responded to the questions, except the Democratic People's Republic of Korea and Myanmar. The details of the persons/organizations that responded to the questions are given in **Annex I**. Table 5 presents the findings.

Table 5. Status on adoption of Codex Standards in the WHO SEA Region

Questions	Whether <i>Codex Alimentarius</i> standards have been adopted in your country?	If they have been adopted, were they adopted per se or were they adopted after harmonization?	Can the details of the adopted texts be shared? If the information is available on the website, the URL of the same can be shared.
Country			
Bangladesh	Yes	Codex standards were adopted as Bangladesh standards.	BSTI adopted 157 Codex standards as Bangladesh standards, out of which 123 are product standards, 33 codes of practice/guidelines and one method of testing. http://www.bsti.gov.bd/about.html
Bhutan	Yes	Codex standards are being adopted in Bhutan after harmonization. Codex standards are also referred to as reference documents per se in absence of national standards as and when an issue arises. MRLs for heavy metals, pesticide residues from Codex standards are such instances.	The details of standards are available on the website www.bafra.gov.bt and in Annex II.
Democratic People's Republic of Korea	The national food safety system has been amended so that it harmonizes with the activities of CAC. The country is also taking measures to strengthen the national food control system and to formulate/update food laws ^f		

^f The Democratic People's Republic of Korea was contacted as it is a member of CAC but there was no response despite repeated emails. On the other hand, Timor-Leste was not contacted as it is not a member of CAC.

Questions	Whether Codex Alimentarius standards have been adopted in your country?	If they have been adopted, were they adopted per se or were they adopted after harmonization?	Can the details of the adopted texts be shared? If the information is available on the website, the URL of the same can be shared.
Country			
India	Yes	Codex standards have been adopted after harmonization.	The list of standards adapted and adopted after harmonization and those that are in the process of being adopted is at Annex II . http://fssai.gov.in/home/fss-legislation/codex-india.html
Indonesia	Codex standards and related texts are used as references in developing Indonesian national standards and regulation for food safety. However, due to some consideration, not all Codex standards are fully adopted as national standards or regulation.	<p>For developing national standards, the country has technical committees, which comprise related ministries or agencies, industries, consumers and experts. They consider relevant international standards when formulating national standards on the basis of consensus. Some of the Codex commodity standards were used as references in developing national standards, such as those for instant noodles, tempe, fish and fishery products, canned food, etc.</p> <p><i>General principles of food hygiene</i> (CAC/ RCP 1-1969, Rev. 4-2003) has been fully adopted as the Indonesian National Standard SNI CAC/RCP 1:2011.</p> <p>The National Agency for Drug and Food Control has the authority to stipulate technical regulation. Regulation on food category, establishment of the maximum level of microbiological and chemical contamination in food, food irradiated maximum level for food additives, claims and food advertising, organic food and follow-up formulas are adopted from related Codex standards.</p>	<p>Information on Indonesian national standards is available at http://sisni.bsn.go.id/index.php/sni_main/sni/index_simple</p> <p>Information on regulations stipulated by the National Agency for Drug and Food Control can be accessed at http://jdih.pom.go.id/</p>

Questions	Whether Codex Alimentarius standards have been adopted in your country?	If they have been adopted, were they adopted per se or were they adopted after harmonization?	Can the details of the adopted texts be shared? If the information is available on the website, the URL of the same can be shared.
Country			
Maldives	Yes	Two Codex standards were adopted after harmonization. The country is also in the process of adapting more Codex standards. Details are available in Annex II .	Adopted texts: <i>General standard for the labelling of prepackaged foods</i> (Codex Stan 1-1985) http://www.mfda.gov.mv/DOCS/1476949150.pdf <i>Recommended methods of analysis and sampling</i> (Codex Stan 234-1999) http://www.mfda.gov.mv/content/?page=Laws
Myanmar^{1 2}	Yes	Codex standards are used as working material as an interim measure before developing national standards, practices and guidelines.	
Nepal	Yes	Nepalese standards are being developed and amended in line with Codex standards through a process of harmonization. Codex standards are not being adopted as such. Generic standards of food products are being developed in the format of Codex and include set measures of Codex. The reference for development of horizontal standards is also in the line with Codex. Codex is the reference standard in the absence of Nepalese standards.	Some examples of recently developed Nepalese standards in line with Codex are: <i>Standards on mineral water, Packaged drinking water, Maximum levels (MLs) for mycotoxins in food products, Maximum levels for melamine.</i> They were also notified as Sanitary and phytosanitary (SPS) measures in the World Trade Organization (WTO).
Sri Lanka	Yes	Most of the standards are based on Codex. Some are adopted as they are and some are modified to suit requirements.	All food regulations in Sri Lanka, including regulations on food standards are available at: http://www.health.gov.lk/enWeb/FOODWEB/files/regulations.html

