### CODEX ALIMENTARIUS COMMISSION







Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - Fax: (+39) 06 5705 4593 - E-mail: codex@fao.org - www.codexalimentarius.org

Agenda Item 9

CX/SCH 15/02/09

June 2015

# JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEX COMMITTEE ON SPICES AND CULINARY HERBS

**Second Session** 

Goa, India, 14 - 18 September 2015

### PROPOSALS FOR NEW WORK

### Replies to CL 2014/4-SCH by EGYPT, INDIA, INDONESIA, IRAN AND NIGERIA

### **Background**

1. The First Session of the Codex Committee on Spices and Culinary Herbs (CCSCH) held in Kochin India in 2014 agreed that a Circular Letter requesting proposals for new work would be issued by the Codex Secretariat as an attachment to the report of the session with a deadline for submission of proposals of three/four months before the session to give Members and Observers time to prepare and submit proposals for new work and the Secretariats to translate, compile the proposals and distribute working documents before the session.

### **Proposals**

- 2. In response Circular Letter CL 2014/4-SCH nine (9) new work proposals were submitted as follows: two (2) proposals from Egypt on basil and coriander (Annexes I & II); three (3) proposals from India on: dehydrated chillies; dried and dehydrated garlic; and dried and dehydrated ginger (Annexes III, IV, & V); one (1) proposal from Indonesia on nutmeg (Annex VI); one (1) proposal from Iran on Saffron (Annex VII); and two (2) proposals from Nigeria on cloves and dried whole and ground ginger (Annexes VIII & IX).
- 3. In addition to the nine proposals above, CCSCH1 did not consider the proposal by Argentina on paprika but agreed to seek clarification from CCFFV and CCPFV as to whether paprika might be in their mandate. The response to this question is provided in document **CX/SCH 15/02/02** in which it is clarified that the work on paprika; dried chilli peppers; dried garlic and dried ginger could be considered for new work in CCSCH.

\_

<sup>&</sup>lt;sup>1</sup> CX/SCH 14/1/6

Annex I

### PROJECT DOCUMENT

### PROPOSAL FOR NEW WORK ON CODEX STANDARD FOR BASIL

(Proposal submitted by Egypt)

### Introduction

Basil, Thai basil, or sweet basil, is a common name for the culinary herb Basil which belongs to the family *Lamiaceae*, in the genus: *Ocimum*. Its scientific name is "*Ocimum basilicum*". Basil herb is one of the oldest and popular herbal plants brimming with notable benefiting phytonutrients. This highly prized plant is revered as "holy herb" in many traditions all around the world. ". Basil is considered the "king of herbs" by many cookery authors. Basil is native to India, China, Southeast Asia and Iran. It was originally domesticated in India, having been cultivated there for more than 5,000 years, now it is found in most tropical parts of the world.

The most common varieties of basil are treated as annuals, some are perennial in warm, tropical climates, The various basils have such different scents because the herb has a number of different essential oils that come together in different proportions for various breeds (eugenol, citral, limonene, camphor, anethole).

The objective of this work is to develop a Codex standard based on measurable characteristics, specifically quality criteria and any other factors for developing an international document to protect consumer's health and facilitate the international trade.

### 1. The Purpose and Scope of the Standard

The scope of the work is to establish a worldwide standard for dried and/or dehydrated whole, crushed or ground basil leaves (*Ocimum spp.*) of the family *Lamiaceae* to be offered industrial food production and direct consumption, including for catering purposes or for repacking, as required. The standard will cover all species and varieties of basil of commercial interest.

### 2. Relevance and Timeliness

Basil is widespread in Asia, Africa as well as central and Southern America. It appears to have its centre of diversity in Africa. Today Basil is cultivated in many Asian and Mediterranean countries. Basil is cultivated extensively in France, Egypt, Hungary, Indonesia, Morocco and the United States of America. The United States crops are considered to be of the highest quality, producing the finest odour .USA is the one of the biggest producer and importer. To develop a worldwide standard will help to protect consumer's health and to facilitate fair trade.

#### 3. Main aspects to be covered

The standard will cover characteristics related to identification and quality in all aspects as well as safety requirements.

- Product definition: Defining the product as dried and / or dehydrated basil's leaves including all species and varieties of basil (*Ocimum spp.*) of commercial.
- Style: Listing the different forms of the dried basil leaves (whole, crushed, and powdered).
- Composition: Including provisions for basic ingredient and other permitted ingredients. Establishing
  moisture, ash and volatile oil content as well as other values of the dried basil leaves.
- Quality criteria: Including provisions for colour, odour, flavour...etc
- Provisions for the labelling and marking of the product in accordance with the CODEX standard for the labelling of pre-packaged foods.
- Provisions for hygiene, contaminants, and pesticides residues with reference to pre-existing Codex documents.
- · References to Methods of Analysis and Sampling.

### 4. Assessment against the criteria for the Establishment of Work Priorities

#### **General Criterion**

Consumer protection from the point of view of health, food safety, ensuring fair practices in food trade and taking into account the indentified needs of developing countries.

The proposed new standard will meet this criterion by:

- Promotion of consumer protection and the prevention of fraudulent practices.
- Providing greater assurance of the product to meet consumer needs and the minimum requirements for food safety
- Arriving at levels of standardization based on the properties of different to meet industrial and consumer needs with exactness and credibility.

In addition, the elaboration of the standard would be to the benefit of many countries in general and more particular in the case of developing countries, for the developing countries are the major producers, exporters, and consumers of basil.

### Criteria applicable to commodities

### (a) Volume of production and consumption in individual countries and volume and pattern of trade between countries

Country	Trade 2013		
	Import (MT)	Export (MT)	
China	98,537	199,424	
China (Hong Kong SA)	95,279	3,234	
United States of America	72,147	13,454	
Germany	56,688	21,270	
Madagascar	49,311	71,141	
Viet Nam	33,285	7,858	
India	30,015	87,731	
Japan	28,440	44	
Korea, Republic of	27,213	314	
Spain	18,710	13,982	
France	17,122	6,562	
Netherlands	15,853	3,343	
Malaysia	15,446	2,340	
Mexico	14,693	27,242	
Canada	14,186	1,295	
Singapore	13,453	1,884	
Italy	11,388	2,641	
United Kingdom	11,155	1,315	
Thailand	10,497	8,831	
Russian Federation	10,052	1,087	
Pakistan	9,970	18,377	
Poland	8,809	14,732	
Egypt	6,862	41,664	

Sources: ITC calculations based on UN COMTRADE statistics.

### Pattern in international trade

Import	World (MT)
2009	558,101
2010	588,304
2011	594,303
2012	611,575
2013	820,177

Sources: ITC calculations based on UN COMTRADE statistics.

Export	World (MT)
2009	546,145
2010	568,738
2011	658,888
2012	613,772
2013	820,162

Sources: ITC calculations based on UN COMTRADE statistics.

The global trade of Basil as total export and import in 2013 is to be (820,162MT – 8201,77 MT) respectively as the major exporters was China, India, Madagascar, Egypt, Mexico; while the major importers was China, including Hong Kong SA, USA, Germany, Madagascar. [Sources: ITC calculations based on UN COMTRADE statistics].

