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Assessment of Cambodian Standards on Fish and Fishery Products and Foods

CAMBODIA EXPORT DIVERSIFICATION AND EXPANSION PROGRAM: MARINE FISHERY COMPONENT

United Nations Industrial Development Organization (UNIDO)
Fisheries Administration, Ministry of Agriculture, Forestry and Fisheries

July 2015

The views expressed in this report are based on the actual information and data collected during the study period and through review of available literatures. The views expressed in this report do not necessarily reflect those of the UNIDO or any participating organizations.

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List of Abbreviations

AOAC	: Association of Official Agricultural Chemists
ASEAN	: The Association of Southeast Asian Nations
CA	: Competent Authority
CEDEP	: Cambodia Export Diversification and Expansion Program
CS	: Cambodian Standards
DG	: Directorate General
EQI	: Export Quality Infrastructure
EU	: European Union
FAO	: Food and Agriculture Organization
FiA	: Fisheries Administration
FBOs	: Food Business Operators
FFP	: Fish and Fishery Products
GMP	: Good Manufacturing Practices
HACCP	: Hazard Analysis and Critical Control Point
HC	: Health Certificate
HPLC	: High-Performance Liquid Chromatography
ISC	: Institute of Standards of Cambodia
ISO	: International Standardization Organization
MDG	: Millennium Development Goals
MRL	: Maximum Residue Limit
OC	: Official Controls
SPS	: Sanitary and Phytosanitary (Measures)
TBT	: Technical Barriers to Trade
UNIDO	: United Nations Industrial Development Organization
WHO	: World Health Organization

1. Introduction

The present assessment study has been prepared under the Marine Fishery Component of the Export Diversification and Expansion Program (CEDEP II), jointly implemented by the United Nations Industrial Development Organization (UNIDO) and the Fisheries Administration (FiA) of the Ministry of Agriculture, Forestry and Fisheries (MAFF).

The assessment was carried out between 14 June and 3 July, 2015.

The overall objective is to contribute for achieving the two target outcomes of the Marine Fisheries Product component:

- *Outcome #1* - The needs of the marine fisheries product export sector are better understood, the sector is better structured, the policy dialogue with the Government is enhanced, and the enabling business environment is improved;
- *Outcome #2* - A group of marine fisheries processors have become export-ready and are increasing their export business including to new markets;

The specific objectives are:

- To create the necessary environment for developing the fish trade sector, contributing for the development of export operators;
- To improve the Cambodian export quality infrastructure system (standardization, conformity assessment, export quality testing).

2. Project Background and context

The main planned goals of the CEDEP II Project are:

1. To better structure the sector of small and medium sized processors and exporters in marine fishery products. A value chain study(ies) will be formulated to analyze the structure of the sector, provide a detailed review of legal and regulatory requirements, understand trade facilitation issues, explore export opportunities and requirements, etc. This information will be used, in turn, as one component to help strengthen the product specific associations and their ability to dialogue with Government through the creation of an Apex body;
2. To identify a group of small and medium-sized Cambodian processors that can receive targeted technical support to improve their export readiness through (1) identification of markets, development of market contacts, match-making with import buyers, through trade missions and trade fairs, etc., (2) becoming SPS compliant to meet requirements of “formal” (as opposed to “informal”) export markets; (3) identifying possible negative environmental impacts and possible mitigations as appropriate; and (4) branding some of their exports;
3. To disseminate lessons learned from 2 above to the larger community of producer associations in the three coastal provinces.

This component of CEDEP II focusing on marine fisheries exports is designed to benefit from synergies and generate complementarities with the ongoing TDSP-funded fisheries project funded implemented by FiA with consulting inputs from UNIDO.

The CEDEP II project will focus on a selected group of processors to turn them from “near-export-ready” to “export-ready” by introducing SPS practice such as GMP and HACCP in an intense way among the aforementioned group of processors. In addition, resources targeted will be used to take the selected group of export-ready processors to selected foreign markets for market development purpose (develop contract opportunities, etc.). Likewise, the project will seek to create an Apex Association to provide the local associations created with assistance from FiA (with support from TDSP) that can provide a channel for the sector to express its interests in some of the policy dialogues that take place in the Fisheries Government-Donor Technical Working Group. One of the analytical foundations for organizing an Apex Association around policy needs critical to the sector will be the value chain study work.

In the indicative activities of the Work Plan for the Marine Fisheries exports component of CEDEP II it is indicated a survey of capacity gaps at the processor level will be developed. The results of the survey will help the project team acquire a more in-depth understanding of potential “export-ready” processors. These findings, together with knowledge acquired through the value chain analysis(es), including a stronger understanding of import demand in potential foreign markets, will provide a basis to select a group of pilot processors to be targeted.

The Marine Fisheries Product component will target two main development impacts:

- Fisheries, including marine fisheries, are one of Cambodia Government’s priority sectors for export diversification. The sector employs thousands of people. Positive development of the sector supports Cambodia’s efforts to meet its MDGs through improved income of producers;
- The competitiveness of Cambodian marine fisheries exports increases resulting in opening of new markets (geographical and products) and improved pricing of its exports.

Those two key impacts are consistent with the five goals pursued under Cambodia’s Trade SWAp.

In reference to the identified two target outcomes:

- The first outcome is consistent with Objectives 1 and 2 of Trade Swap Pillar 2.
- The second outcome is consistent with Objective 3 of Trade Swap Pillar 2.

3. Methodology and activities

To assess the Cambodia Standards (CS) the consultants undertook the following activities and tasks:

- A. Assessment of compatibility of CS with International Standards, with particular focus to SPS requirements.

A.1 – Identification of existing fish and food related Standards, either in the form of formal standards or any other regulatory form.

The following institutions were consulted:

- Institute of Standards of Cambodia
- Fisheries Administration (Department of Post-Harvest)
- Camcontrol
- Ministry of Industry and Handicraft
- ILCC

A.2 – Review and analysis of Standard content:

- in terms of their compatibility with international Standards, in particular regarding the SPS requirements;

- in terms of their constraints and potential for improving the export quality infrastructure of Cambodia, supporting and contributing for upgrading the sector operators in the context of export development.

A.3 – Cross-checking the Regulatory inter-action with CS, in the sense of mandatory / voluntary status of the Standards and their impact on the industry.

B. Assessment of Standards Infrastructure (SI), focusing on SPS conditions of Fish and Fishery Products.

This assessment was undertaken taking into account the 3 main levels of SI, as shown in box below:

BOX 1: Standards Infrastructure	
Regulatory and Standardization provisions	These provide the legal basis and/or necessary Standards – through Law /technical regulations or voluntary/mandatory standards – which will sustain the conformity assessment systems to be carried out for final certification of products.
Conformity Assessment Schemes	Mechanisms to verify compliance of existing requirements and dispositions (mandatory or voluntary).
Accreditation	Recognition of verification systems according to specific rules, criteria and requirements (international). Insurance that conformity assessment is working well achieving the objectives. Provision of recognized capacity for certification issuance.

For this purpose it was done:

- collection and review of existing relevant Legislation / Standards, in particular in terms of provision of the necessary export background as per the international SPS requirements.
- Analysis of the existing SPS conformity assessment schemes
- Identification of accreditation status acquired in the country

The assessment which was done, considered also the EU import requirements for animal products, in particular FFP. These were used as a model for targeting one of the most stringent but also required markets of FFP exporters, regarding the trend that most of the import requirements of other importing countries follow the same or very similar approach of the EU. A summary of the sanitary EU import requirements are presented in Box 2.

C. Adequacy of Cambodian import requirements

C.1 – Collection and review of fish import requirements in Cambodia, against international SPS requirements.

BOX 2: Summary of Sanitary EU import requirements	
Three Basic Sanitary Requirements are necessary to be fulfilled:	
1. Official Controls	Official controls are undertaken by formally established Competent Authority of exporting country, which should be equivalent to the OC in the EU countries and recognition shall be acquired by the EU through a Council Decision laying down: "Special Conditions Governing Imports of Fishery and Aquaculture Products Originating in" following an audit visit to the country by EU-DG Sanco.
2. Industry Operators – Export Establishments,	

Exporting establishments need to have an EU Approval Number and be listed in EU list of approved establishments. Approval is annually given in reference to their compliance (accomplishment and performance of EU hygiene requirements) in particular in the implementation of the HACCP System (in practice fulfilling high level performance).

3. Products Certification

Product when exported require a Health Certificate (EU format). Only EU Approved Establishments are eligible for exporting their products into EU market. Every export consignment from individual establishments requires a HC. The HC is issued by the CA of the exporting country.

Requires in summary:

- A. **Officially designated Competent Authority** with appropriate legal powers and capacity (resources, staff, equipment, organization) to fulfill effectively the task of Official Control.
- B. **Existence of appropriate Legislation in the country** to be equivalent to the European Legislation, covering the hygiene matters of fishery products and the organizational scheme for official controls.
- C. **Control procedures in place and effectively performed for establishment approval, surveillance and monitoring.**
- D. **Export Health Certification issuance organized in connection with outcomes of the control system applied to operators.**
- E. **Accredited laboratory testing capacity available** and able to support the verification, surveillance and monitoring activities.

The findings and recommendations derived from the assessment were presented in a final seminar with all the involved institutions and sector stakeholders, giving opportunity for discussion and explanation of the study preliminary findings.

4. Results and Findings

4.1. Characterization and coverage of the Standards

The consultants searched for all potential existing “*standardized* product related criteria, parameters and systems” related with Fish Products and other Foods, which could be in other formats than that from the usual so called formal Standards, for example developed through regulatory provisions (technical regulations). Therefore it was necessary to do a full review of existing regulations on fish and fish products.

The results are that only the Institute of Standards of Cambodia (ISC) have really dealt with such matters of standardization - product and processing parameters and criteria - as well as with Food Systems related standards. Although whenever a standard is developed it is drafted through a technical group comprising elements of the concerned Ministry Department with legal responsibilities over the product type.

In total Cambodia has 343 Food related Standards published by ISC, plus 3 draft fishery products standards. The total list is shown in annex 1. Of these, 21 are in-country developed standards (Table 1) written in Cambodian language, with only 4 regarding to Fish Products (included in these the 3 draft standards).

Eight of the 21 in-country Standards are mandatory as per indication of the present legislation, plus 1 mandatory CODEX adopted CS (in English), with all others having a voluntary status for being applied. Two of the mandatory standards are horizontal, meaning they will be applicable to all food products - Labelling and Contaminants and toxins (the latter although titled as contaminants and toxins seem to relate specifically to food additives). The remaining 6 all consist of vertical standards associated with specific products (Fish Sauce, Soy Sauce, Drinking water bottle, Drinking Ice, Mineral Water, and Instant Noodles).