Questions	Whether <i>Codex Alimentarius</i> standards have been adopted in your country?	If they have been adopted, were they adopted per se or were they adopted after harmonization?	Can the details of the adopted texts be shared? If the information is available on the website, the URL of the same can be shared.
Country			
Thailand	Thailand has adopted some Codex standards per se as national standards, e.g. <i>General principles of food hygiene</i> (CAC/RCP 1-1969).	Several Codex standards have been adopted after harmonization, i.e. Codex text to suit national conditions. For example, <i>Code of practice for the processing and handling of quick frozen foods</i> (CAC/RCP 8-1976).	The details of Thai agricultural standards are available online on the website: www.acfs.go.th

5. Discussion on food and health, and the role of Codex Alimentarius

5.1 Noncommunicable diseases

NCDs¹³ tend to be of long duration and are the result of a combination of genetic, physiological, environmental and behavioural factors. The main types of NCDs are cardiovascular diseases (such as heart attack and stroke), cancers, chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma) and diabetes. NCDs kill 40 million people each year, equivalent to 70% of all deaths globally. Cardiovascular diseases account for most NCD deaths, or 17.7 million people annually, followed by cancers (8.8 million), respiratory diseases (3.9 million), and diabetes (1.6 million). These four groups of diseases account for 81% of all NCD deaths. Tobacco use, physical inactivity, harmful use of alcohol and unhealthy diets all increase the risk of dying from an NCD (Table 5).

5.2 Socioeconomic impact of NCDs

Worldwide, the incidence of NCDs has increased and particularly in South-East Asia, 62% of deaths are due to NCDs. NCDs are top killers in the WHO South-East Asia Region,¹⁴ claiming an estimated 8.5 million lives each year. One third of these deaths are premature and occur before the age of 70 years, thus affecting economically productive individuals.

NCDs threaten to hinder progress towards the 2030 Agenda for Sustainable Development, which includes a target of reducing premature deaths from NCDs by one third by 2030. Poverty is closely linked with NCDs. The rapid rise in NCDs is predicted to impede poverty reduction initiatives in low-income countries, particularly by increasing household costs associated with health care. Vulnerable and socially disadvantaged people get sicker and die sooner than people in higher social positions, especially because they are at greater risk of being exposed to harmful products, such as tobacco or unhealthy dietary practices, and have limited access to health services.

5.3 Codex Alimentarius standards and human health

Recognizing the importance of work being done by CAC in the area of setting food standards and its linkage to health, WHO¹⁵ urged Member States to, “make full use of Codex standards for the protection of human health throughout the food chain, including assistance with making *healthy choices* regarding nutrition and diet and to stimulate collaboration between all sectors involved at national level in setting standards based on the *Codex Alimentarius* related to food safety and nutrition, with particular focus on the health sector and fully involving all stakeholders”.

WHO also outlined its global strategy¹⁶ on diet, physical activity and health (resolution WHA57.17) and noted that, “Public health efforts may be strengthened by the use of international norms and standards, particularly those drawn up by the Codex Alimentarius Commission and as resolved in WHA56.23.” Attention of national governments was also drawn to the importance of accurate food labelling and use of existing Codex labelling guidelines.

5.4 WHO Global Action Plan for the Prevention and Control of NCDs

To strengthen national efforts to address the burden of NCDs, the Sixty-sixth World Health Assembly endorsed the WHO Global Action Plan for the Prevention and Control of NCDs¹⁷ 2013–2020 (resolution WHA66.10).