# (b) Diversification of national legislations and apparent resultant or potential impediments to international trade:

Imports and exports of basil take place for many applications. However, it would be preferred that the trade in basil is carried under an international criteria based on Codex Standard. Therefore, the new work would provide internationally recognized specific standards in order to enhance international trade and to accommodate the importer's requirements.

International organizations like the European Spice Association and ISO have dealt with the standards for basil. To overcome the resultant or potential impediments to international trade, it is essential to incorporate all existing different standards in a single improved comprehensive standard acceptable across board internationally. This warrants the establishment of a Codex standard as per the Procedural Manual.

### (c) International or regional market potential

The world market for imported Basil in 2013 was valued at 3,086,654 (USD thousands) and the exported ones was 2,829,966(USD thousands), China contributes about 25% of the export market in 2013.

Basil shows an international growth in quantity exported between 2012 and 2013 (613,772- 820,162) MT respectively by percentage of 25%.

### (d) Amenability of commodity to standardization

The standard will include the characteristics of dry and/or dehydrated basil's leaves including all species and varieties of basil cultivar varieties, composition, quality and packaging criteria.

## (e) Coverage of the main consumer protection and trade issues by existing or proposed general standards

There is no general commodity standard covering basil. The new work will enhance consumer protection and facilitate trade by establishing an international agreed and recognized quality standard.

# (f) Number of commodities which would need separate standards including whether raw, semi-processed or processed.

The proposed standard will cover the dried and / or dehydrated basil's leaves. The different forms of basil like whole, crushed, and powdered.

### (g) Work already undertaken by other international organizations in this field

- i. ASTA's Cleanliness Specification for spices, seeds and herbs –USA (2007)
- ii. Quality Minima Document of ESA (Rev.4) December 2011
- iii. ISO Standard for Dried sweet basil (Ocimum basilicum L.) Specification (ISO 11163:1995)

### 5. Relevance to CODEX strategic objectives

The proposal is consistent with the Strategic Plan of the Codex Alimentarius Commission 2014-2019, in particular, Strategic Goal 1 and objectives 1.1, 1.3, 2.3 and 3.1 and aims at setting up international accepted minimum quality requirements of basil for human consumption.

### 6. Information on the relation between the Proposal and other existing CODEX document

This proposal is a new Codex standard and is not related to or based on any pre-existing Codex document. This standard will include references to relevant pre – existing Codex texts developed by general subject committees, as follows:

- Principles and Guidelines for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997) "
- General Principles of Food Hygiene (CAC/RCP 1-1969)
- Data bases related to the maximum limits for pesticides residues issued by Codex Committee on Pesticides Residues in Food (CCPR).
- General Standard for Contaminants and Toxins in Food and Feed (CODEX STAN 193-1995)
- Code of Hygienic Practice for Spices and Dried Aromatic Herbs (CAC/RCP 42-1995)

### 7. Identification of any requirement for and availability of expert scientific advice

No need for expert scientific advice is foreseen at this stage. Published research documents by international bodies will be referred in the process of preparing the standard.

# 8. Identification of any requirement for technical input to the standard from external bodies so that this can be planned for

Technical input from the International Standards Organization (ISO), American Spice Trade Association (ASTA), and European Spice Association (ESA) may be sought when developing this standard.

### 9. Proposed Time Schedule

The following is the proposed timetable for the completion of the standard.

DATE	ADVANCE AND PROCEDURES	
2 <sup>nd</sup> CCSCH	Consideration of new work by the 2 <sup>nd</sup> session of CCSCH	
July 2016	Critical review of proposal by CCEXEC;	
	Approval of new work proposals by the Commission	
3 <sup>rd</sup> CCSCH	Consideration at Step 3 by the 3 <sup>rd</sup> CCSCH	
	Approval at Step 3.	
July 2017	Adoption at Step 5 by CAC	
4 <sup>th</sup> CCSCH	Consideration at Step 6 by the 4 <sup>th</sup> session of CCSCH	
July 2019	Adoption at Step 8 by the CAC	

Annex II

### PROJECT DOCUMENT

### PROPOSAL FOR NEW WORK ON CODEX STANDARD FOR CORIANDER

(Proposal submitted by Egypt)

#### Introduction

Coriander is the dried fruits of *Coriandrum sativum* family *Apiaceae*, also known as coriander seeds. Coriander is native to regions spanning from South-eastern Europe and North Africa to the South-western Asia and grown extensively all over Europe, Middle East, China, India, and Turkey.

The word coriander in food preparation may refer solely to these fruits (as a spice), rather than to the plant. The fruits have a lemony citrus flavour when crushed, due to terpenes linalool and pinene. It is described as warm, nutty, spicy, and orange-flavoured. The spice fruit has been used since ancient times and now it is an important item of international trade. Coriander is widely used in whole or ground forms for flavouring purposes. In India, coriander goes into curry powders (25 to 40 percent of world production) and is used to flavour liqueurs in Russia and Scandinavia, as well as being an important flavouring agent in gin production. The fruits are also used (both whole and ground) in baking, sausages, pickles, candies, sauces and soups.

The variety *Coriandrum sativum* vulgare has a fruit diameter of 3–5 mm, grown mainly by tropical and subtropical countries, e.g. Morocco, India and Australia, and contains low volatile oil content (0.1-0.4%). They are used extensively for grinding and blending purposes in the spice trade. While var. microcarpum fruits have a diameter of 1.5–3 mm, are produced in temperate regions and usually have a volatile oil content of around 0.4-1.8%, so are highly valued as a raw material for the preparation of essential oil. It is commonly found both as whole dried seeds and in ground form.

The objective is to develop a codex standard based on measurable characteristics, specifically quality criteria and any other factors for developing an international document to protect consumer's health and facilitate the international trade.

### 1. The Purpose and Scope of the Standard

The scope of the work is to establish a worldwide standard for dry and/or dehydrated whole, crushed or ground coriander *Coriandrum sativum* of the family *Apiaceae* to be offered for industrial food production and for direct consumption, including catering purposes or repacking, as required. The standard will cover coriander fruits of *Coriandrum sativum*. The standard will cover all varieties of fruits of *Coriandrum sativum* with commercial interest

#### 2. Relevance and Timeliness

Coriander is produced and traded worldwide and the major producing / trading countries are: India, Bulgaria, Ukraine, Morocco, Italy, Russian Federation, Syria and Canada. India contributes around 80% of world coriander production. Globally, production ranging from 300,000 – 335,000 MT annually, and the global trade is estimated to be 85,000 – 100,000 MT. It is relevant to establish a worldwide standard to protect consumer's health and to facilitate fair trade.