Table 1: List of in-country developed standards and mandatory standards

	Standards Code	Standards Title	Status
1.	CS 001:2000	Labeling for food products	<i>mandatory</i>
2.	CS 004:2003	Vinegar	
3.	CS 005:2003	Fish sauce	<i>mandatory</i>
4.	CS 009:2005	Bottled Drinking Water	
5.	CS 051:2005	Chilli Sauce	
6.	CS 054:2007	Rice Flour	
7.	CS 055:2007	Edible Salt	
8.	CS 056:2007	Tapioca Flour	
9.	CS 057:2007	Dried Chilli	
10.	CS 058:2008	Tapioca Starch	
11.	CS 059:2008	Honey	
12.	CS 066:2011	Soy Sauce	<i>mandatory</i>
13.	CS 078:2012 Codex Stan 192-1995	Contaminants and Toxin in Food	<i>mandatory</i>
14.	CS 086:2012	Black and White Piper	
15.	CS 114:2011	Ground Coffee	
16.	CS 115:2012	Drinking Water Bottle Polyethylene Terehtahlate (pet)	<i>mandatory</i>
17.	CS 182: 2011	Drinking Ice	<i>mandatory</i>
18.	193: 2011	on natural mineral water	<i>mandatory</i>
19.	194: 2012	on Instant Noddle	<i>mandatory</i>
20.	CS522:2015 (DRAFT)	Standard for Dried fish (DRAFT)	
21.	CS523:2015 (DRAFT)	Standard for Fish paste (DRAFT)	
22.	CS005:2003 Rev.1.2014 (DRAFT)	Standard for Fish sauce (DRAFT)	

Of the total Standards, 322 are all International adopted Standards mainly from CODEX Standards, with 3 ASEAN Standards and 1 ISO Standard, all in English Language.

Out of the total Standards, 24 are specifically related with Fish and Fish Products consisting of CODEX adopted Standards (all in English). There is 1 horizontal Standard applied to all fish products consisting of the Code of Practice for Fish and Fishery Products. All the rest are specific vertical standards of which, 12 are related or potentially related in the short-term with the Cambodian Fish Sector production profile. These are highlighted below in Table 2.

Table 2: Specific Fish and Fish Products Standards

	Standards Code	Standards Title
1.	CS204:2014 CODEX STAN 36-1981	Standard for Quick Frozen Finfish, Eviscerated or Eviscerated
2.	CS218:2014 CODEX STAN 70-1981	Standard for Canned Tuna and Bonito
3.	CS230:2014 CODEX STAN 90-1981	Standard for Canned Crab Meat
4.	CS250:2014 CODEX STAN 119-1981	Standard for Canned Finfish
5.	CS260:2014 CODEX STAN 150-1985	Standard for Food Grade Salt
6.	CS268:2014 CODEX STAN 165-1989	Standard for Quick Frozen Blocks of Fish Fillets, Minced Fish Flesh and Mixtures of Fillets and Minced Fish Flesh
7.	CS269:2014 CODEX STAN 166-1989	Standard for Quick Frozen Fish Sticks (Fish Fingers), Fish Portions and Fish Fillets -Breaded or in Batter
8.	CS270:2014 CODEX STAN 167-1989	Standard for Salted Fish and Dried Salted Fish of the Gadded Family of Fishes
9.	CS289:2014 CODEX STAN 189-1993	Standard for Dried Shark Fins
10.	CS290:2014 CODEX STAN 190-1995	General Standard for Quick Frozen Fish Fillets

	Standards Code	Standards Title
11.	CS291:2014 CODEX STAN 191-1995	Standard for Quick Frozen Raw Squid
12.	CS317:2014 CODEX STAN 222-2001	Standard for Crackers from Marine and Freshwater Fish, Crustaceans and Mollusca Shellfish
13.	CS 113:2014Codex Stan 37-1981	Standard for Canned Shrimps or Prawns
14.	CS166:2014 CODEX STAN 95-1981	Standard for Quick Frozen Lobsters
15.	CS122:2014 CODEX STAN 311-2013	Standard for Smoked, Fish Smoke-Flavored Fish and Smoke-Dried Fish
16.	CS198:2014 CODEX STAN 3-1981	Standard for Canned Salmon
17.	CS334:2014 CODEX STAN 244-2004	Standard for Salted Atlantic Herring and Salted Sprat
18.	CS375:2014 CODEX STAN 291-2010	Standard for Sturgeon Caviar
19.	CS376:2014 CODEX STAN 292-2008	Standard for Live and Raw Bivalve Mollusca
20.	CS394:2014 CODEX STAN 312-2013	Standard for Live Abalone and for Raw Fresh Chilled or Frozen Abalone for Direct Consumption or for further Processing
21.	CS479:2014 CAC/RCP 23-1979	Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods
22.	CS490:2014 CAC/RCP 47-2001	Code of Hygienic Practice for the Transport of Food in Bulk and Semi-Packed Food
23.	CS495:2014 CAC/RCP 52-2003	Code of Practice for Fish and Fishery Products
24.	CS 164:2012CAC/RCP 8-1976	Code of Practice for the Processing and Handling of Quick Frozen Foods

From the total related food (and Fish and Fish Products) Standards, 81 (meaning 23%) consist of International horizontal standards potentially applicable to all products. The contents cover the following matters:

- Inspection and Control Systems
- Food Safety Systems
- Quality Control
- Laboratories
- Risk Analysis
- Risk Assessment
- MRLs
- Hygiene
- Handling
- Contaminants
- Testing
- Sampling
- Food Additives

4.2. General structure and contents of Fish Product CS

The FFP Standards focus exclusively on Product Composition and Quality and misperceive and miss important food safety elements which should be considered. On the other hand quality criteria is very poorly described. The 4 CS (consisting of fish products), including the draft CS, reveal to be quite weak in respect to the information that would be expected to be made available as specific guidance for the potential producer/processor to apply when he will develop his business operation.

The present FFP product related CS contain the following contents:

- a) Identify very briefly the processing process only through the definition of the product, not providing good process guidance for the operators.
- b) Identify the expected conditions and characteristics of the final product, mostly through chemical composition and sensory criteria (through very poor criteria).
- c) Mention contamination agents and deficiencies (wrongly and misleading).
- d) Identify certain testing criteria with reference to the expected limits and respective testing methodology, which refer to International reference methods.
- e) Identify labelling conditions and instructions, as per the regulations.
- f) Identify Sampling requirements.

They do not adequately cover or contain:

- a) Quality and food safety definitions and their respective separation.
- b) Respective food safety related hazards and respective controls guidance.
- c) Process parameters

4.2.1 Lack of GMP/GHP criteria

There is no specific GMP/GHP information made available, only a very brief 2 sentences definition about the product. Processing steps are not identified, processing parameters and criteria are not described, only final product chemical composition is described.

It is not clear if the intention would be to have a Code of Practice for each product (e.g. Fish Sauce) or just to describe the conditions of final product for end-product testing and inspection. If the intention was of being a Code of Practice then it totally fails the objective as the Standard do not provide any valuable practical information to be applied and followed. If the intention was only to focus on the final product, then it fails on the understanding of what is the modern concept of quality and food safety assurance of fish/food products and the respective verification of the production conditions and control systems in place. Instead of focusing on the process-control criteria, only targets final product testing.

A clear example of this, and which can be used to show the difference between code of practice and product composition based standard, is to compare the existing practical process / processing information within the CODEX Standards by product type, which are available in the CODEX adopted CS and the specific in-country developed CS.

4.2.2 Misleading and incorrect terminology

The 4 product CS, refers to incorrect sanitary definitions and terminology standards which mislead the operator and the authorities in respect to international SPS requirements. As example:

It is defined as “Defect” or “Defective” that “*the product must not contain harmful substances to human health*”. This is seriously incorrect as it falls under the definition of Food Safety and Hazard, while defect falls under the concept of loss of quality without safety implications.

4.2.3 Availability of Food Safety guidance information

There is no good and clear coverage of Food Safety guidance information available in the country for the operators, specifically identifying most relevant hazards and providing control guidance for each product.

The CS could perfectly cover this aspect which would be highly relevant for the development of the sector, in particular when there are no other legal information available. Although FiA has received project inputs in reference to these matters, very little has really been done in terms of dissemination to the operators.

In several countries similar approach has been applied for having good controls in-place related with FFP hazards.

4.2.4 Sensory Criteria provisions

Sensory assessment criteria are very poorly described and most of the time falling under subjectivity (e.g. using the word “delicious” to describe the descriptor for “taste” or “flavor” is not correct and is of subjective nature; using “signature characteristic” is also incorrect because “signature” needs itself to be described with specific characters). Each sensory attribute analyzed under specific sensory properties needs sound objective descriptors, as the following examples in box 3. In complement each one may also need further specific definition for full understanding of the assessors.

In addition, the scores used need to be clearly defined in connection with the descriptors.

Sensory assessment is of sound importance for identifying and classifying the product quality and also used as indicator of food safety issues. Therefore it is essential to have such tool very well identified and described to be properly applied.

It should be noted that the new draft for Fish Sauce is already a little better in this regard than the other Standards.

BOX 3: Sensory Attributes	
<u>Flavour:</u>	<u>instead of delicious, should be:</u> sweet, very sweet, creamy, fresh oil, neutral, sour, oxidised, putrid, musty, fermented, rancid, bitter, very bitter, alkaline, bland, chalky, chemical, fresh, metallic, salty, stony, sweet, tart, wooden
<u>Texture (by eating/tasting):</u>	succulent, firm, very firm, soft, pasty, gelatinous, dry, grainy, greasy, gritty, hairy, hard, leathery, lumpy, matte, metallic, moist, mushy, oily, powdery, prickly, resilient, rough, rubbery, sandy, semi-hard, semi-soft, sharp, silky, slick, slippery, smooth, soft, spongy, velvety, wet, wooden
<u>Odour:</u>	marine, cucumber, grass recently cut, neutral, musty, sour, cabbage, rotten cabbage, acrid, aromatic, chemical, earthy, fragrant, fresh, moist, moldy, musty, pungent, stale, sweet
<u>Color:</u>	amber, beige, black, blue, bronze, brown, bright, dark, green, orange, gray, pink, purple, red, silver, white, yellow, turquoise, yellowish green, yellowish orange, etc
<u>Appearance:</u>	dim, faded, fluorescent, golden, light, luminescent, mottled, pale, patterned, reflective, shadowed, shiny, speckled, tan, transparent.
<u>(Amongst others)</u>	

4.2.5 Testing criteria

The CS have several unsatisfactory testing criteria defined, in particular which bring a lack of compatibility with EU SPS requirements for testing criteria, as follows:

- i. Histamine testing

It is applicable to all 3 products covered by CS, although only mentioned in 2. The reference methodology (AOAC) is not acceptable for EU for which it is required to be applied an HPLC methodology.

Sampling: No. of minimum samples are not referred.

In the case of Fish Sauce, histamine is not even considered when it is a must in this type of product.

ii. Histamine limits

Maximum limits for histamine do not match with EU criteria.

In fact the EU SPS requirements have more favorable approach than what is considered in the CS, as shown in table below.