Promote nutrition labelling, according to but not limited to, international standards, in particular the *Codex Alimentarius*, for all pre-packaged foods, including those for which nutrition or health claims are made. Develop guidelines, recommendations or policy measures that engage different relevant sectors, such as food producers and processors, and other relevant commercial operators, as well as consumers:

- to reduce the level of salt/sodium added to food (prepared or processed);
- to increase the availability, affordability and consumption of fruit and vegetables;
- to reduce saturated fatty acids in food and replace them with unsaturated fatty acids;
- to replace trans-fats with unsaturated fats;
- to reduce the content of free and added sugars in food and non-alcoholic beverages;
- to limit excess calorie intake, reduce portion size and energy density of foods;
- to develop policy measures that engage food retailers and caterers to improve the availability, affordability and acceptability of healthier food products (plant foods, including fruit and vegetables, and products with reduced content of salt/sodium, saturated fatty acids, trans-fatty acids and free sugars).

In resolution WHA67.14,¹⁸ the World Health Assembly, recognizing the importance of implementing relevant internationally agreed commitments, urged Member States to ensure that health is central to the post-2015 Development Agenda; to ensure that the post-2015 Development Agenda will accelerate and sustain progress towards the achievement of the health-related Millennium Development Goals (MDGs). As part of a wide-ranging global consultation, the Open Working Group of the General Assembly on Sustainable Development Goals (OWG), consisting of representatives of Member States of the United Nations, in August 2014 proposed 17 Sustainable Development Goals (SDGs) (**Annex III**). In the scheme proposed by the OWG, health is positioned as one of the 17 SDGs. The overarching goal is to “Ensure healthy lives and promote well-being for all at all ages”. This overarching health goal has nine targets: three related to the MDGs, three to NCDs and injuries, and three that are cross-cutting or focused on systems, including universal health coverage (UHC), universal access to sexual and reproductive health-care services, and reduced hazards from air, water and soil pollution.

At the Sixty-eighth World Health Assembly,¹⁹ it was reaffirmed that improvements in diet and nutrition require relevant legislative frameworks for food safety and quality, including for the proper use of agrochemicals. This could be done by promoting participation in the activities of CAC for the development of international standards for food safety and quality, as well as for improving information to consumers, while avoiding inappropriate marketing and publicity of foods and non-alcoholic beverages to children, as recommended by resolution WHA63.14. Among a number of recommended actions for sustainable food systems promoting healthy diets, it was recommended to “explore regulatory and voluntary instruments – such as marketing, publicity and labelling policies, economic incentives or disincentives in accordance with Codex Alimentarius and World Trade Organization rules – to promote healthy diets”. For recommended actions on food safety and antimicrobial resistance, inter alia, it was recommended:

- to actively take part in the work of CAC on nutrition and food safety, and implement, as appropriate, internationally adopted standards at the national level;
- to develop and implement national guidelines on prudent use of antimicrobials in food-producing animals according to internationally recognized standards adopted by competent international organizations to reduce non-therapeutic use of antimicrobials, and to phase out the use of antimicrobials as growth promoters in the absence of risk analysis, as described in Codex Code of Practice CAC/RCP61-2005.

6. Discussion and conclusion

6.1 Discussion

Ten Member States of the WHO SEA Region – Bangladesh, Bhutan, the Democratic Peoples’ Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka and Thailand – are members of CAC. National CCPs have been identified and designated in these Member States. However, the range of their activities varies considerably, depending largely on the level of technical capacity and availability of resources, which are limited in several Member States. It has also been noted that the extent of communication is not enough between different stakeholders involved in various aspects of food safety, dissemination of Codex standards and protocols, as well as their applications, thus affecting the quality of the overall food control systems in several Member States.²⁰

All countries in the Region are using the Codex texts, albeit differently. Some of the texts have been adopted as such, others have been adapted according to national priorities and some of them are referred to on a case-by-case basis. However, the level of adoption/adaption of Codex standards in the WHO SEA Region varies considerably. This is evident from the fact that countries such as Bhutan, Maldives and Nepal have adopted few standards whereas countries such as Thailand, Indonesia, India have adopted/standardized a large number of standards.