### 3. Main aspects to be covered

The standard will cover characteristics related to identification and quality in all aspects as well as safety requirements

- Product definition: Defining the product as dry and /or dehydrated coriander fruits of (*Coriandrum sativum*) including all varieties of coriander of commercial interest.
- Style: Listing the different forms of the dried coriander fruits(whole, crushed, powdered)
- Composition: Including provisions for basic ingredients and other permitted ingredients. Establishing moisture, ash and volatile oil content as well as other values of the dried coriander fruits.
- Quality criteria: Including provisions for colour, odour, flavour ...etc
- Provisions for the labelling and marking of the product in accordance with the CODEX standard for the labelling of pre-packaged foods.
- Provisions for hygiene, contaminants, food additives and pesticides residues with reference to preexisting Codex documents.
- · References to Methods of Analysis and Sampling.

### 4. Assessment against the criteria for the Establishment of Work Priorities

### **General Criterion**

Consumer protection from the point of view of health, food safety, ensuring fair practices in food trade and taking into account the indentified needs of developing countries.

The proposed new standard will meet this criterion by:

- Promotion of consumer protection and the prevention of fraudulent practices.
- Providing greater assurance of the product to meet consumer needs and the minimum requirements for food safety
- Arriving at levels of standardization based on the various properties to meet industrial and consumer needs with exactness and credibility.

In addition, the elaboration of the standard would be to the benefit of many countries in general and more particular in the case of developing countries, for the developing countries are the major producers, exporters, and consumers of coriander.

### Criteria applicable to commodities

# (a) Volume of production and consumption in individual countries and volume and pattern of trade between countries

Country	Trade 2013	
	Import (MT)	Export (MT)
India	4,364	40,790
Bulgaria	216	16,955
Ukraine	41	7,926
Morocco	2	7,393
Italy	382	6,699
Russian Federation	69	6,357
Syrian Arab Republic	-	6,310
Canada	518	5,995
Iran (Islamic Republic of)	-	4,941
Argentina	21	4,100
Netherlands	4,344	2,316
Ethiopia	-	2,101
United States of America	5,088	1,706
Romania	207	1,486
Australia	670	1,207
Poland	2,948	1,133
Egypt	809	936

Sources: ITC calculations based on UN COMTRADE statistics.

### Pattern in international trade

Import	World (MT)
2009	106,328
2010	124,855
2011	122,616
2012	46,671
2013	143,301

Sources: ITC calculations based on UN COMTRADE statistics.

Export	World (MT)
2009	112,897
2010	112,089
2011	128,384
2012	68,299
2013	127,431

Sources: ITC calculations based on UN COMTRADE statistics.

The global trade of coriander as total export and import in 2013 was (127,431 MT-143,301 MT) respectively as the major exporters are India, Bulgaria, Ukraine, Morocco, and Italy; while the major importers are USA, India, Netherlands, Poland and Egypt. Sources: ITC calculations based on UN COMTRADE statistics]

# (b) Diversification of national legislations and apparent resultant or potential impediments to international trade:

Imports and exports of coriander take place for many applications. However, it would be preferred that the trade in coriander is carried under an International criteria based on Codex Standard. Therefore, the new work would provide internationally recognized specific standards in order to enhance international trade and to accommodate the importer's requirements.

International organizations like the European Spice Association and ISO have dealt with the standards for coriander. To overcome the resultant or potential impediments to international trade, it is essential to incorporate all existing different standards in a single improved comprehensive standard acceptable across board internationally. This warrants the establishment of a Codex standard as per the Procedural Manual.

### (c) International or regional market potential

The world market for imported coriander in 2013 was valued at 157,891 (USD thousands) and the exported ones was 151,725 (USD thousands). India contributes around 35.7% of world coriander exports in 2013.

Coriander shows an international growth in quantity exported between 2012 and 2013 (68,299- 127,431) MT respectively by percentage of 46.4%.

### (d) Amenability of commodity to standardization

The standard will include the characteristics of dried and /or dehydrated coriander's fruits including all varieties of *Coriandrum sativum*, composition, quality and packaging criteria.

### (e) Coverage of the main consumer protection and trade issues by existing or proposed general standards

There is no general commodity standard covering coriander. The new work will enhance consumer protection and facilitate trade by establishing an international agreed and recognized quality standard.

### (f) Number of commodities which would need separate standards including whether raw, semiprocessed or processed.

The proposed standard will cover the dried and / or dehydrated coriander's fruits. The different forms of coriander like whole, crushed, and powdered.

### (g) Work already undertaken by other international organizations in this field

- i. ASTA's Cleanliness Specification for spices, seeds and herbs -USA (2007)
- ii. Quality Minima Document of ESA (Rev.4) December 2011
- iii. ISO Standard for Coriander (*Coriandrum sativum* L.), whole or ground (powdered) Specification (ISO 2255:1996)

### 5. Relevance to CODEX strategic objectives

The proposal is consistent with the Strategic Plan of the Codex Alimentarius Commission 2014-2019, in particular, Strategic Goal 1 and objectives 1.1, 1.3, 2.3 and 3.1 and aims at setting up international accepted minimum quality requirements of coriander for human consumption.

### 6. Information on the relation between the Proposal and other existing CODEX document

This proposal is a new Codex standard and is not related to or based on any pre-existing Codex document. This standard will include references to relevant pre - existing Codex texts developed by general subject committees, as follows:

- Principles and guidelines for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997)
- General Principles of Food Hygiene (CAC/RCP 1-1969)
- Data bases related to the maximum limits for pesticides residues issued by Codex Committee on Pesticides Residues in Food (CCPR).
- General Standard for Contaminants and Toxins in Food and Feed (CODEX STAN 193-1995)
- Code of Hygienic Practice for Spices and Dried Aromatic Herbs (CAC/RCP 42-1995)

### 7. Identification of any requirement for and availability of expert scientific advice

No need for expert scientific advice is foreseen at this stage. Published research documents by international bodies will be referred in the process of preparing the standard.

# 8. Identification of any requirement for technical input to the standard from external bodies so that this can be planned for

Technical inputs from the International Standards Organization (ISO), American Spice Trade Association (ASTA), and European Spice Association (ESA) may be sought when developing this standard.

### 9. Proposed Time Schedule

The following is the proposed timetable for the completion of the standard.

The following is the proposed timetable for the completion of the standard.

DATE	ADVANCE AND PROCEDURES	
2 <sup>nd</sup> CCSCH	Consideration of new work by the 2 <sup>nd</sup> session of CCSCH	
July 2016	Critical review of proposal by CCEXEC;	
	Approval of new work proposals by the Commission	
3 <sup>rd</sup> CCSCH	Consideration at Step 3 by the 3 <sup>rd</sup> CCSCH	
	Approval at Step 3.	
July 2017	Adoption at Step 5 by CAC	
4 <sup>th</sup> CCSCH	Consideration at Step 6 by the 4 <sup>th</sup> session of CCSCH	
July 2019	Adoption at Step 8 by the CAC	

Annex III

### PROJECT DOCUMENT

# PROPOSAL FOR NEW WORK ON CODEX STANDARD FOR DRIED OR DEHYDRATED CHILLI (Submitted by India)

### Introduction

Chilli is the most consumed spice in the world, belongs to the genus *Capsicum* under *Solanaceae* family. Chilli is said to be originated in South America and it is widely grown in the tropical and sub-tropical regions of the World. *Capsicum annuum, C. frutescens, C. chinense, C. baccatum and C. pubescens* are the important species grown and used for human consumption. Most commercially cultivated cultivars in the world are *Capsicum annuum and Capsicum frutescens*. Commercially important part is the fruit.