Table 3: Histamine sampling and testing criteria

Products	Sampling criteria	Limits:	CS Limits
Fishery products from fish species associated with a high amount of histidine	9 samples/lot (if fish, each sample from 1 individual fish)	Mean value must not exceed 100 ppm, 2 samples may exceed 100 ppm 0 samples to exceed 200 ppm.	100 ppm
Fishery products, except those below, which have undergone enzyme maturation treatment in brine, manufactured from fish species associated with a high amount of histidine	9 samples/lot (if fish, each sample from 1 individual fish)	Mean value must not exceed 200 ppm, 2 samples may exceed 200 ppm 0 samples to exceed 400 ppm.	200 ppm
Fish sauce produced by fermentation of fishery products	1	ppm	none

iii. Salmonella

Testing reference methodology indicated is wrong (EU reference method is: EN/ISO 6579).

iv. E. coli

Testing reference methodology indicated does not correspond to the EU reference (Method: ISOTS16649-3).

v. TVBN

TVBN is identified as testing method, however it is important to note that this parameter is not really used for food safety purposes and not really a powerful parameter for evaluating the quality of most products, especially when no reference values are indicated to be followed. TVBN varies according to species and products and must be formulated from specific research assessment for defining the applicable values.

In case this has not been done (which seems to be the case) then, it is absolutely essential to be undertaken before specifying the need of TVBN analysis.

4.2.6 Economical fraud of products;

The existing standards (and also the existing legislation) do not cover economical fraud of products, in particular with specific criteria and methods of control, namely covering:

- frozen products having excess proportion of water,
- chilled products, which are frozen and defrosted,
- ingredients not corresponding to real product composition,
- products produced with different species (usually of low commercial value) from what is expected or labeled,
- incorrect designation and designation of origin.

Although there is the potential for standards to have a role in this type of product fraud protection and control, this is not attained within CS contents.

4.3. Standards compatibility with international SPS requirements

The CS are in general quite acceptable as they are mostly International adopted Standards. Therefore, in general they do not represent any serious compatibility problem of SPS international requirements. Some exceptions need however to be made in case of the most stringent SPS markets like the EU, for example:

- Certain criteria of MRL in the CODEX Standards for contaminants are not the same as defined within the EU requirements, although there is trend for harmonisation;
- The testing methodologies referenced are all international reference methods from ISO or AOAC. This is positive in the sense that makes it easy and clear for being applied by the testing laboratories and will be accepted by most importing countries. Also facilitates validation and international recognition. However, in case of EU, it is required the application of ISO reference methods and therefore AOAC methods would not be compatible with EU requirements.
- Reference testing methods indicated in the CS, in some cases are not compatible with EU requirements as mentioned above in 4.2.

In the case of in-country developed CS, in particular those related with specific Cambodian products: Fish Sauce, Fish Paste and Dried Fish, more caution in this analysis should be taken. For such please see 4.5.

4.4. Standards compatibility with in-country legal provisions

In present there is no problem of compatibility with in-country technical regulations or others, basically because there are none. In fact there is a huge gap or outdated provisions in respect to SPS requirements in Cambodia, in reference to FFP specific hygiene requirements, as well for provisions covering the expected official controls. This fact remains as one of the biggest problems behind the development of the sector and operation of the CA due to not provide a clear legal background of the hygiene requirements for compliance by the operators.

4.5. Target contents and approach towards international trade

The contents of in-country developed CS (Fish Sauce, Fish Paste and Dried by focusing in product composition and “quality” have been developed without taking real account of the need for setting up the necessary conditions to reduce their impact on national or regional trade, although the objective of trade development could have been behind their drafting.

The application and enforcement of certain CS may have a significant negative impact with the requirements expected to be set out in national legislation - in particular conflicting definitions of food safety and the specific hygiene requirements for FFP - and consequently also with international legislation, in particular the EU hygiene regulations for the export of fish and fishery products.

In addition it is understood that the CS have been developed in such a way (focusing in product composition and poor quality criteria) that they do not really take into account the requirements of the WTO-SPS measures and TBT agreement. As a consequence, it is considered that the CS are potentially more trade restrictive than necessary and do not follow the policy ends of sector development and product improvement. This may also result in a negative trade impact to the ASEAN economic community's free market objectives.

Currently the approach towards an open market is not comprehensive and a number of deficiencies are apparent that can be attributed to the use of CS as a means of setting standards for the composition, quality etc., of FFP. Also the use of CS in this way introduces limitations for a free approach towards product development, and to the availability of a more diverse range of product types in the same category, where different quality grades may be accepted. The current approach based on the use of CS, leads to a situation in which quality and food safety criteria are intermingled and which does not really identify food safety as the main priority that has to be ensured, independent of the quality grade of the product.

By comparison, within the EU, food safety requirements are covered by regulations or directives, meaning that they are enshrined in law, while standardization organizations like ISO and the majority of national standard bodies in the EU no longer develop standards covering the composition of foods, product formulation, processing descriptions, etc. EU Commission, EU countries, also ISO organizations, have moved away from developing such standards and legislation and instead, relies on accurate labelling and quantitative ingredient declaration for further controls.

In the area of food safety, there are general standards (horizontal status) such as ISO 22000 – *Food Safety Management Systems* but these are not legal documents and food business operators are not necessarily required under the EU legal framework, to implement in full, the food safety requirements of ISO 22000. However the respective Competent Authorities when auditing food manufacturing or processing establishments for approval are likely to take account of ISO 22000 when considering whether or not an establishment can be approved.

4.6. Adequacy and relevancy of CS

The current CSs, which are product related, are largely inadequate and irrelevant to the development and effective operation of the Cambodian EQI.

Relevancy is quite limited mainly due to the fact that CSs do not give relevant guidance (food safety and process parameters) or set out mandatory specific criteria in the field of food safety hazards and their controls for application by the industry.

Food safety assurance is the most important component for compliance by the industry and to ensure entrance in export markets for the protection of the consumers, followed by the respective control and recognition of compliance by authorities. Such should be covered by effective food regulations. The same applies to product fraud (mainly product authenticity and composition which is trustworthy).

Due to a generalized lack of regulatory hygiene and food safety requirements, and complicated regulatory framework to develop necessary legislation as recognized by all departments contacted in the different ministries, it is important to highlight that CSs might be a relevant instrument to cover more quickly this gap.

The CS also do not deliver guidance towards application of processing parameters and good hygiene and manufacturing practices requirements set out in the respective legislation or which might be in future, which could have the potential to facilitate operation of the Cambodian EQI.

On the other hand, when CSs just stick to define product standards in terms of product composition and description and if these CSs are or become mandatory this will in consequence restrain manufacturers on the development of new products. Having EU as a reference it is important to note that the EU has moved away from developing such standards and legislation and instead, relies on accurate labelling and quantitative ingredient declaration.

However, even when considering the way that CSs have been developed in the country, these show poor adequacy as they do not really represent an important support to the industry in product development. The CODEX adopted standards are relevant for product development but the in-country developed standards are not. When considering the existent in-country developed CSs, they do not really fulfill their pre-defined purpose of giving specifications on how to produce the different products. They also do not give what could be understood as the necessary and adequate support to the industry in terms of international trade and export market requirements focused in food safety assurance systems, compliance with food safety hazards controls and related hygiene and manufacturing requirements.

In spite of the above and having present the policy objective of having CSs in the country and also their relevancy in covering the food safety regulatory gaps as mentioned above, then it would be a good opportunity to use the in-country developed CSs for the most appropriate guidance of the industry. Knowing that it is recognized that the value chain needs considerable improvement to develop and implement Good Hygiene Practices, Good Manufacturing Practices or on the implementation of HACCP system in their establishments, therefore the CSs could deliver specific guidance in this respect by product type (eg. boiled fish, cracker, fish ball etc).

4.7. Mandatory status of CS and relevancy of standards

Usually in other country contexts it is quite unusual to find mandatory product standards and when such exists there is always a risk of clashing and overlapping with sanitary technical regulations with a consequent loss of effectiveness of the operator's performance and of the enforcement system.

However in Cambodia this can be seen as a positive and alternative way to overcome the lack of specific and appropriate technical regulations, providing adequate guidance and defining the criteria for the operators to develop their production and processing activities under adequate food safety and quality margins.

Regarding that the drafting and approval of specific legislation has proved to be a difficult process if not almost impossible, due to the lack of consensus and understanding of all the Ministries involved, it looks like that developing these Standards maybe a way to overcome this weakness.

It should therefore be highlighted that the CS are of important relevancy in the context of the gap of official specifications available in the country. However, this should also be overlooked with caution due to the contents and information provided in the standards. In this respect please recall section 4.2.

4.8. Regulatory Provisions and Framework

The following consist of a summary of the relevant identified and potentially applicable SPS legislation to FFP, with particular focus to understand if the international dispositions required for the export of fishery products¹ are fulfilled.

Serious gaps and limitations are identified turning the regulatory framework very weak in respect to formalize and organize the CA for FFP OC and to provide the necessary hygiene requirements for the compliance of FFP operators.

¹Under the present sub-project the Consultants developed a guidance document consisting of a "Compilation of Legal and SPS Import Requirements" of several relevant Fish importing countries: Vietnam, China, Hong Kong, Korea, Canada, Norway and the EU.

Regulation and relevant references	Relevant content description	Highlight Notes	Comments and Observations
<p>Law on Fishery, 2006.</p> <p>(Art. 64, Art. 65, Art. 66, Art. 67, Art. 68, Art. 70, Art. 71 and Appendixes)</p>	<p><i>The provision of this law aims to ensure fisheries and fishery resource management, enhance aquaculture development, the management of production and processing, and to promote the livelihood of people in local communities for the social-economic and environmental benefits, including the sustainability of the conservation of biodiversity and natural culture heritages in the Kingdom of Cambodia. Commercial trading of fishery product can be taken place when:</i></p> <ul style="list-style-type: none"> • <i>A license has been issued by the head of the Central Fisheries Administration.</i> • <i>A license has been issued by the CITES Management Authority of Cambodia for endangered fishery products although it is not for commercial purposes.</i> • <i>A quality control certificate in fishery pathology has been issued depending on the demand of importing country.</i> • <i>Commercial transportation of fishery products needs a license and under inspection of fishery administration. The exports also need to be compliant with CITES convention.</i> 	<p>Identifies the requirement of quality control certification however in matters of fish pathology.</p> <p>No indication or provision about issuance of Health Certification for the exports.</p>	<p>Does not leave any indication to provide MAFF and FiA in particular, as Competent Authority.</p>
<p>Law on Cambodian Standards, 24 June 2007.</p> <p>(Art. 5, Art. 16, Art. 24 and Art. 25)</p>	<p><i>The law aims to enforce national standards for products, commodities, materials, services, practices, and operations and to promote adoption of such standards</i></p> <p><i>All products and systems must conform to mandatory standards of relevant ministries to ensure the safety and to prevent harmful effects to the public, industry, or national economy.</i></p> <p><i>Functions and Duties of the Institute of Standards of Cambodia (MIME)</i> <i>The main functions and duties of the Institute of Standards of Cambodia consist of the following:</i></p> <p><i>(a) to develop national standards for products, commodities, materials, services, practices and operations, and promote general adoption of such standards;</i> <i>(b) to operate conformity assessment scheme in accordance with the provisions set out in this law;</i> <i>(c) to establish and maintain laboratories, libraries, facilities and other equipments for the purpose of furthering standardization and quality;</i> <i>(d) to certify the conformity of products, commodities, substances, materials and equipments for local consumption or export according to the applicant's request;</i> <i>(e) to certify the conformity to a safety standard for products, commodities, substances, materials and equipment for local consumption or export according to the applicant's request;</i> <i>(f) to certify the conformity to the management system standards for production and service according to the applicant's request;</i> <i>(g) to suspend, withdraw and cancel license of product standards mark or certificate of conformity or certificate of registration or management system, or certificate of registration or accreditation;</i> <i>(h) to undertake research in connection with standardization;</i> <i>(i) to provide educational, training and consultancy services to promote standardization and quality;</i> <i>(j) to recognize laboratories, facilities and other equipment of local or foreign entity, for the purpose of the Institute;</i> <i>(k) to provide for cooperation with any person, international organization or foreign association having objectives similar to those of the Institute;</i></p>	<p>Gives a clear legal context for ISC to carry out conformity assessment, export certification in reference to health conditions (food safety).</p>	<p>Provides a good potential to consider ISC with the role of Competent Authority for FFP exports and also other food stuffs. There are cases of other countries to have the Standards Institution as CA.</p> <p>However, in terms of operational potential for such it is clearly limited and not recommendable due to:</p> <ul style="list-style-type: none"> - ISC does not have any specific capacity for FFP controls; - ISC has only very limited recognition for conformity assessment (has obtained accreditation for product certification but only for "bottles for drinking water");