Nutrition safety and food labelling play an important role in controlling NCDs. The Codex Stan 1 or the *General standard for the labelling of prepackaged foods* (GSLPF) applies to the labelling of all pre-packaged foods to be offered as such to the consumer or for catering purposes. This was the first standard to be approved by CAC in 1969, which reflects its importance as the principal Codex standard meant for consumer protection and for ensuring fair practices in the food trade. This horizontal standard was enlarged in 1985 and has undergone a number of amendments thereafter. The first substantive section of the General standard contains the “Principles of food labelling”. Codex has done further work through the development of standards and guidelines on various aspects of nutrition and labelling (Table 6). The *General standard for the labelling of prepackaged foods* has been adopted by all Member States, according to the information gathered through emails.

Table 6. Important Codex texts on nutrition and food labelling

S. NO.	NUMBER	NAME OF THE STANDARD/GUIDELINE
1	CODEX STAN 1-1985	<i>General standard for the labelling of prepackaged foods</i>
2	CODEX STAN 146-1985	<i>General standard for the labelling of and claims for prepackaged foods for special dietary uses</i>
3	CAC/GL 1-1979	<i>General guidelines on claims</i>
4	CODEX STAN 180-1991	<i>Standard for labelling of and claims for foods for special medical purposes</i>
5	CAC/GL 2-1985	<i>Guidelines on nutrition labelling</i>
6	CAC/GL 23-1997	<i>Guidelines for use of nutrition and health claims</i>
7	CAC/GL 8-1991	<i>Guidelines for formulated complementary foods for older infants and young children</i>

S. NO.	NUMBER	NAME OF THE STANDARD/GUIDELINE
1	CODEX STAN 1-1985	<i>General standard for the labelling of prepackaged foods</i>
2	CODEX STAN 146-1985	<i>General standard for the labelling of and claims for prepackaged foods for special dietary uses</i>
3	CAC/GL 1-1979	<i>General guidelines on claims</i>
4	CODEX STAN 180-1991	<i>Standard for labelling of and claims for foods for special medical purposes</i>
8	CAC/GL 9-1987	<i>General principles for the addition of essential nutrients to foods</i>
9	CAC/GL 10-1979	<i>Advisory lists of nutrient compounds for use in foods for special dietary uses intended for infants and young children</i>
10	CAC/GL 55-2005	<i>Guidelines for vitamin and mineral food supplements</i>

Thus, the areas of nutrition and food labelling have benefited from the development of Codex food standards and harmonization efforts to shape food and nutrition labelling requirements internationally. Codex, through its work on food labelling and nutrition (see Table 6), has championed initiatives that directly or indirectly supported the implementation of the WHO Global Strategy on Diet, Physical Activity and Health²⁶ with the addition of saturated fats, sodium and total sugars to the list of nutrients that should be declared on food labels. With the increased association found between food and diet and NCDs, and the impact of the latter on human health, Codex may focus its attention more on prevention and mitigation strategies through the development/updation of nutrition and labelling standards.

In addition, another area that Member States need to focus on is food hygiene. Most of them have implemented the *General principles of food hygiene* in their national food control systems as such or after modifications. However, an area that Member States need to consider is the implementation of RCPs for reduction of aflatoxins/mycotoxins in various food products. Aflatoxins are considered to be genotoxic and carcinogenic.²¹ There are a number of RCPs developed by CAC on the reduction of aflatoxins in food and feed, and Member States need to adopt/adapt them.

Similarly, certain vertical standards that prescribe standards for salt, sugar or fat may also have an impact on NCDs. Member States need to look at such vertical standards and, based on their national priorities, either adopt them or amend their existing national food standards, if they exist.

6.2 Conclusion

A well-established Codex structure in a country accomplishes two goals. First, it ensures that the work being done by Codex is made known to all stakeholders in the country so that it can be implemented as per the national priorities. Second, a strong Codex structure at the national level helps a country to participate actively in Codex work by sending relevant experts as delegates to various committee meetings, send comments on agenda points that are of relevance and, finally, participate in Codex work by sending new work proposals to various committees.

Almost all Member States in the Region have initiated a harmonization exercise to align their food standards with the Codex standards. However, the number of standards taken up for adoption/adaption after harmonization varies considerably. Countries that have set up strong Codex systems are able to utilize Codex work more effectively.