Capsicum fruits have been part of the human diet for at least 1,000 years. They are rich sources of vitamin C (ascorbic acid) and vitamin A. Pungent types of dried chilli, are used as a condiment for seasoning. The dried fruits are ground and used as an ingredient in curry powder. The pungency is mainly due to the presence of chemical compounds collectively called capsaicinoids. Its extract, capsaicin is used as flavouring in food. Some varieties of Chilli have high colour and less pungency, which are used also for extracting natural red colour. Colour extracted from those varieties of chilli are used as 'natural colours' in various foods. They are grown and traded for the market importance for their colouring pigments present in them. The usage of natural colours in food is beneficial in terms of consumer health when compared to synthetic food colours.

The purpose of the work is to develop a world-wide standard for dried or dehydrated chilli by considering the identity and quality characteristics of chilli in view of international trade.

### 1. Purpose and scope of the standard

The scope of this work is to establish an international standard for dried or dehydrated chilli obtained by drying the fruits of *Capsicum annuum or Capsicum frutescens* of *Solanaceae* family presented in whole, cracked, crushed, ground or powdered forms. The work will not cover paprika chilli.

### 2. Relevance and timeliness

Chilli is an important commodity widely used in food. It is one of the oldest traded commodities in the world. India, China, Peru etc. are the pioneers in the supply of Chilli to the world market. Major importers of chilli are Malaysia, United States of America, Thailand, Sri Lanka, Bangladesh, Mexico, Spain, Germany, Indonesia, Japan, Republic of Korea, Netherlands, United Arab Emirates and United Kingdom. The global demand for chilli is increasing continuously. In view of the increased production and global trade, there is a need for an internationally harmonized standard for dried or dehydrated chilli.

The proposed standard would deal with all quality aspects concerning dried or dehydrated chilli, including wholesomeness, hygiene aspects, moisture content, size, extractable colour, pungency, ash content and foreign matter. The standard, thereby providing a frame of reference agreed by worldwide consensus among countries which produce market and consume this commodity. Moreover, the development of a Codex standard for dried or dehydrated chilli in whole, cracked, crushed, ground or powdered forms will help to protect consumer health and to promote fair trade practices in accordance with current international agreements.

#### 3. Main aspects to be covered

The main aspects of the product to be covered in the standard are the minimum quality and safety requirements to protect consumer's health and to ensure fair practices in food trade:

- Product Definition Defining the product as "dry and/or dehydrated Chilli" including a reference to the genus and the species and/or varietal types if necessary.
- Styles Listing/describing the different forms of presentation including sizes of whole chilli, pieces and/or powder and tolerances allowed.
- Classes/ Quality Criteria Including provisions for colour value, odour, taste, pungency, texture, classification of "defectives" vis-à-vis "lot acceptance based on the defects allowed."
- Quality tolerances.
- Provisions for the labelling and marking of the product in accordance with the General Standard for the Labelling of Pre-packaged Foods.
- Provisions for hygiene, contaminants, pesticides residues, labelling and packaging with reference to

pre-existing Codex documents.

· References to Methods of Analysis and Sampling.

### 4. Assessment against the criteria for the establishment of work priorities

### **General Criterion**

Consumer protection from the point of view of health, food safety, ensuring fair practices in the food trade and taking into account the identified needs of developing countries.

The proposed new standard will meet this criterion by:

- Promoting consumer protection and prevention of fraudulent practices.
- Providing greater assurance of the quality of the product to meet consumer needs and minimum requirements of food safety.
- Arriving at levels of standardization based on the properties of different varieties to meet industrial and consumer needs with exactness and credibility.

The drafting of the standard would be beneficial to many countries in general and more particular in the case of developing countries because they are the major producers, exporters and consumers of chilli.

### **Criteria Applicable to Commodities**

### a) Volume of production and consumption in individual countries and volume and pattern of trade between countries:

The worldwide production of chilli accounts to nearly 3,352,160 tonnes from 1,989,660 hectares of land during 2012 (FAOSTAT) with more than 30% growth in a decade span and it is on the increase. India, China, Peru, Bangladesh, Pakistan, Thailand, Myanmar, Ghana, Ethiopia, etc. are the major Chilli producing countries in the World. India, China, Peru, Spain, Mexico, Germany, Tunisia, Netherlands, etc. are the major chilli exporting countries in the world. United States of America, Malaysia, Spain, Sri Lanka, Germany, Japan, Mexico, Republic of Korea, United Kingdom, Thailand, Bangladesh, etc. are the major importers of Chilli in the world. Demand for chilli is bound to go up in different national and international markets.

Table 1: World production of chilli and land used			
Year Quantity		Area harvested	
(in Metric Tonnes) (in hectare)		(in hectare)	
2008	3,123,440	1,918,840	
2009	3,035,150	2,035,260	
2010	3,053,540	1,974,850	
2011	3,244,250	1,976,350	
2012	3,352,160	1,989,660	

Source: FAOSTAT

Table 2: Worldwide Export & Import of Chilli				
	EXPORTS		IMPORTS	
YEAR	Quantity (in Metric Tonnes)	Value (1000 \$)	Quantity (in Metric Tonnes)	Value (1000 \$)
2007	503,182	856,838	523,102	912,456
2008	510,566	957,952	521,479	1,007,030
2009	532,418	933,670	556,037	970,186
2010	533,970	983,465	548,420	1,053,140
2011	536,163	1,317,220	546,853	1,308,300

Source: FAOSTAT

Table 3: Production of Chilli in countries in 2012 (Top 15 countries)		
S.No Country Quantity (in Metric Tonnes		Quantity (in Metric Tonnes)
1	India	1,299,940
2	China	290,000
3	Peru	175,000
4	Bangladesh	172,000
5	Pakistan	150,000
6	Thailand	145,000
7	Myanmar	128,000
8	Ghana	100,000
9	Ethiopia	100,000
10	Vietnam	93,000
11	Benin	67,760
12	Egypt	65,000
13	Nigeria	62,000
14	Mexico	60,000
15	Romania	48,500

Source: FAOSTAT

	Table 4: Export of Chilli from countries in 2011 (Top 15 countries by value)			
S.No Country		Quantity (in Metric Tonnes)	Value in 1000 \$	
1	India	260,485	497,052	
2	China	98,479	282,628	
3	Peru	48,471	131,820	
4	Spain	34,879	115,589	
5	Mexico	11,007	34,975	
6	Germany	5,480	34,410	
7	Tunisia	17,451	29,255	
8	Netherlands	3,954	17,611	
9	United States of America	4,802	15,338	
10	France	1,386	12,012	
11	Hungary	2,342	11,312	
12	Republic of Korea	2,098	10,387	
13	Chile	1,650	9,689	
14	Serbia	2,153	9,576	
15	Belgium	2,130	9,417	