	<p>(l) to foster and promote the implementation of standards and standardization as a means of advancement in the national economy, health, safety and public welfare; (m) to collaborate with the industrial, commercial and trading local authorities and other organizations to ensure the implementation of standards.</p>		
<p>Sub-decree No. 47 on Food Hygiene for Humans, 12 June, 2003.</p> <p>(Chapter II, Chapter III, Chapter IV, Chapter V, Chapter VI, Chapter VII, Chapter VIII and Chapter IX)</p>	<p>The sub-decree govern the implementation in all stages, starting from the beginning of production, namely harvesting, fishing, slaughtering, milk gathering, both during the preparation for products to be finished, processed, packaged, stored, transported, distributed, handled, displayed, for sales or during the sale of raw materials and delivery to consumers.</p> <p>The measure is intended to accomplish the implementation in a manner to prevent it from being infected, going bad, or spoilt, or the spread of all types of micro-organisms. They key contents are as follows:</p> <ul style="list-style-type: none"> • Places, building and annexes: these need to be cleaned and properly maintained for operation of activities- no insect, rats, rodents, sufficient lights and airs....ect. • Building rooms for food products to be prepared, treated and processed: floor, wall, and connecting wall shall be made of hard and smooth materials without any holes and cracks which are easily washed and disinfected. Room need to be prevented from being sources of contamination. • Transportation: all means of transportation need to be properly operated and maintained to avoid contamination. • Equipment: things used to handle foods need to be carefully washed and sterilized. Installation of materials and equipment need to be carried out in a way which can minimizes the risks of food contamination. • Wastes: all kinds of useless wastes shall be frequently discharged from working places. Room for storing wastes need to be permanently clean to prevent intersects and other bad animals. • Water supply: (i) adequate drinkable water, (ii) ice need to be produced from drinkable water, (iii) used vapor directly touching food products shall not contain any toxic substances. • Staff hygiene: bodies and cloths of staff shall be tightly clean. • Raw materials and ingredients: shall be produced under the regulations of law on the management of quality and safety of products and services. 	<p>Contains general hygiene specifications.</p> <p>Specific requirements and criteria for FFP are not available.</p>	<p>Quite good potential use.</p> <p>Could be used as the legal basis for guideline mandatory documents as have been developed previously.</p> <p>Its not understandable why this document does not receive a more proactive attention, regarding the absence of others.</p> <p>Although it provides hygiene criteria it would be necessary to undertake a revision and update of this document.</p> <p>Specific requirements and criteria for FFP are required.</p>
<p>Inter-Ministerial Prakas No. 868 On The Implementation And Institutional arrangements Of Food Safety Based On The Farm To Table Approach, 22 October, 2010.</p> <p>(Art. 12, Art. 15, Art. 17, Art. 19, Art. 20, Art. 22)</p>	<p>The provisions of the Prakas cover only food for commercial purpose and related activities at all stages of the food chain from primary production at farm to final consumer consumption. With the purpose to move towards building a Food Safety Policy on an integrated approach, the institutional arrangement under this Prakas clarifies accountability and effective roles and responsibilities of ministries and competent authorities:</p> <ul style="list-style-type: none"> • MAFF shall be the sole responsible agency and lead coordination to promote effective and efficient implementation of the tasks related to food and food business at primary production and processing. • MAFF has the task to implement verification program and issuing official health and quality certificates for export of food that are fishery products, processed fishery products, animal products and other agricultural products in a raw or primary processed form • MIME shall be the sole responsible agency and lead coordination to promote effective and efficient implementation of the tasks related to food and food business at secondary processing. • MIME has also the task to implement verification programs and issuing quality assurance certificates for export of secondary processed food products 	<p>Specifically specifies MAFF (FiA) as CA for issuing Health Certificate for FFP and to implement respective Verification Program. However, only applies for primary production and primary processing.</p> <p>QA Certificates and respective Verification Program</p>	<p>When crossing the full information and respective definitions, the understanding is that any small facility with simple chill storage and/or freezing equipment will fall under the criteria of having an SME establishment independently of the type of processing activity carried out in the facility, which means will be under the supervision control and certificate issuance of MIME.</p> <p>From above remember that ISC is institution of MIME and has already designated attributions of</p>

	<ul style="list-style-type: none"> The General Department of Camcontrol of the Ministry of Commerce (MOC) shall be the sole responsible agency and lead coordination to promote effective and efficient implementation of market surveillance in trading businesses on the market. Ministry of Health (MOH) shall be the sole responsible agency in leading effective and efficient coordination in the implementation of the following tasks related to food safety at the consumer sector. The General Department of Customs and Excise of Cambodia (GDCE) shall be the sole responsible agency in leading effective and efficient coordination in food safety inspection at the international checkpoint <p>Definitions:</p> <p>Primary processing: refers to agricultural products not changing the nature of the product itself, such as grinding, cleaning; husking; peeling, cutting and slicing; threshing and winnowing; animal slaughter; gutting, skinning, drying, boning and filleting; preservation by traditional means and other technologies, <u>but primary processing shall not include processing activities that are carried out in Small, Medium and Large factory and handicraft units as defined in Article 2 and Article 4 of the Law on Administration of Factory and Handicraft promulgated by Royal Decree No. NS/RKM/0606/018.</u></p> <p>Secondary processing: means production or transforming by further processing beyond the primary stage, such as grinding, purifying, sterilizing, mixing, cooking etc. that are carried out in the factory and handicrafts units .</p> <p>SME</p> <table border="1" data-bbox="421 874 1384 1054"> <thead> <tr> <th>Definition of SMEs in Cambodia: Source: Royal Government of Cambodia Sub-committee on SMEs (2005)</th> <th>Number of Employees</th> <th>Financial Determined by Assets excluding land (USD)</th> </tr> </thead> <tbody> <tr> <td>Micro</td> <td>Less than 11</td> <td>50,000</td> </tr> <tr> <td>Small</td> <td>11-50</td> <td>50,000-250,000</td> </tr> <tr> <td>Medium</td> <td>51-100</td> <td>250,000-500,000</td> </tr> <tr> <td>Large</td> <td>Over 100</td> <td>Over 500,000</td> </tr> </tbody> </table>	Definition of SMEs in Cambodia: Source: Royal Government of Cambodia Sub-committee on SMEs (2005)	Number of Employees	Financial Determined by Assets excluding land (USD)	Micro	Less than 11	50,000	Small	11-50	50,000-250,000	Medium	51-100	250,000-500,000	Large	Over 100	Over 500,000	<p>for secondary processing to be covered by MIME.</p>	<p>conformity assessment and certification on food safety.</p> <p>Although this piece of legislation has the objective to bring guidance On The Implementation And Institutional arrangements Of Food Safety Based On The Farm To Table, in fact it just turns the role of the involved different from what they claim.</p> <p>It turns out that the matter of designation of CA for FFP exports falls now more under the scope of MIME than of MAFF, although it is not mentioned Health Export Certification under the task of MIME.</p> <p>The practical arrangements is that this is not consensual at all between the involved Ministries.</p> <p>In relation of hygiene controls it is not however clear who would in fact be responsible.</p>
Definition of SMEs in Cambodia: Source: Royal Government of Cambodia Sub-committee on SMEs (2005)	Number of Employees	Financial Determined by Assets excluding land (USD)																
Micro	Less than 11	50,000																
Small	11-50	50,000-250,000																
Medium	51-100	250,000-500,000																
Large	Over 100	Over 500,000																
<p>Cambodia Trade Integration Strategy 2014-2018 (Inter-Ministerial Committee)</p>	<p>It is stated: "... Cambodia will also need to improve the functioning of the post-harvest components of the fish supply chain. A better-organized and well-coordinated supply chain will help drive private sector collaboration, promote investment, and implement export-oriented industry reforms. This includes the clear need to implement internationally recognized hygiene and health standards among fish processors to improve supply chain integrity as well as opening up access to key export markets. Cambodia's Fisheries Administration (FiA) should continue to pursue achieving accreditation as a "Competent Authority" to facilitate exports to the high-value EU market."</p>	<p>Specifically specifies MAFF (FiA) as CA</p>	<p>This strategic Inter-ministerial document brings again clear focus <u>on whom relies the responsibility of becoming CA</u> to achieve the necessary international recognition. Also specifically defines the focus of the CA in respect to controls <u>for hygiene compliance</u>. This fact may easily overcome the issues coming from</p>															

			the definitions of primary and secondary processing.
Prakas No. 183: Prohibited Chemical Substance on Food, 28 September 2006.	<i>The Prakas governs the chemical substances enlisted as prohibition to be used or place on food production, processing or sales places. The imports of foods also require to go through analysis on prohibited chemical substances.</i>	<i>None of the following prohibited substances are listed: Aristolochia spp. and preparations thereof Chloramphenicol Chloroform Chlorpromazine Colchicine Dapsone Dimetridazole Metronidazole Nitrofurans (including furazolidone) Ronidazole Malachite Green</i>	Not having the mentioned substances listed and under specific control, is an important gap related with aquaculture products controls. These prohibited substances are in-line with SPS requirements of most importing countries (if not all).
Prakas No.502: Sample and procedures of certificate for fishery product quality certification, 14 October, 2014. (Art. 1, Art. 2, Art. 3 and annex)	<i>The Prakas defines the sample and procedures of certificate for fishery product quality in the development of quality and safety control system to ensure the public health, to promote the market and competition on exports of fishery products in Cambodia. Every import of fishery product must have the quality certification issued by the exporting country, and must be inspected by the fishery administration officials.</i>		
Law on Management of quality and safety of product (26 June 2000). (Art. 3, Art. 4, Art.5, Art. 6, Art. 10, Art. 12, Art. 14, Art. 27, Art. 28, Art. 29, Art. 30, Art. 32, Art. 33, Art. 37, Art. 42, Art. 43, Art. 44, Art. 45, Art. 46, Art. 47, Art. 59)	<i>The provision of this law covers all commercial enterprises, all manufacturers for commercial ends, importers, exporters, merchants, service providers, advertisers of products, goods and services, civic associations and non-governmental agencies in manufacturing, commerce, or humanitarian relief on manufacturing and commercialization of products in subject to consumers' health and safety. All imports, exports and trading of commodities are subjects to requirements such as: testing, certification, inspection, labelling and special authorization for some commodities.</i>	Specifies the inspection of products and operators, as well as the inspection powers.	A similar piece of legislation would be required for the CA for FFP in respect to the licensing and approval and routine inspection of the establishments.