While addressing the issue of NCDs in their respective countries, Member States may need to focus on standards for harmonization or adoption in specific areas where standards have been developed. For example,

- nutrition and labelling
- food hygiene
- codes of practice on the reduction of aflatoxins/mycotoxins in food and feed
- identification of vertical standards that impact NCDs.

It is not possible to build capacity for everything overnight. It is thus important to identify those Codex committees and their outcomes that are relevant to national priorities, and build core competency in those areas by identifying experts and research institutes working in those areas.

It is better to follow a scalable and modular approach to institutionalizing Codex work in the national framework for food standardization. Apart from tailor-made capacity-building programmes, there may be a need harness information and communication technology (ICT) to spread awareness about NCDs and their relationship to unhealthy diets.

Annex I. List of WHO Member States and contact details

S. No.	Country	Response received or not	Response received from & contact email
1.	Bangladesh	Yes	Golam Md Sarwar Asst Director (Agri. & Food) BSTI, Dhaka Email: kbdsarwarbsti@gmail.com
2.	Bhutan	Yes	National Codex contact point – Bhutan Bhutan Agriculture and Food Regulatory Authority (BAFRA) Ministry of Agriculture & Forests, Royal Government of Bhutan PO Box No. 1071 Thimphu, Bhutan Tel:+975 2 327031 (direct)/325790/331349 Fax:+9752 27032/335540 Email : bhutancodex@gmail.com
3.	Democratic People’s Republic of Korea	No	No response received from Dr Tun Zaw to the emails sent to tunzawdr@gmail.com
4.	India	Yes	FSSAI Secretariat National Codex contact point – India Email: codex-india@nic.in
5.	Indonesia	Yes	Secretariat of the Codex contact point The National Standardization Agency of Indonesia Email: codex_indonesia@bsn.go.id
6.	Maldives	Yes	Sajidha Mohamed Codex contact point – Maldives Email: foodsafetydivision@health.gov.mv
7.	Myanmar	No	No response received from Director, Academy of Health and Food Science to the emails sent to ahfs-421@co.chesin.com
8.	Nepal	Yes	Mohan Krishna Maharjan National Codex Secretariat DFTQC Email: mkmaharjan@gmail.com; info@dftqc.gov.np

S. No.	Country	Response received or not	Response received from & contact email
9.	Sri Lanka	Yes	Dr Lakshman Gamlath Director (Environmental Health, Occupational Health & Food safety) National Codex contact point, Sri Lanka National coordinator, "Hear all" programme Ministry of Health, Sri Lanka. Email: lankacodex@gmail.com
10.	Thailand	Yes	Ing-Orn Panyakit, Director of the Office of Standard Development, National Bureau of Agricultural Commodity and Food Standards Codex contact point of Thailand Email: codex@acfs.go.th
11.	Timor-Leste	Is not a member of CAC and does not have an NCCP	

Annex II. List of the standards adopted/harmonized with Codex by Member States

Bhutan

1. *Criteria for good hygienic and manufacturing practices for licensing of food business*
2. *Food handlers' training manual for food processing units*
3. *Food handler training manual 2008*
4. *Extracted from food safety licensing of food business licensing process*
5. *Food safety licensing of food businesses*
6. *Minimum standard requirement for street food vendors*
7. *Minimum standards for establishment and operation of temporary food stalls*
8. *Training manual for meat handlers*
9. *Training manual for street food vendors*
10. *Bhutan standard for street vended foods*
11. *Bhutan standard for red rice*
12. *Bhutan standard for natural mineral water*
13. *Bhutan standard for maize and maize products*
14. *Bhutan standard for home processed pickles*
15. *General standard for food hygiene*
16. *Bhutan standard for dry fish and dried salted fish*
17. *Bhutan standard for chilli and chilli powder*
18. *Bhutan standard: Good agricultural practices (GAP): fruits and vegetables*
19. *Bhutan standard for animal meat and co-products*