Source: FAOSTAT

	Table 5: Import of Chilli into countries during 2011 (Top 15 countries by value)				
S.No	Country	Import (in Metric Tonnes)	Value in 1000 \$		
1	United States of America	109,937	278,490		
2	Malaysia	54,296	135,581		
3	Spain	38,141	95,141		
4	Sri Lanka	42,782	82,523		
5	Germany	20,228	76,416		
6	Japan	12,252	60,133		
7	Mexico	24,693	55,196		
8	Republic of Korea	16,309	44,833		
9	United Kingdom	8,723	35,646		
10	Thailand	36,970	25,059		
11	Netherlands	9,819	24,179		
12	Canada	6,308	23,062		
13	Bangladesh	13,177	21,866		
14	Indonesia	19,988	18,186		
15	France	4,054	17,787		

Source: FAOSTAT

### b) Diversification of national legislations and resultant or potential impediments to international trade:

The import of chilli take place for many applications and chilli undergoes various operations such as grinding, cracking, powdering and extraction etc based on specific objectives. Hence the trade in chilli takes shape based on applications and customer requirement. However trade in chilli is based on producing countries and importing country's mutually agreed conditions in terms of grade and specifications.

The ISO has given specifications for dried chilli and capsicums, whole or ground (powdered) (ISO 972:1997). Producing countries viz. India (IS 2322: 2010), Thailand (TAS 3001:2010), Malaysia etc. have developed their own quality specifications for dried chillies. The Regional standards viz., *CRS 35: 2010 - Specification for spices and sauces* implemented by CARICOM Regional Organization for Standards and Quality are associated with the standards for chilli. The trade associations viz American Spice Trade Association (ASTA) has developed ASTA's Cleanliness Specification for spices, seeds and herbs including dried chillies for imports into United States of America. The European Spice Association has brought out Quality Minima Document of ESA for spices including dried chillies.

### Different quality standards of Dried Chilli

National/ Internation al/Regional Standards	Moisture content % (m/m), max.	Ash content % (m/m) on dry basis	Acid Insoluble Ash % (m/m), on dry basis	Discoloured fruits % (by wt.), max	Deformed fruits % (by wt.), max	Foreign Matter % (by wt.), max	Broken fruits % (by wt.), max	Scoville heat units
ASTA	11	8	1	NA	NA	NA	NA	NA
ESA	11	10	1.6	NA	NA	NA	NA	NA
India	11	8	1.3	NA	NA	1	5	Not less than 24000 SHU
Thailand	13.5	NA	NA	5	5	1	Dried bird chilli-5 Dried large fruit chilli-10	NA
CARICOM	10	10	1.6	NA	NA	1	2	NA
ISO	11	10	1.6	NA	NA	1	5	NA

### Different quality standards of Dried Chilli powder

National Standard	Moisture content % (m/m), max.	Ash content % (m/m) on dry basis	Acid Insoluble Ash % (m/m) on dry basis	Size	Crude fibre % (m/m) on dry basis, max	Non-volatile ether extract % (m/m) on dry basis, min	Scoville Heat Units
India	11	8	1.3	Passes through 500 µm IS sieve	30	12	Not less than 24000 SHU
Malaysia	12	8	1.3	NA	30	12	NA

From the tables above, differences in international and national legislations are clearly evident. The diversification in legislations apparently may result in a hindrance to international trade. Hence, it would be preferred that the trade in chilli and chilli products is carried under an International criteria based on Codex Standard.

### c) International or regional market potential:

As illustrated in Table 2 above, there has been a remarkable increase in the international trade for chilli in the recent years. Not only in the international market but also there is a strong domestic market for dried or dehydrated chilli in the producing countries.

### d) Amenability of commodity to standardization:

The characteristics of dried or dehydrated chilli from its cultivation to harvest, the characteristics of the fruit, cultivar varieties, composition, quality and packaging all the parameters lend adequate for conducive to the establishment of an appropriate standard for the commodity. There are existing standards in different counties as well as ISO, which indicates amenability to standardization through harmonization.

# e) Coverage of the main consumer protection and trade issues by existing or proposed general standards:

There is no general standard specifically covering dried or dehydrated chilli. The new work will encourage consumer safety and also it will facilitate trade in dried or dehydrated chilli by establishing an internationally accepted and recognized quality standard.

# f) Number of commodities which would need separate standards including whether raw, semi processed or processed.

This standard will be a general standard for dried or dehydrated chilli to cover the relevant aspects concerned. But, it will include all the different forms of dried or dehydrated chilli such as whole, cracked, crushed, ground or powdered etc.

# g) Work already undertaken by other international organization in this field and/or suggested by the relevant international intergovernmental bodies

The International organization for Standardization (ISO) has dealt with the standards for dried chilli (ISO 972: 1997). The existing standards could be taken into consideration as a step process to develop Codex Standards for dried chilli.

### 5. Relevance to the codex strategic objectives

This proposal is consistent with the Strategic Plan of the Codex Alimentarius Commission 2014-2019, in particular strategic objectives 1.1, 1.3, 2.3 and 3.1.

### 6. Information on the relation between the proposal and other existing Codex documents.

The work will take into consideration:

- Standard for Chilli Peppers (CODEX STAN 307-2011), which deals with fresh chilli.
- General Principles of Food Hygiene (CAC/RCP 1-1969); General Standard for Labelling of Pre Packaged Foods (CODEX STAN 1-1985); Code of Hygienic Practice for Spices and Dried Aromatic plants (CAC/RCP 42-1995); Methods of Analysis and Sampling (CODEX STAN 234-1999); Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods (CAC/GL 21-1997); Maximum Residue Limits for pesticides adopted by Codex for 'Spices'.

### 7. Identification of any requirements for and availability of expert scientific advice

No expert scientific advice is foreseen at this stage. Published research documents by international bodies will be referred in the process of preparing the standard, if found necessary.

# 8. Identification of any need for technical input to the standard from external bodies so that this can be planned for

ISO standards can be used as a step process to frame the codex standard for chilli. The technical inputs from ASTA, ESA, and ISO shall be welcomed as they have already done work related to the subject.

### 9. Proposed Time Schedule

The following tentative time schedule is proposed, subject to the decisions taken during the Second Session of Codex Committee on Spices and Culinary Herbs:

DATE	ADVANCE AND PROCEDURES
2 <sup>nd</sup> CCSCH	Consideration of new work by the 2 <sup>nd</sup> session of CCSCH
July 2016	Critical review of proposal by CCEXEC;
	Approval of new work proposals by the Commission
3 <sup>rd</sup> CCSCH	Consideration at Step 3 by the 3 <sup>rd</sup> CCSCH
	Approval at Step 3.
July 2017	Adoption at Step 5 by CAC
4 <sup>th</sup> CCSCH	Consideration at Step 6 by the 4 <sup>th</sup> session of CCSCH
July 2019	Adoption at Step 8 by the CAC

Annex IV

### PROJECT DOCUMENT

# PROPOSAL FOR NEW WORK ON CODEX STANDARD FOR DRIED AND DEHYDRATED GARLIC (Allium sativum L.)

(Submitted by India)

#### Introduction

Allium sativum L., commonly known as garlic, is a species in the onion genus, Allium. Garlic is one of the most popular spices in the world. The bulb or subterranean reserve structure derived from leaves is the plant part used. It has a strong characteristic odour and taste. Garlic is a perennial plant of the lily family. It grows to a height of about 60 cm. It has short, flat upright leaves of 15 - 30 cm. The tall single flower stem bears spherical head of pale pink or greenish-white blooms, often mixed with tiny bulbils. The subterranean white-skinned bulb or corn is subdivided into numerous 'cloves'.