<p>Sub-decree No. 21: The facilitation of trade through risk management, 01 March, 2006.</p> <p>(Art. 1, Art. 2, Art. 5, Art. 7, Art. 15 and attachment)</p>	<p><i>The sub-decree aims to increase the effectiveness of management of export and import operations through the application of risk management by establishing an Inter-Agency Coordination Group comprising representatives from:</i></p> <ul style="list-style-type: none"> • <i>Custom and Excise Department</i> • <i>CAMCONTROL</i> • <i>Ministry of Commerce</i> • <i>Ministry of Health</i> • <i>Ministry of Agriculture, Forestry and Fisheries</i> • <i>Ministry of Industry, Mine and Energy</i> • <i>Special Economic Zone Committee</i> • <i>Other government agencies determined by Sub-decree</i> <p><i>The Customs and Excise Department is a single leading agency with responsibility for inspecting goods at the international border checkpoints and if there is a need for more than one agency to inspect in accordance to risk identified, this inspection must be carried out as a single, joint agency examination under the coordination of the Customs and Excise Department.</i></p>		
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4.9. Standards Infrastructure

The Standards Infrastructure is characterized to be very weak, within the 3 levels of SI. This very weak status in the country's legal and formal organization prevails within at least the past 10 years, while within the SI for fish products at the private level it has just a residual expression. The following gaps and deficiencies of the SI may be pinpointed for each of the SI levels:

Level I - Regulatory and Standardization provisions

- i. Inexistence of clear and consensual in-country Competent Authority to undertake sanitary FFP OC and respective sanitary certification.
- ii. Inexistence of adequate and appropriate food hygiene technical regulations for foods, in particular for fish and fish products in-line with SPS international requirements.
- iii. Inexistence of modern Food Safety Law, with consensual integration of the different authorities and legal roles, in-line with SPS international requirements.
- iv. Mandatory Standards reveal great insufficiency to cover adequately fish and fish products in the country.
- v. Voluntary Standards, although mostly adopted from CODEX Standards, may not cover the needs and requirements of the most stringent SPS markets like the EU.
- vi. Voluntary Standards and Standards Framework only provide the potential for private international certification schemes of ISO 9001.

Level II - Conformity Assessment

- i. Inexistence of organized and operating CA, although tools (inspection/audit procedures, checklists, guidelines) have been provided by EU funded projects to support capacity building and institutional development of the required CA, during the last 10 years and very recently.
- ii. The conformity assessment, is often performed by laboratories, or is based on end-product testing. The modern concept of product control and food safety controls is not understood in general by the authorities and remains as a major concern and weakness of the control systems.
- iii. The lack of recognized conformity assessment has been also inferred to sometimes exporters needing to perform double testing in both Cambodia and importing countries. In some cases, importers dispatch their expert group to conduct field inspections in the factory to evaluate whether exported products are compliant with desirable conditions against their standards or of the import country standards. Sometimes, these are characterized by the presence of company inspectors for the process control during the production.
- i. Conformity assessment is operational for International voluntary standards, but very limited. It is only available for ISO 9001 or product certification for only "bottle of drinking water".
- ii. Conformity assessment is operating at the level of laboratory testing with at least 3 available laboratories, although do not cover the full scope of analytical needs for SPS requirements and might also have a high cost. In consequence operators also fall back on external testing (out of the country).

Level III - Accreditation

- i. Inexistence of operational and recognized Competent Authority and Official Controls for controlling the exports and establishments producing fishery products. This is a fact in terms of recognition from the EU DG Sanco, but the same also applies with neighbor countries from which Cambodia have not reached any bilateral export agreement.
- ii. In consequence of the latter, exporters still depend heavily on negotiations with importing countries and buyers. The intervention of importers on how to overcome importing procedures in terms of standard certifications are obviously common practice in Cambodia.
- iii. Import controls have support of laboratory which is in the process of acquiring accreditation of several methodologies.
- iv. ISC has achieved recognition being accredited for ISO 9001 and Product certification, although only for 1 product (bottles for drinking water); Other else is very limited in terms of capacity to achieve the respective accreditation for food safety controls, in particular with no specific capabilities for FFP.
- v. ISC has however the direct support of accredited laboratory methodologies.

4.10. Import Requirements

There are no formal specific import requirements criteria in the country. It is only defined that it is Camcontrol which has the role to provide the authorization and controls of the imported goods. Camcontrol facilitates the process by just requesting and accepting the entrance of consignments accompanied with a Health Certificate issued by the Competent Authority of the respective exporting country. Therefore any requirements for such issuance of the HC will be accepted by Camcontrol independently of the criteria defined by each country to certify their respective exports.

In addition, Camcontrol may also undertake complementary testing to the HC or in case there is no HC. The Laboratory testing criteria and limits applied can be from CODEX standards, or from the country or region of origin of the goods. This information was directly provided by Camcontrol.

5. Conclusions and Recommendations

5.1. SPS Requirements for FFP exports

Having as model the EU SPS import requirements for FFP the conclusion is that Cambodia is in a very weak status to be able to fulfill the basic and full conditions. In summary the following is concluded:

Required Conditions	Conclusions
A. Officially designated Competent Authority with appropriate legal powers and capacity (resources, staff, equipment, organization) to fulfill effectively the task of Official Control.	Not in place. Not effective. Not operational. A lot is necessary to be done in order to achieve the fulfillment of the requirements.

B. Existence of appropriate Legislation in the country to be equivalent to the European Legislation, covering the hygiene matters of fishery products and the organizational scheme for official controls.	Very weak framework does not provide the necessary support for the operation of the Official Controls.
C. Control procedures in place and effectively performed for establishment approval, surveillance and monitoring.	Not in place. Not operational. Inconsistence.
D. Export Health Certification issuance organized in connection with outcomes of the control system applied to operators.	Not in place. Not operational.
E. Accredited laboratory testing capacity available and able to support the verification, surveillance and monitoring activities.	Exists, but is neglected by the CA. May provide the necessary support for the operation of Official Controls.

5.2. In-country developed FFP Standards

In respect to the existing standards, namely those related with specific traditional Cambodian products the relevancy of CS in their present objectives and purposes is quite poor due to not really achieve those objectives in the contents of the standards. To this end, the target processing specifications are not effectively identified nor described with good information, which could at least have the potential to support the manufacturers in developing the processing procedures, plus the focus area which they should attend - food safety hazards and controls guidance - is not covered at all or is wrongly addressed.

Identification of specific criteria or guideline information to be followed for specific food safety hazards is in fact absent. Characteristic hazards associated to specific raw materials and specific final products introduced or enhanced by certain processing technologies are not at all identified, described and highlighted for application of respective controls by the industry. Most relevant hazards and respective controls specific to each product are not identified and do not receive any type of focus and guidance. Inclusion of such information could be a very important and positive approach and enable the use of CSs to provide support and guidance to the industry.

CSs lack details on technical characteristics or processing values to be followed, which if included could represent important guidance to be applied by the operators for potential use and to support the activities of the industry and application of the relevant good manufacturing and hygiene practices and associate those to the safety assurance systems. In the Technical opinion of the consultants, these CS would better serve the sector by addressing specific GMP/GHP (product related).

5.3. Specific Recommendations

Recommended Priority Actions

- a) Review and improvement of the legislation framework in-line with the international import requirements.
- b) Designate the CA for FFP exports, with clear, consensual and formal status.

- c) Develop and implement the necessary conformity assessment for FFP exports – To put control procedures in place and effectively performed for establishment approval, surveillance and monitoring, linking the system to Export Health Certification issuance.
- d) Improvement and development of standard(s) complementary to the technical regulations capable of providing good support for the operation of the industry, having attention for not having conflicting requirements.
- e) Improve the standards with good technical guidance in respect to processing values to be followed, or for potential use, supporting the activities of the industry and application of the relevant good manufacturing and hygiene practices and associate those to the safety assurance systems.
- f) Improve the standards with in-depth sound sensory characters and chemical parameters.
- g) Revision of standards in-line with SPS requirements, namely in reference to analytical testing parameters, methods and criteria.

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- Guidance document on the implementation of certain provisions of Regulation (EC) No 853/2004 on the hygiene of food of animal origin:
http://ec.europa.eu/food/food/biosafety/hygienelegislation/docs/guidance_doc_853-2004_en.pdf
- Guidance document on the implementation of procedures based on the HACCP principles, and on the facilitation of the implementation of the HACCP principles in certain food businesses:
http://ec.europa.eu/food/food/biosafety/hygienelegislation/guidance_doc_haccp_en.pdf
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ANNEX I

ISC List of Cambodian Standards on Fish and Food Products and food related systems and conditions

Standards Code	Standards Title
CS 001: 2000	Labeling for food products
CS 004:2003	Vinegar
CS 005:2003	Fish sauce
CS 009:2005	Bottled Drinking Water
CS 051:2005	Chilli Sauce
CS 054:2007	Rice Flour
CS 055:2007	Edible Salt
CS 056:2007	Tapioca Flour
CS 057:2007	Dried Chilli
CS 058:2008	Tapioca Starch
CS 059:2008	Honey
CS 083 : 2011	ASAEN Common Principles for Food Control System
CS 084 : 2011	ASAEN Common Principles and Requirements for Food Hygiene
CS 085 : 2011	ASAEN Common Principles and Requirements for the Labelling of Prepackaged Food
CS ISO 22000:2011	ISO 22000:2005 Food Safety Management System - Requirements for any organization in the food chain
CS 066:2011	Soy Sauce
CS 086:2012	Black and White Piper
CS 114:2011	Ground Coffee
CS 115:2012	Drinking Water Bottle Polyethylene Terehtahlate (pet)
CS 078:2012 Codex Stan 192-1995	General Standard for Contaminants and Toxin in Food
CS 080:2012 Codex Stan 192-1995	General Principle for use Food Additive in Food
CS 093:2012 Codex Stan192-1995	General Standard of Food Additive
CS 113:2014Codex Stan 37-1981	Standard for Canned Shrimps or Prawns
CS163:2014CODEX STAN 42-1981	Standard for Canned Pineapple
CS166:2014 CODEX STAN 95-1981	Standard for Quick Frozen Lobsters
CS118:2014CODEX STAN 115-1981	Standard for Pickled Cucumbers
CS150:2014CODEX STAN 152-1985	Standard for Wheat Flour
CS139:2014 CODEX STAN 159-1987	Standard for Canned Mangoes
CS146:2014CODEX STAN 247-2005	General Standard for Fruit Juices and Nectars
CS122:2014 CODEX STAN 311-2013	Standard for Smoked, Fish Smoke-Flavored Fish and Smoke-Dried Fish
CS198:2014 CODEX STAN 3-1981	Standard for Canned Salmon
CS111:2014 CAC/GL 83- 2013	Principles sampling and testing in international food trade
CS200:2014CODEX STAN 13-1981	Standard for Preserved Tomatoes
CS201:2014CODEX STAN 17-1981	Standard for Canned Applesauce