India

Final notified regulations/standards	
I. Amendment in Food Safety and Standards (Food Product Standards and Food Additives) Regulation, 2011	
Revision of standards	
1.	Product standards of olive oils
2.	Standards for cotton seed oil
3.	Use of food additives (harmonization with Codex provisions)
New standards under Food Safety and Standards (Food Product Standards and Food Additives) Regulation	
4.	Specification for phytosterol and trehalose, oligofructose, infant food, fortified atta and maida
5.	Use of glucose oxidase, lipase and xylanase in bread
6.	Use of pullulan (food additive) in foods
7.	Standards for lecithin in breads
8.	Use of caramel and glazing agents
9.	Use of steviol glycosides (food additives) in foods
10.	Standards for gluten free and low-gluten products.
11.	Use of DHA and ARA in infant formula
12.	Use of DHA and ARA in follow up formula w.r.t DHA and ARA
13.	Use of isomaltulose in foods
14.	Use of high fibre dextrin in foods
15.	Food Safety and Standards (Food or Health Supplements, Nutraceuticals, Foods for Special Dietary Uses, Foods for Special Medical Purpose, Functional Foods and Novel Food) Regulations, 2016
II. Amendment in Food Safety and Standards (Packaging and Labelling) Regulation, 2011	
Revision of standards	
16.	Declaration of trans-fatty acids
17.	Declaration of trans-fats in various foods and class titles of edible oils
New standards under Food Safety and Standards (Packaging and Labelling) Regulation	
18.	Labelling requirements for phytosterols, trehalose and oligofructose
19.	Declaration of gluten-free products
20.	Declaration of high-fibre dextrin
21.	Declaration of phytosterols
III. Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011	
Revision of standards	

22.	Maximum limit of mycotoxins in foods
23.	Maximum limit of naturally occurring toxins (NOTS) in foods
24.	Maximum limit of chromium in gelatin
25.	Maximum limit of polycyclic aromatic hydrocarbon and polychlorinated biphenyls in fish and fishery products
26.	Maximum limit of biotoxin in fish and fishery products
27.	Standards for melamine in powdered infant formula, liquid infant formula and other foods
28.	Limit of heavy metals in foods
29.	Removal of zinc from contaminants list
Draft notifications for regulations/standards	
IV. Amendment in Food Safety and Standards (Food Product Standards and Food Additives) Regulation, 2011	
Revision of standards	
1.	Use of natural colour and carboxymethyl cellulose in foods
2.	Standards for fish and fishery products (i) Frozen cephalopods (ii) Frozen finfish (iii) Frozen shrimp (iv) Fish fillets (v) Smoked-fishery products
3.	Palm oil and palm kernel oil
4.	Cocoa butter
5.	Standards for milk and milk products (i) General standard for milk and milk products (ii) Standard for fermented milk (iii) Standard for sweetened condensed milk (iv) Standard for evaporated milks (v) Standard for edible casein products (vi) Standard for whey powder (vii) Standard for milk fat products (viii) Standard for butter (ix) Standard for cheeses and cheese products
6.	Standards of table olives
New standards	
7.	Use of aspartame-acesulfame salt
8.	Use of phytosterols in foods

9.	Specification for certain processed fruits and vegetables (i) Canned tomatoes (ii) Tomato juice (iii) Jams, fruit jellies and marmalades (iv) Frozen beans (v) Frozen cauliflower (vi) Frozen peas (vii) Frozen spinach
10.	Standard for coconut milk
11.	Standard for coconut cream
12.	Standard for dried apricots
13.	Standards for durum wheat maida
14.	Standards for pearl millet flour
15.	Standard for instant noodles
16.	Standard for seasoning
17.	Adopting 46 vertical standards for food additives
New Regulations	
V. Amendment in Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011	
Revision of standards	
18.	Fixing the limits of HCN in sago
19.	List of histamine-forming fish species and limits of histamine level for fish and fishery products
20.	Maximum residue limits for pesticides, antibiotics and veterinary drugs residues in foods
21.	Code of practice for the reduction of contamination of food with polycyclic aromatic hydrocarbons (PAH)
VI. Amendment in Food Safety and Standards (Food Product Standards and Food Additives) Regulation, 2011	
Revision of standards	
1.	Standards of chocolate
2.	Cocoa powder
3.	Canned tropical fruit salad/cocktail/mix
4.	Sodium saccharin (food grade) and calcium saccharin (food grade)
New standards	
5.	Standards for oats
6.	Date paste
7.	Fermented soybean paste

8.	Coca mass or coca/chocolate liquor and coca cake
9.	Vegetable protein products
10.	Harrisa (red hot pepper paste)
11.	Inclusion of fatty acid composition (by GLC) in standards for various edible vegetable oils
12.	Complementary food for older infants and young children
13.	Special dietary foods with low sodium
14.	Durum wheat
15.	Sorghum flour
16.	Soy protein products
17.	Whole maize (corn) flour
18.	Wheat protein products including wheat gluten
19.	Revision in food category system w.r.t food additives harmonised with Codex.