Garlic, originated in Central Asia, is widely cultivated all over the world; the major producers being Bangladesh, Egypt, Ethiopia, India, Myanmar, People's Republic of China, Republic of Korea, Russia, United States of America and Ukraine. It features in the mythology, religion and culture of many nations. In Europe, garlic has been commonly used since the days of the Roman Empire, and it was extensively used in India and East Asia even before the arrival of Europeans.

Raw garlic is used in the preparation of garlic powder, toasted garlic, garlic flakes, garlic salt, garlic vinegar, garlic cheese croutons, garlicked potato chips, garlic bread, garlicked bacon etc. It is also used for the preparation of spray dried garlic products and for liquid garlic preparations. It is widely used in a multitude of salads, spring rolls, soups and Mediterranean sauces. On heating, the pungency and strong odour of garlic get lost and the aroma becomes more subtle and less dominant, harmonizing perfectly with ginger, pepper, chillies and many other spices. Therefore, it is an essential ingredient for nearly every cuisine of the world.

The purpose of the work is to develop a world-wide quality standard based on physico-chemical characteristics of garlic in the point of view of international trade.

### 1. The Purpose and Scope of the Standard

The scope of the standard will cover dried or dehydrated garlic in whole, crushed, powdered, ground, chopped and sliced forms, obtained from the bulb of *Allium sativum* L.

### 2. Relevance and Timeliness

The need to have an international standard for garlic arises from the fact that the crop is grown in many regions of the world and especially as a commercial crop in developing countries in fragmented areas by marginal farmers. It is globally traded and is not limited to any particular region. Therefore, it is necessary to establish standard covering quality characteristics of garlic. The major garlic producing countries are China, India, Republic of Korea, European Union etc. China, Argentina, Spain, Netherlands, Egypt, Mexico, France, United States of America, Italy, Chile were the major exporting countries as per 2011 FAOSTAT data. Indonesia, Brazil, Vietnam, Malaysia, United States of America, Thailand, Russian federation, Pakistan, United Arab Emirates, Bangladesh, were the major importing countries as per 2011 FAOSTAT data.

The current and historical significance of garlic to producers, traders and consumers warrants the development of a Codex standard based on its physical and chemical characteristics. This will overcome discrepancies among the various national standards and different trade association standards and in still transparency in marketing from producing countries and re-exporting centres. The proposed standard will be based on the principles of consumer protection and fair trade practices.

### 3. Main aspects to be covered

The main aspects of the product to be covered in the standard are the minimum quality and safety requirements to protect consumer's health and to ensure fair practices in food trade which includes:

- Establishing the minimum quality requirements, maturity requirements, cleanliness specifications and defect action levels as per the products
- Defining the categories to classify the product in accordance with the characteristics; taking into
  account the whole, crushed, sliced, powdered, ground, dried or dehydrated form including a reference
  to the genus and the species.
- Provisions for basic composition and other permitted ingredients.
- Provisions to be considered related to the uniformity of the packaged product and the packaging used.

• Provisions for the labelling and marking of the product in accordance with the general standard for the labelling of pre-packaged foods.

- Establishing physical and chemical quality parameters like moisture, volatile oil, fibre, total ash etc required for categorizing the product into different classes.
- Specifying the acceptable levels of defectives, lot acceptance and other quality tolerances like extraneous matter.
- Provisions for hygiene with reference to the recommended International Code of Practice for hygiene and general principles of food hygiene, contaminants, pesticide residues and method of analysis.
- Provisions concerning tolerances with respect to quality and size allowed in each package for garlic not satisfying the requirements of that class.

### 4. Assessment against the Criteria for the Establishment of Work Priorities

#### **General criterion**

Consumer protection from the point of view of health, food safety, ensuring fair practices in the food trade and taking into account the identified needs of developing countries.

The proposed new standard will meet this criterion by:

- (a) Promoting consumer protection and the prevention of fraudulent practices.
- (b) Providing greater assurance of the quality of the product to meet consumer needs and the minimum requirements for food safety.
- (c) Arriving at levels of standardization based on the properties of different varieties to meet industrial and consumer needs with exactness and credibility.

In addition, the elaboration of the standard would be to the benefit of many countries in general and more particular in the case of developing countries, as the developing countries are the major producers, exporters, and consumers of garlic.

### Criteria applicable to commodities

### a) Volume of production and consumption in individual countries and volume and pattern of trade between countries

According to the production data from FAOSTAT for the year 2012, the total production of garlic was nearly 24,836,877.00 tonnes of which about 80% is from China. Egypt, India, Republic of Korea and Russia are the other countries leading in garlic production. The total export of garlic in 2012 accounts to 1,755,615 tonnes. The major exporters are China (mainland), Argentina and Spain. Indonesia and Brazil have the major share in the garlic import which comes to 1,631,587 tonnes in 2012.

**Table 1: Production Data** 

	Production Data					
Year	2008	2009	2010	2011	2012	
Quantity (in Tonnes)	22,790,482.80	22,033,858.50	22,541,421.10	23,710,768.21	24,836,877.00	

(Source: FAOSTAT)

**Table 2: Export Data** 

Year	Export Quantity (In Tonnes)	Export Value (in US \$ 1000)
2007	1,758,982	1,325,353
2008	1,829,001	1,072,576
2009	1,910,071	1,554,057
2010	1,681,948	3,038,623
2011	1,975,108	2,834,780
2012	1,755,615	1,989,858

(Source: FAOSTAT)

**Table 3: Import Data** 

Year	Import Quantity (In Tonnes)	Import Value (in US \$ 1000)
2007	1,714,183	1,233,038
2008	1,924,913	1,182,667
2009	1,769,325	1,276,821
2010	1,656,908	2,325,483
2011	1,850,917	2,355,292
2012	1,631,587	1,816,298

(Source: FAOSTAT)

### b) Diversification of national legislations and apparent resultant or potential impediments to international trade

Though the garlic trade continues to expand in the absence of a harmonized international standard, a standard is needed to increase trading efficiency. Garlic trade is carried out using different national or industry standards. In the absence of a common trading language, producers and traders find it tedious and/or difficult to communicate with new clients. In this regard, it would be helpful if the international dried garlic trade could be carried out using a single harmonized Codex standard. The development of a Codex standard will allow the different stakeholders to harmonize their different requirements to facilitate international trade.

### c) International or regional market potential

From the trade data given in Table 1 and Table 2, it is evident that there is a constant high demand for garlic. Total export of garlic during 2012 is 1,755,615 tonnes as per FAOSTAT data. This shows that dried garlic is an internationally traded commodity.