Standards Code	Standards Title
CS202:2014CODEX STAN 19-1981	Standard for Edible Fats and Oils not Covered by Individual Standards
CS203:2014CODEX STAN 33-1981	Standard for Olive Oils and Olive Pomade Oils
CS204:2014 CODEX STAN 36-1981	Standard for Quick Frozen Finfish, Eviscerated or Eviscerated
CS205:2014CODEX STAN 38-1981	Standard for Edible Fungi and Fungus Products
CS206:2014CODEX STAN 39-1981	Standard for Dried Edible Fungi
CS207:2014 CODEX STAN 40R-1981	"Chanterelle" Standard for Fresh Fungus "Chanterelle"
CS208:2014CODEX STAN 41-1981	Standard for Quick Frozen Peas
CS209:2014CODEX STAN 52-1981	Standard for Quick Frozen Straw berries
CS210:2014CODEX STAN 53-1981	Standard for Special Dietary Foods with Low-Sodium Content
CS211:2014CODEX STAN 57-1981	Standard for Processed Tomato Concentrates
CS212:2014 CODEX STAN 60-1981	Standard for Canned Raspberries
CS213:2014 CODEX STAN 61-1985	Standard for Canned Pears
CS214:2014 CODEX STAN 62-1981	Standard for Canned Strawberries
CS215:2014 CODEX STAN 66-1981	Standard for Table Olives
CS216:2014 CODEX STAN 67-1981	Standard for Raisins
CS217:2014 CODEX STAN 69-1981	Standard for Quick Frozen Raspberries
CS218:2014 CODEX STAN 70-1981	Standard for Canned Tuna and Bonito
CS219:2014 CODEX STAN 72-1981	Standard for Infant Formula and Formulas for Special Medical Purposes Intended for Infants
CS220:2014 CODEX STAN 73-1981	Standard for Canned Baby Foods
CS221:2014 CODEX STAN 74-1981	Standard for Processed Cereal-Based Foods for Infants and Young Children
CS222:2014 CODEX STAN 75-1981	Standard for Quick Frozen Peaches
CS223:2014 CODEX STAN 76-1981	Standard for Quick Frozen Bilberries
CS224:2014 CODEX STAN 77-1981	Standard for Quick Frozen Spinach
CS225:2014 CODEX STAN 78-1981	Cocktail Standard for Canned Fruit Cocktail
CS226:2014 CODEX STAN 86-1981	Standard for Cocoa Butter
CS227:2014 CODEX STAN 87-1981	Standard for Chocolate
CS228:2014 CODEX STAN 88-1981	Standard for Corned
CS229:2014 CODEX STAN 89-1981	Standard for Luncheon Meat
CS230:2014 CODEX STAN 90-1981	Standard for Luncheon Meat

Standards Code	Standards Title
CS230:2014 CODEX STAN 90-1981	Standard for Canned Crab Meat
CS233:2014 CODEX STAN 96-1981	Standard for Cooked Cured Ham
CS234:2014 CODEX STAN 97-1981	Standard for Cooked Cured Pork Shoulder
CS235:2014 CODEX STAN 98-1981	Standard for Cooked Cured Chopped Meat
CS236:2014 CODEX STAN 99-1981	Standard for Canned Tropical Fruit Salad
CS237:2014 CODEX STAN 103-1981	Standard for Quick Frozen Blueberries
CS238:2014 CODEX STAN 104-1981	Standard for Quick Frozen Blueberries
CS239:2014 CODEX STAN 105-1981	Standard for Cocoa powders (cocoas) and dry mixtures of cocoa and sugars
CS240:2014 CODEX STAN 106-1983	General Standard for Irradiated Foods
CS241:2014 CODEX STAN 107-1981	General Standard for the Labeling of Food Additives when sold as such
CS242:2014 CODEX STAN 108-1981	Standard for Natural Mineral Waters
CS243:2014 CODEX STAN 110-1981	Standard for Quick Frozen Broccoli
CS244:2014 CODEX STAN 111-1981	Standard for Quick Frozen Cauliflower
CS245:2014 CODEX STAN 112-1981	Standard for Quick Frozen Brussels Sprouts
CS246:2014 CODEX STAN 113-1981	Standard for Quick Frozen Green and Wax Beans
CS247:2014 CODEX STAN 114-1981	Standard for Quick Frozen French Fried Potatoes
CS248:2014 CODEX STAN 117-1981	Standard for Bouillons and Consommés
CS249:2014 CODEX STAN 118-1981	Standard for Foods for Special Dietary Use for Persons Intolerant to Gluten
CS250:2014 CODEX STAN 119-1981	Standard for Canned Finfish
CS251:2014 CODEX STAN 130-1981	Standard for Dried Apricots
CS252:2014 CODEX STAN 131-1981	Standard for Unshelled Pistachio Nuts
CS253:2014 CODEX STAN 132-1981	Standard for Quick Frozen Whole Kernel Corn
CS254:2014 CODEX STAN 133-1981	Standard for Quick Frozen Corn-on-the-Cob
CS255:2014 CODEX STAN 140-1983	Standard for Quick Frozen Carrots
CS256:2014 CODEX STAN 141-1983	Standard for Cocoa (Cacao) Mass (Cocoa/Chocolate Liquor) and Cocoa Cake
CS258:2014 CODEX STAN 145-1985	Standard for Canned Chestnuts and Chestnut Purée
CS259:2014 CODEX STAN 146-1985	General Standard for the Labeling of and Claims for Prepackaged Foods for Special Dietary Uses
CS260:2014 CODEX STAN 150-1985	Standard for Food Grade Salt
CS261:2014 CODEX STAN 151-1985	Standard for Geri

Standards Code	Standards Title
CS262:2014 CODEX STAN 153-1985	Standard for Maize (Corn)
CS263:2014 CODEX STAN 154-1985	Standard for Whole Maize (Corn) Meal
CS264:2014 CODEX STAN 155-1985	Standard for Degreed Maize (Corn) Meal and Maize (Corn) Grits
CS266:2014 CODEX STAN 160-1987	Standard for Mango Chutney
CS267:2014 CODEX STAN 163-1987	Standard for Wheat Protein Products
CS268:2014 CODEX STAN 165-1989	Standard for Quick Frozen Blocks of Fish Fillets, Minced Fish Flesh and Mixtures of Fillets and Minced Fish Flesh
CS269:2014 CODEX STAN 166-1989	Standard for Quick Frozen Fish Sticks (Fish Fingers), Fish Portions and Fish Fillets -Breaded or in Batter
CS270:2014 CODEX STAN 167-1989	Standard for Salted Fish and Dried Salted Fish of the Gadded Family of Fishes
CS271:2014 CODEX STAN 169-1989	Standard for Whole and Decorticated Pearl Millet Grains
CS272:2014 CODEX STAN 170-1989	Standard for Pearl Millet Flour
CS273:2014 CODEX STAN 171-1989	Standard for Certain Pulses
CS274:2014 CODEX STAN 172-1989	Standard for Sorghum Grains
CS275:2014 CODEX STAN 173-1989	Standard for Sorghum Flour
CS276:2014 CODEX STAN 174-1989	General Standard for Vegetable Protein Products
CS277:2014 CODEX STAN 175-1989	Standard for Soy Protein Products
CS278:2014 CODEX STAN 177-1991	Standard for Grated Desiccated Coconut
CS279:2014 CODEX STAN 178-1991	Durum Standard for Durum Wheat Semolina and Durum Wheat Flour
CS280:2014 CODEX STAN 180-1991	Standard for Labeling of and Claims for Foods for Special Medical Purposes
CS281:2014 CODEX STAN 181-1991	Standard for Formula Foods for Use in Weight Control Diets
CS282:2014 CODEX STAN 182-1993	Standard for Pineapple
CS283:2014 CODEX STAN 183-1993	Standard for Papaya
CS284:2014 CODEX STAN 184-1993	Standard for Mangoes
CS286:2014 CODEX STAN 186-1993	Standard for Prickly Pear
CS287:2014 CODEX STAN 187-1993	Standard for Carrabolla
CS288:2014 CODEX STAN 188-1993	Standard for Baby Corn
CS289:2014 CODEX STAN 189-1993	Standard for Dried Shark Fins
CS290:2014 CODEX STAN 190-1995	General Standard for Quick Frozen Fish Fillets
CS291:2014 CODEX STAN 191-1995	Standard for Quick Frozen Raw Squid
CS292:2014 CODEX STAN 193-1995	General Standard for Contaminants and Toxins in Food and Feed

Standards Code	Standards Title
CS293:2014 CODEX STAN 196-1995	Standard for Litchi
CS294:2014 CODEX STAN 197-1995	Standard for Avocado
CS295:2014 CODEX STAN 199-1995	Standard for Wheat and Durum Wheat
CS296:2014 CODEX STAN 200-1995	Standard for Peanuts
CS297:2014 CODEX STAN 201-1995	Standard for Oats
CS298:2014 CODEX STAN 202-1995	Standard for Couscous
CS299:2014 CODEX STAN 203-1995	Standard for Formula Foods for Use in Very Low Energy Diets for Weight Reduction
CS300:2014 CODEX STAN 204-1997	Standard for Mangos teens
CS301:2014 CODEX STAN 205-1997	Standard for Bananas
CS302:2014 CODEX STAN 206-1999	General Standard for Use of Dairy Terms
CS303:2014 CODEX STAN 207-1999	Standard for Milk Powders and Cream Powder
CS304:2014 CODEX STAN 208-1999	Standard for Cheeses in Brine (Group Standard)
CS305:2014 CODEX STAN 210-1999	Standard for Named Vegetable Oils
CS306:2014 CODEX STAN 211-1999	Standard for Named Animal Fats
CS307:2014 CODEX STAN 212-1999	Standard for Sugars
CS308:2014 CODEX STAN 213-1999	Standard for Limes
CS309:2014 CODEX STAN 214-1999	Standard for Pummels (Citrus grand
CS310:2014 CODEX STAN 215-1999	Standard for Guavas
CS311:2014 CODEX STAN 216-1999	Standard for chayote
CS312:2014 CODEX STAN 217-1999	Standard for Mexican Limes
CS313:2014 CODEX STAN 218-1999	Standard for Ginger
CS314:2014 CODEX STAN 219-1999	Standard for Grapefruits (Citrus paradise)
CS315:2014 CODEX STAN 220-1999	Standard for Longmans
CS316:2014 CODEX STAN 221-2001	Group Standard for Unripe Ned Cheese including Fresh Cheese
CS317:2014 CODEX STAN 222-2001	Standard for Crackers from Marine and Freshwater Fish, Crustaceans and Mollusca Shellfish
CS318:2014 CODEX STAN 223-2001	Standard for Kimchee
CS319:2014 CODEX STAN 224-2001	Standard for Tania
CS320:2014 CODEX STAN 225-2001	Standard for Asparagus
CS321:2014 CODEX STAN 226-2001	Standard for Cape Gooseberry