D1– Draft notifications

I. Amendment in Food Safety and Standards (Food Product Standards and Food Additives) Regulation, 2011

Revision of standards

1.	Common standards for various pulses
2.	Standards for whole and decorticated pearl millet grains (bajra) products
3.	Standards for honey

New standards

4.	Standards for avocado oil
5.	Standards for peroxide value for vegetable oils
6.	Standards for quick frozen French fried potatoes
7.	Standards for canned chestnut and chestnut puree
8.	Standards for edible fungus products
9.	Standards for degermed maize (corn) meal and maize (corn) grits
10.	Standards for couscous
11.	Standards for tempe
12.	Standards for sago flour
13.	Adoption of Codex standards on fish and fisheries products (i) Live and raw bivalve molluscs (ii) Sturgeon caviar (iii) Fish sauce (iv) Quick frozen fish sticks (v) Fresh and quick frozen raw scallop products
14.	Standards for dry mixtures of cocoa and sugars
15.	Standards for beeswax

II. Amendment in Food Safety and Standards (Packaging and Labelling) Regulation, 2011	
Revision of regulations	
16.	Labelling
New regulations	
17.	Advertisement and claims
III. Amendment in Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011	
New standards	
18.	Aflatoxin in arecanut

During the process of harmonization, around 11 000 standards/provisions related to food standards, additives and contaminants have been finalized and notified.

Maldives

Codex standards in the process of being adapted

- *General principles of food hygiene*
- *General standard for bottled/ packaged drinking waters (other than natural mineral waters)*
- *Standard for milk powders and cream powder*
- *General standard for contaminants and toxins in food and feed*
- *Standard for formula foods for use in weight control diets*
- *Standard for labelling of and claims for foods for special medical purposes*
- *General standard for the labelling of and claims for prepackaged foods for special dietary uses*
- *General standard for food additives*
- *General standard for the use of dairy terms*
- *General principles for the addition of essential nutrients to foods*
- *Code of hygienic practice for milk and milk products*
- *Guidelines for use of nutrition and health claims*
- *Guidelines for vitamin and mineral food supplements*
- *Guidelines on nutrition labelling*
- *General guidelines on claims*

Annex III. Sustainable Development Goals (SDGs) proposed by the Open Working Group of the General Assembly (OWG)

- Goal 1. End poverty in all its forms everywhere.
- Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
- **Goal 3. Ensure healthy lives and promote well-being for all at all ages.**
- Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- Goal 5. Achieve gender equality and empower all women and girls.
- Goal 6. Ensure availability and sustainable management of water and sanitation for all.
- Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all.
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- Goal 9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10. Reduce inequality within and among countries.
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable.
- Goal 12. Ensure sustainable consumption and production patterns.
- Goal 13. Take urgent action to combat climate change and its impacts.
- Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
- Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
- Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
- Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.

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Food related outbreaks in the increasingly complex global food chain could involve multiple countries across continents since sourcing of raw materials and manufacturing processes transcend national boundaries. Codex standards, guidelines and recommendations are the benchmarks for national health and safety requirements for food. Codex standards are recognized in the Agreement on the Application of Sanitary and Phytosanitary Measures of the World Trade Organization. The standards, guidelines and recommendations adopted by the Codex Alimentarius Commission represent the international consensus regarding health and safety requirements for food, which are critical for public health and well-being.

As per Article 2 (U) of its Constitution, the World Health Organization has the mandate to 'develop, establish and promote international standards with respect to food, biological, pharmaceutical and similar products'. Codex Standards in the WHO South-East Asia Region provides information on the standards for food safety in the food trade relating to existing Codex texts in Member States of the WHO South-East Asia Region.



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