### d) Amenability of commodity to standardization

The characteristics of garlic traded, in dried and dehydrated states and parameters such as volatile oil, Total ash, maximum moisture content, acid insoluble ash, fibre content, flavour, Extraneous matter and defects allowed could be adequate for the standardization of the product. Furthermore, the existence of ISO standard and several national standards with the same parameters and nomenclature enhance the potential for successful development of a Codex standard for this product.

### e) Coverage of the main consumer protection and trade issues by existing or proposed general standards

There is no general standard specifically covering dried or dehydrated garlic. The new work will encourage consumer safety and also it will facilitate trade in dried or dehydrated garlic by establishing an internationally accepted and recognized quality standard.

### f) Number of commodities which would need separate standards including whether raw, semiprocessed or processed

The standard will be for dried or dehydrated garlic covering the relevant aspects concerned. But, it will include all the different forms of dried or dehydrated garlic such as whole, cracked, crushed, ground or powdered etc.

### g) Work already undertaken by other international organization in this field

The international standards that can support the development of this standard:

- ISO 5560:1997. International Standard. Dehydrated garlic (Allium sativum L.) Specification.
- ISO 5567:1982. International Standard. Dehydrated garlic Determination of volatile organic sulphur compounds.
- UNECE STANDARD FFV-18 GARLIC 2011 EDITION (concerning the marketing and commercial quality control of garlic).
- European Union. EU Commission Regulation No 2288/97 of 18 November 1997 laying down marketing standards for garlic.
- European Spice Association quality minima document

### 5. Relevance to the Codex Strategic Objectives

This proposal is consistent with the Strategic Plan of the Codex Alimentarius Commission 2014-2019, in particular strategic objectives 1.1, 1.3, 2.3 and 3.1.

### 6. Information on the relation between the proposal and other existing Codex documents

A new proposal for standard on fresh garlic under CCFFV has been approved by CAC (Ref.N09-2014). This proposal is for a new Codex standard for dried garlic and is not related or based on any existing Codex document. However, when completed, the standard will include references to relevant existing Codex texts developed by general subject committees and also the on-going work in CCFFV on Garlic (Ref.N09-2014).

### 7. Identification of any requirement for and availability of expert scientific advice

No expert scientific advice is foreseen at this stage. Published research documents by international bodies will be referred in the process of preparing the standard, if found necessary.

# 8. Identification of any need for technical input to the standard from external bodies so that this can be planned for

Technical inputs from external bodies such as the International Organization for Standardization (ISO), American Spice Trade Association (ASTA), European Spice Association (ESA) as well as existing standards will be welcomed for development of the standard.

### 9. Proposed Time Schedule

The following is the proposed timetable for the completion of the standard, subject to the decisions taken during the Second Session of Codex Committee on Spices and Culinary Herbs.

DATE	ADVANCE AND PROCEDURES	
2 <sup>nd</sup> CCSCH	Consideration of new work by the 2 <sup>nd</sup> session of CCSCH	
July 2016	Critical review of proposal by CCEXEC;	
	Approval of new work proposals by the Commission	
3 <sup>rd</sup> CCSCH	Consideration at Step 3 by the 3 <sup>rd</sup> CCSCH	
	Approval at Step 3.	
July 2017	Adoption at Step 5 by CAC	
4 <sup>th</sup> CCSCH	Consideration at Step 6 by the 4 <sup>th</sup> session of CCSCH	
July 2019	Adoption at Step 8 by the CAC	

Annex V

### PROJECT DOCUMENT

# PROPOSAL FOR NEW WORK ON CODEX STANDARD FOR DRIED AND DEHYDRATED GINGER (Zingiber officinale Roscoe.)

(Submitted by India)

### Introduction

Ginger produced from the rhizome (underground stem) of the plant *Zingiber officinale* Roscoe, is one of the world's highly traded spices. Obtained by the Greeks and Romans from Arab traders, it was one of the first oriental spices to arrive in Europe. It is widely grown as a commercial crop in South and South-east Asia, tropical Africa, Latin America, the Caribbean and Australia. Dried ginger is marketed in different forms such as whole, cracked, ground (powder), etc. It can also be classified as bleached or unbleached depending upon the processing steps involved. In Asia, the fresh rhizome is an essential ingredient of many food dishes, whereas the dried and ground product as spice is more popular in European cooking.

The purpose of the work is to develop an international standard for dried or dehydrated ginger in view of international trade and for ensuring consumer health.

### 1. The Purpose and Scope of the Standard

The scope of this work is to establish an international standard for dried or dehydrated ginger obtained by drying the rhizome of *Zingiber officinale* Roscoe presented in whole, sliced, cracked, crushed, ground or powdered forms.

#### 2. Relevance and Timeliness

Ginger is one of the oldest commodities to be traded internationally. The annual worldwide production of ginger in 2012 accounts to nearly 2 million tonnes, of which about 0.5 million tonnes were traded internationally for about US \$647 million.

In view of the trade importance of the spice, development of a Codex Standard for dried and dehydrated ginger is essential to ensure the quality of the product, to promote fair practices in trade as well as to safeguard the consumer health.

### 3. Main Aspects to be covered

The main aspects of the product to be covered in the standard are the minimum quality and safety requirements to protect consumer's health and to ensure fair practices in food trade which includes:

- Defining the product as "Dried and dehydrated ginger" including a reference to the genus and the species, styles or forms of presentation and varietal types.
- Listing the Styles, the different forms of presentation including sizes of whole dried ginger, pieces and/or powder and tolerances allowed.
- Including provisions for basic composition and other permitted ingredients.
- Establishing physical and chemical quality parameters required for categorizing the produce into different classes. (Moisture, Volatile oil, Fibre, Total ash etc.)
- Specifying the acceptable levels of defectives, lot acceptance and other quality tolerances such as extraneous matter, abrasions during peeling, size of peels in case of sliced ginger etc.
- Provisions for the labelling and marking of the product in accordance with the Codex General Standard for the Labelling of Pre-packaged foods.
- Provisions for food additives, contaminants, pesticide residues food hygiene and method of analysis
  according to the existing Codex standards.

#### 4. Assessment against the Criteria for the Establishment of Work Priorities

#### **General criterion**

Consumer protection from the point of view of health, food safety, ensuring fair practices in the food trade and taking into account the identified needs of developing countries.

The proposed new standard will meet this criterion by:

Promoting consumer protection and prevention of fraudulent practices.

• Providing greater assurance of the quality of the product to meet consumer needs and minimum requirements of food safety.

 Arriving at levels of standardization based on the properties of different varieties to meet industrial and consumer needs with exactness and credibility.

The drafting of the standard would be beneficial to many countries in general and more particular in the case of developing countries because they are the major producers, exporters and consumers of dried or dehydrated ginger.