Standards Code	Standards Title
CS322:2014 CODEX STAN 227-2001	General Standard for Bottled/Packaged Drinking Waters (Other Than Natural Mineral Waters)
CS324:2014 CODEX STAN 231-2001	General Codex Methods for the Detection of Irradiated Foods
CS326:2014 CODEX STAN 236-2003	Standard for Boiled Dried Salted Anchovies
CS327:2014 CODEX STAN 237-2003	Standard for Pitahayas
CS328:2014 CODEX STAN 238-2003	Standard for Sweet Cassava
CS330:2014 CODEX STAN 240-2003	Standard for Aqueous Coconut Products: Coconut Milk and Coconut Cream
CS331:2014 CODEX STAN 241-2003	Standard for Canned Bamboo Shoots
CS332:2014 CODEX STAN 242-2003	Standard for Canned Stone Fruits
CS333:2014 CODEX STAN 243-2003	Standard for Fermented Milks
CS334:2014 CODEX STAN 244-2004	Standard for Salted Atlantic Herring and Salted Sprat
CS335:2014 CODEX STAN 245-2004	Standard for Oranges
CS336:2014 CODEX STAN 246-2005	Standard for Rambutan
CS337:2014 CODEX STAN 249-2006	Standard for Instant Noodles
CS338:2014 CODEX STAN 250-2006	Standard for a Blend of Evaporated Skimmed Milk and Vegetable Fat
CS339:2014 CODEX STAN 251-2006	Standard for a Blend of Skimmed Milk and Vegetable Fat in Powdered Form
CS340:2014 CODEX STAN 252-2006	Standard for a Blend of Sweetened Condensed Skimmed Milk and Vegetable Fat
CS341:2014 CODEX STAN 253-2006	Standard for Dairy Fat Spreads
CS342:2014 CODEX STAN 254-2007	Standard for Certain Canned Citrus Fruits
CS343:2014 CODEX STAN 255-2007	Standard for Table Grapes
CS344:2014 CODEX STAN 256-2007	Standard for Fat Spreads and Blended Spreads
CS345:2014 CODEX STAN 257R-2007	Regional Standard for Canned Humus with Tehama
CS346:2014 CODEX STAN 258R-2007	Regional Standard for Canned Foul me dames
CS347:2014 CODEX STAN 259R-2007	Regional Standard for Tehama
CS348:2014 CODEX STAN 260-2007	Standard for Pickled Fruits and Vegetables
CS349:2014 CODEX STAN 262-2006	Standard for Mozzarella
CS350:2014 CODEX STAN 263-1966	Standard for Cheddar
CS351:2014 CODEX STAN 264-1966	Standard for Dumbo
CS352:2014 CODEX STAN 265-1966	Standard for Edam
CS353:2014 CODEX STAN 266-1966	Standard for Gouda

Standards Code	Standards Title
CS354:2014 CODEX STAN 267-1966	Standard for Havarti
CS355:2014 CODEX STAN 268-1966	Standard for Samosa
CS356:2014 CODEX STAN 269-1967	Standard for Mental
CS357:2014 CODEX STAN 270-1968	Standard for Tipster
CS358:2014 CODEX STAN 271-1968	Standard for Saint-Pauline
CS359:2014 CODEX STAN 272-1968	Standard for Provolone
CS360:2014 CODEX STAN 273-1968	Standard for Cottage Cheese incl. Creamed Cottage Cheese
CS361:2014 CODEX STAN 274-1969	Standard for Coulometers
CS362:2014 CODEX STAN 275-1973	Standard for Cream Cheese
CS363:2014 CODEX STAN 276-1973	Standard for Camembert
CS364:2014 CODEX STAN 277-1973	Standard for Brie
CS365:2014 CODEX STAN 278-1978	Standard for Extra Hard Grating Cheese
CS366:2014 CODEX STAN 279-1971	Standard for Butter
CS367:2014 CODEX STAN 280-1973	Standard for Milk fat Products
CS368:2014 CODEX STAN 281-1971	Standard for Evaporated Milks
CS369:2014 CODEX STAN 282-1971	Standard for Sweetened Condensed Milks
CS370:2014 CODEX STAN 283-1978	General Standard for Cheese
CS371:2014 CODEX STAN 284-1971	Standard for Whey Cheeses
CS372:2014 CODEX STAN 288-1976	Standard for Cream and Prepared Creams
CS373:2014 CODEX STAN 289-1995	Standard for Whey Powders
CS374:2014 CODEX STAN 290-1995	Standard for Edible Casein Products
CS375:2014 CODEX STAN 291-2010	Standard for Sturgeon Caviar
CS376:2014 CODEX STAN 292-2008	Standard for Live and Raw Bivalve Mollusca
CS377:2014 CODEX STAN 293-2008	Standard for Tomatoes
CS378:2014 CODEX STAN 294R-2009	Regional Standard for Gochujang
CS379:2014 CODEX STAN 295R-2009	Regional Standard for Ginseng Products
CS380:2014 CODEX STAN 296-2009	Standard for Jams, Jellies and Marmalades
CS381:2014 CODEX STAN 297-2009	Standard for Certain Canned Vegetables
CS382:2014 CODEX STAN 298R-2009	Regional Standard for Fermented Soybean Paste

Standards Code	Standards Title
CS383:2014 CODEX STAN 299-2010	Standard for Apples
CS384:2014 CODEX STAN 300-2010	Standard for Bitter Cassava
CS385:2014 CODEX STAN 301R-2011	Regional Standard for Edible Sago Flour
CS386:2014 CODEX STAN 303-2011	Standard for Tree Tomatoes
CS387:2014 CODEX STAN 304R-2011	Regional Standard for Cilantro Coyote (LAC)
CS388:2014 CODEX STAN 305R-2011	Regional Standard for Lucama (LAC)
CS389:2014 CODEX STAN 306R-2011	Regional Standard for Chili Sauce (Asia)
CS390:2014 CODEX STAN 307-2011	Standard for Chili Peppers
CS391:2014 CODEX STAN 308R-2011	Regional Standard for Harass (Red Hot Pepper Paste)(Near East)
CS392:2014 CODEX STAN 309R-2011	Regional Standard for HalwaTehania (Near East)
CS393:2014 CODEX STAN 310-2013	Standard for Pomegranate
CS394:2014 CODEX STAN 312-2013	Standard for Live Abalone and for Raw Fresh Chilled or Frozen Abalone for Direct Consumption or for further Processing
CS395:2014 CODEX STAN 313R-2013	Regional Standard for Tempe
CS396:2014 CODEX STAN 314R-2013	Regional Standard for Date Paste (Near East)
CS397:2014 CAC/GL 50-2004	General guidelines on sampling
CS398:2014 CAC/GL 1-1979	General Guidelines on Claims
CS399:2014 CAC/GL 3-1989	Guidelines for Simple Evaluation of Food Additive Intake
CS400:2014 CAC/GL 4-1989	General Guidelines for the Utilization of Vegetable Protein Products (VPP) in Foods
CS401:2014 CAC/GL 8-1991	Guidelines for Formulated Complementary Foods for Older Infants and Young Children
CS402:2014 CAC/GL 9-1987	General Principles for the Addition of Essential Nutrients to Foods
CS403:2014 CAC/GL 10-1979	Advisory Lists of Nutrient Compounds for Use in Foods for Special Dietary Uses intended for Infants and Young Children
CS404:2014 CAC/GL 13-1991	Guidelines for the Preservation of Raw Milk by Use of the Lacto peroxidase System
CS405:2014 CAC/GL 14-1991	Guide for the Microbiological Quality of Spices and Herbs Used in Processed Meat and Poultry Products
CS406:2014 CAC/GL 17-1993	Guidelines Procedures for the Visual Inspection of Lots of Canned Foods for Unacceptable Defects
CS407:2014 CAC/GL 19-1995	Guidelines for the Exchange of Information in Food Control Emergency Situations
CS408:2014 CAC/GL 20-1995	Principles for Food Import and Export Certification and Inspection
CS409:2014 CAC/GL 21-1997	Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods
CS410:2014 CAC/GL 22R-1997	Regional Guidelines for the Design of Control Measures for Street-Vended Foods (Africa)
CS411:2014	Guidelines for Use of Nutrition and Health Claims

Standards Code	Standards Title
CAC/GL 23-1997	
CS412:2014 CAC/GL 24-1997	General Guidelines for Use of the Term Halal
CS413:2014 CAC/GL 25-1997	Guidelines for the Exchange of Information between Countries on Rejections of Imported Foods
CS414:2014 CAC/GL 26-1997	Guidelines for the Design, Operation, Assessment and Accreditation of Food Import and Export Inspection and Certification Systems
CS415:2014 CAC/GL 27-1997	Guidelines for the Assessment of the Competence of Testing Laboratories Involved in the Import and Export Control of Foods
CS416:2014 CAC/GL 28-1995	International Harmonized Protocol for the Proficiency Testing of (Chemical) Analytical Laboratories
CS417:2014 CAC/GL 30-1999	Principles and Guidelines for the Conduct of Microbiological Risk Assessment
CS418:2014 CAC/GL 31-1999	Guidelines for the Sensory Evaluation of Fish and Shellfish in Laboratories
CS419:2014 CAC/GL 32-1999	Guidelines for the Production, Processing, Labeling and Marketing of Organically Produced Foods
CS421:2014 CAC/GL 34-1999	Guidelines for the Development of Equivalence Agreements Regarding Food Imports and Export Inspection and Certification Systems
CS422:2014 CAC/GL 36-1989	Class names and the International Numbering System for food additives
CS428:2014 CAC/GL 45-2003	Guideline for the Conduct of Food Safety Assessment of Foods Derived from Recombinant-DNA Plants
CS429:2014 CAC/GL 46-2003	DNA Guideline for the Conduct of Food Safety Assessment of Foods Produced Using Recombinant-DNA Microorganisms
CS430:2014 CAC/GL 47-2003	Guidelines for Food Import Control Systems
CS431:2014 CAC/GL 48-2004	Model Certificate for Fish and Fishery Products
CS432:2014 CAC/GL 49-2003	Harmonized IUPAC Guidelines for Single-Laboratory Validation of Methods of Analysis
CS433:2014 CAC/GL 51-2003	Guidelines for Packing Media for Canned Fruits
CS434:2014 CAC/GL 53-2003	Guidelines on the Judgment of Equivalence of Sanitary Measures associated with Food Inspection and Certification Systems
CS435:2014 CAC/GL 54-2004	Guidelines on Measurement Uncertainty
CS436:2014 CAC/GL 55-2005	Guidelines for Vitamin and Mineral Food Supplements
CS438:2014 CAC/GL 57R-1999	Regional Guidelines for Codex Contact Points and National Codex Committees (Asia)
CS439:2014 CAC/GL 58R-2005	Regional Guidelines for Codex Contact Points and National Codex Committees (Near East)
CS440:2014 CAC/GL 59-2006	Guidelines on Estimation of Uncertainty of Results
CS441:2014 CAC/GL 60-2006	Principles for Traceability / Product Tracing as a Tool Within a Food Inspection and Certification System
CS442:2014 CAC/GL 61-2007	Guidelines on the Application of General Principles of Food Hygiene to the Control of <i>Listeria monocytogenes</i> in Ready-to-Eat Foods
CS443:2014 CAC/GL 62-2007	Working Principles for Risk Analysis for Food Safety for Application by Governments
CS444:2014 CAC/GL 63-2007	Principles and Guidelines for the Conduct of Microbiological Risk Management

Standards Code	Standards Title
CS446:2014 CAC/GL 65-1997	Harmonized Guidelines for Internal Quality Control in Analytical Chemistry Laboratories
CS447:2014 CAC/GL 66-2008	Guidelines for the Use of Flavorings
CS448:2014 CAC/GL 67-2008	Model Export Certificate for Milk and Milk Products
CS449:2014 CAC/GL 68-2008	Guideline for the Conduct of Food Safety Assessment of Foods Derived from Recombinant-DNA Animals
CS450:2014 CAC/GL 69-2008	Guideline for the Validation of Food Safety Control Measures
CS452:2014 CAC/GL 71-2009	Guidelines for the Design and Implementation of National Regulatory Food Safety Assurance Programmers Associated with the Use of Veterinary Drugs in Food Producing Animals
CS453:2014 CAC/GL 72-2009	Guideline on Analytical Terminology
CS454:2014 CAC/GL 73-2010	Guidelines on the Application of General Principles of Food Hygiene to the Control of Pathogenic Vibrio Species in Seafood
CS455:2014 CAC/GL 74-2010	Guidelines on performance criteria and validation of methods for detection, identification and quantification of specific and sequences and specific proteins in foods
CS456:2014 CAC/GL 75-2010	Guidelines on Substances used as Processing Aids
CS457:2014 CAC/GL 76-2011	Compilation of Codex texts relevant to the labeling of foods derived from modern biotechnology
CS458:2014 CAC/GL 77-2011	Guidelines for Risk Analysis of Foodborne Antimicrobial Resistance
CS459:2014 CAC/GL 78-2011	Guidelines for the Control of Campylobacter and Salmonella in Chicken Meat
CS460:2014 CAC/GL 79-2012	Guidelines on the Application of General Principles of Food Hygiene to the Control of Viruses in Food
CS461:2014 CAC/GL 80-2013	Guidelines on the Application of Risk Assessment for Feed
CS462:2014 CAC/GL 81-2013	Guidance for governments on prioritizing hazards in feed
CS463:2014 CAC/GL 82-2013	Principles and Guidelines for National Food Control Systems
CS466:2014 CAC/MRL 2	Maximum Residue Limits for Veterinary Drugs in Food
CS468:2014 CAC/RCP 1-1969	General Principles of Food Hygiene
CS469:2014 CAC/RCP 2-1969	Code of Hygienic Practice for Canned Fruit and Vegetable Products
CS470:2014 CAC/RCP 3-1969	Code of Hygienic Practice for Dried Fruits
CS471:2014 CAC/RCP 4-1971	Code of Hygienic Practice for Desiccated Coconut
CS472:2014 CAC/RCP 5-1971	Code of Hygienic Practice for Dehydrated Fruits and Vegetables including Edible Fungi
CS473:2014 CAC/RCP 6-1972	Code of Hygienic Practice for Tree Nuts
CS474:2014 CAC/RCP 8-1976	Code of Practice for the Processing and Handling of Quick Frozen Foods
CS475:2014 CAC/RCP 15-1976	Code of Hygienic Practice for Eggs and Egg Products
CS476:2014 CAC/RCP 19-1979	Code of Practice for Radiation Processing of Food

Standards Code	Standards Title
CS477:2014 CAC/RCP 20-1979	Code of Ethics for International Trade in Food including Concessional and Food Aid Transactions.
CS478:2014 CAC/RCP 22-1979	Code of Hygienic Practice for Groundnuts (Peanuts)
CS479:2014 CAC/RCP 23-1979	Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods
CS480:2014 CAC/RCP 30-1983	Code of Hygienic Practice for the Processing of Frog Legs
CS481:2014 CAC/RCP 33-1985	Code of Hygienic Practice for Collecting, Processing and Marketing of Natural Mineral Waters
CS482:2014 CAC/RCP 36-1987	Code of Hygienic Practice for the Storage and Transport of Edible Oils and Fats in Bulk
CS483:2014 CAC/RCP 39-1993	Code of Hygienic Practice for the Storage and Transport of Edible Oils and Fats in Bulk
CS484:2014 CAC/RCP 40-1993	Code of Hygienic Practice for Precooked and Cooked Foods in Mass Catering
CS485:2014 CAC/RCP 42-1995	Code of Hygienic Practice for Aseptically Processed and Packaged Low-Acid Foods
CS486:2014 CAC/RCP 43R-1995	Code of Hygienic Practice for Spices and Dried Aromatic Plants
CS487:2014 CAC/RCP 44-1995	Regional Code of Hygienic Practice for the Preparation and Sale of Street Foods (Latin America and the Caribbean)
CS488:2014 CAC/RCP 45-1997	Code of Practice for the Reduction of Aflatoxin B1 in Raw Materials and Supplemental Feeding stuffs for Milk-Producing Animals
CS489:2014 CAC/RCP 46-1999	Code of Hygienic Practice for Refrigerated Packaged Foods with Extended Shelf-Life
CS490:2014 CAC/RCP 47-2001	Code of Hygienic Practice for the Transport of Food in Bulk and Semi-Packed Food
CS491:2014 CAC/RCP 48-2001	Code of Hygienic Practice for Bottled/Packaged Drinking Waters (Other than Natural Mineral Waters)
CS492:2014 CAC/RCP 49-2001	Code of Practice Concerning Source Directed Measures to Reduce Contamination of Foods with Chemicals
CS493:2014 CAC/RCP 50-2003	Code of Practice for the Prevention and Reduction of Pauline Contamination in Apple Juice and Apple Juice Ingredients in Other Beverages
CS494:2014 CAC/RCP 51-2003	Code of Practice for the Prevention and Reduction of Mycotoxin Contamination in Cereals, including Annexes on Ochratoxin A, Zearalenone, Fumonisin and Tricothecenes
CS495:2014 CAC/RCP 52-2003	Code of Practice for Fish and Fishery Products
CS496:2014 CAC/RCP 53-2003	Code of Hygienic Practice for Fresh Fruits and Vegetables
CS497:2014 CAC/RCP 54-2004	Code of Hygienic Practice for Fresh Fruits and Vegetables
CS498:2014 CAC/RCP 55-2004	Code of Practice for the Prevention and Reduction of Aflatoxin Contamination in Peanuts
CS499:2014 CAC/RCP 56-2004	Code of Practice for the Prevention and Reduction of Lead Contamination in Foods
CS500:2014 CAC/RCP 57-2004	Code of Hygienic Practice for Milk and Milk Products
CS501:2014 CAC/RCP 58-2005	Code of Hygienic Practice for Meat
CS502:2014 CAC/RCP 59-2005	Code of Practice for the Prevention and Reduction of Aflatoxin Contamination in Tents
CS503:2014 CAC/RCP 60-2005	Code of Practice for the Prevention and Reduction of Tin Contamination in Canned Foods

Standards Code	Standards Title
CS509:2014 CAC/RCP 66-2008	Code of Hygienic Practice for Powdered Formulae for Infants and Young Children
CS510:2014 CAC/RCP 67-2009	Code of Practice for the Reduction of Acrylamide in Foods
CS511:2014 CAC/RCP 68-2009	Code of Practice for the Reduction of Contamination of Food with Polycyclic Aromatic Hydrocarbons (PAH) from Smoking and Direct Drying Processes
CS512:2014 CAC/RCP 69-2009	Code of Practice for the Prevention and Reduction of Ochratoxin A Contamination in Coffee
CS513:2014 CAC/RCP 70-2011	Code of Practice for the Prevention and Reduction of Ethyl Carbamate Contamination in Stone Fruit Distillates
CS514:2014 CAC/RCP 71R-2013	Regional Code of Practice for Street-vended Foods (Near East)
CS516:2014 CAC/RCP 73-2013	Code of Practice for the Reduction of Hydrocyanic Acid (HCN) in Cassava and Cassava Products
CS518:2014 CAC/MISC 4	Classification of Foods and Animal Feeds
CS519:2014 CAC/MISC 5-1993	Glossary of Terms and Definitions (Veterinary Drugs Residues in Foods)
CS520:2014 CAC/MISC 6-2013	List of Codex Specifications for Food Additives
CS092-1:2014ISO 8611-1:2011	Pallets for material handling- Flat pallets-Part1: Test methods
CS092-2:2014 ISO 8611-2:2011	Pallets for material handling- Flat pallets-Part2: Performance requirements and selection of tests
CS 067:2014	Standard for Bean
CS 068:2014	Standard for Maize (Corn)
CS 069:2014	Standard for Maize (Corn) Meal
CS 078:2012 (Codex Standard 193-1995)	Standard for Contaminants and Toxin in Food
CS 080:2012 (Codex Standard 192-1995)	General Principle for use Food Additive in Food
CS 093:2012 (Codex Standard 192-1995)	Standard principle for use food additive in food
CS 100:2013 CAC/RCP 51-2013	Code of Practice for the prevention and reduction of Mycotoxin contamination in cereals, including annexes on Ochratoxin A, Zearalenone, Fumonisin and Tricothecenes
CS 111:2013 CAC/GL 83-2013	Principle for the use of sampling and testing in international food trade)
CS 112:2014	Standard for Tomatoes Sauce
CS 182: 2011	Drinking Ice
CS 193: 2011	Cambodian standard on natural mineral water
CS 194: 2012	Cambodian Standard on Instant Noodle
CS 164:2012 CAC/RCP 8-1976	Code of Practice for the Processing and Handling of Quick Frozen Foods
CS 166:2014 (Codex Standard 95-1981, Rev 2 -2004)	Standard principle for use food additive in food
CS522:2015	Standard for Dried fish*
CS523:2015	Standard for Fish paste*
CS005:2003 Rev.1.2014	Standard for Fish sauce*

* Being Drafted.

Source: Extract from Cambodian Standard Catalogue, ISC, 2015.