### Criteria applicable to commodities

### (a) Volume of production and consumption in individual countries and volume and pattern of trade between countries

The global production data is available as of ginger which represents the total global produce while a part of which undergo drying before use and the remaining which are consumed as fresh. However, the trade data is available for dried ginger (ITC, Geneva). The major ginger producing countries are India, China, Nepal, Thailand and Nigeria. The major exporters are China, Netherlands, Thailand, Ethiopia, Nigeria, Brazil, Germany, Nepal and Peru. Major importers of the spice are Japan, Pakistan, United States of America, Netherlands, Bangladesh, Germany, United Arab Emirates, United Kingdom, Malaysia and Saudi Arabia. According to FAOSTAT, the international trade accounted to more than 0.5 million tonnes for about US \$647 million in 2013.

**Table 1: World-wide Production Data** 

Year	Production (in Tonnes)				
2008	1,596,625.00				
2009	1,643,678.25				
2010	1,692,234.62				
2011	2,034,429.00				
2012	2,095,056.00				

(Source: FAOSTAT)

**Pattern of International Trade** 

	Table 2: World-wide Export Data					
	Export Quantity Value					
Year	(in Tonnes)	(in US \$1000)				
2009	494,044	411,999				
2010	458,514	661,043				
2011	555,248	668,334				
2012	104,089	166,268				
2013	569,604	647,265				

(Source: ITC Geneva)

	Table 3: World-wide Import Data					
	Import Quantity	Value				
Year	(in Tonnes)	(in US \$1000)				
2009	459,217	391,627				
2010	440,068	601,282				
2011	559,053	669,620				
2012	128,917	540,502				
2013	566,357	714,183				

(Source: ITC Geneva)

## (b) Diversification of national legislations and apparent resultant or potential impediments to international trade

There exist various national and international standards for dried ginger. Some of them are given below:

- ISO 1003:2008, Spices -- Ginger (Zingiber officinale Roscoe.) Specification
- ESA quality minima document Rev 4.
- Indian Standard, IS 1908 (2008), "Spices and Condiments, ginger, Whole and ground, Specification",
- Malaysian standard, MS 718: 1981 "Specification for ginger, whole and in pieces"

The lack of harmonized and internationally accepted standards is detrimental to the trade and it leads to fraudulent practices and rejections of exports. Therefore, development of a Codex standard will allow the different stakeholders to harmonize their different requirements to facilitate international trade.

### (c) International or regional market potential

There is a consistent demand for all forms of dried ginger around the world. Ginger is also widely cultivated throughout the world. The global trade data of dried ginger given in Table 2 and Table 3 shows the importance of dried ginger as an internationally traded commodity.

### (d) Amenability of commodity to standardization

The characteristics of dried ginger such as class, size in its whole form, fineness (in case of ground ginger), volatile oil, ash content, moisture content and defects allowed are adequate parameters for standardization of the product. Furthermore, the existence of various national and international standards with the same parameters, enhance the potential for successful development of a Codex standard for this product.

### (e) Coverage of the main consumer protection and trade issues by existing or proposed general standards

The proposed Codex standard for dried and dehydrated ginger will help in assuring consumer protection and fair practices of international trade by setting an internationally accepted quality standard.

### (f) Number of commodities which would need separate standards including whether raw, semiprocessed or processed

This standard will cover all forms of dried and dehydrated ginger such as the whole, sliced, crushed, ground or powdered forms. Standard for fresh ginger is already established under CCFFV.

### (g) Work already undertaken by other international organizations in this field

The following standards by International Organization for Standardization (ISO) and European Spice Association (ESA) have quality specifications for dried ginger.

- ISO ISO 1003:2008 (Spices Ginger (Zingiber officinale Roscoe.) Specification)
- ESA Quality Minima Document Rev 4.

### 5. Relevance to Codex Strategic Objectives

The proposal is consistent with the Strategic Plan of the Codex Alimentarius Commission 2014 - 2019, in particular, Strategic Goals 1.1, 1.3, 2.3 and 3.1.

### 6. Information on the relation between the proposal and other existing Codex documents

The work will take into consideration:

- Codex standard for ginger (CODEX STAN 218-1999), which deals with fresh ginger
- General Principles of Food Hygiene (CAC/RCP 1-1969); General Standard for Labelling of Pre Packaged Foods (CODEX STAN 1-1985); Code of Hygienic Practice for Spices and Dried Aromatic plants (CAC/RCP 42-1995); Methods of Analysis and Sampling (CODEX STAN 234-1999); Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods (CAC/GL 21–1997); Maximum Residue Limits for pesticides adopted by Codex for 'Spices'.

### 7. Identification of any requirement for and availability of expert scientific advice

No expert scientific advice is foreseen at this stage. Published research documents by international bodies will be referred in the process of preparing the standard, if found necessary.

# 8. Identification of any need for technical input to the standard from external bodies so that this can be planned for

Technical inputs from external bodies such as the International Organization for Standardization (ISO), American Spice Trade Association (ASTA), and European Spice Association (ESA) shall be welcomed for this work.

### 9. Proposed timeline

The following tentative time schedule is proposed, subject to the decisions taken during the Second Session of Codex Committee on Spices and Culinary Herbs:

DATE	ADVANCE AND PROCEDURES	
2 <sup>nd</sup> CCSCH	Consideration of new work by the 2 <sup>nd</sup> session of CCSCH	
July 2016	Critical review of proposal by CCEXEC;	
	Approval of new work proposals by the Commission	
3 <sup>rd</sup> CCSCH	Consideration at Step 3 by the 3 <sup>rd</sup> CCSCH	
	Approval at Step 3.	
July 2017	Adoption at Step 5 by CAC	
4 <sup>th</sup> CCSCH	Consideration at Step 6 by the 4 <sup>th</sup> session of CCSCH	
July 2019	Adoption at Step 8 by the CAC	

Annex VI

### PROJECT DOCUMENT

# PROPOSAL FOR NEW WORK ON CODEX STANDARD FOR NUTMEG (*Myristica fragrans* Houtt) (Proposal Submitted by Indonesia)

### Introduction

Nutmeg and Mace from *Myristica fragrans* Houtt or fragrant nutmeg is an important commodity widely used in food industry. Nutmeg used in the natural food flavouring in breads, syrups, beverages, and candy. Nutmeg is the seed of the fruit of the plant *Myristica fragrans* Houtt of the Myristica family, already dried and unshelled, round and oval shape. Mace is arillus red to light yellow that exists between the flesh and seed of the fruit of the plant *Myristica* spp, cleaned and dried.

Nutmeg is native to the Moluccas Islands of Indonesia, but it is also grown in Penang Island in Malaysia, in the Carribean (particularly Grenada), Papua New Guinea, Guatemala and Costa Rica, in the southern state of Kerala in India, Sri Lanka and in the island of Zanzibar. The largest importing countries are European Union, USA, Japan and India. The biggest re-exporting countries are Singapore and the Netherlands. Each country has its own standards in production and trade, it makes harmonization of nutmeg standard become necessary.

This work aims at establishing a worldwide standard quality, facilitate international trade of Nutmeg and Mace from *Myristica fragrans* Houtt of the Myristica family.

### 1. The Purpose and Scope of the Standard

The scope of the standard will cover Nutmeg and Mace from *Myristica fragrans* Houtt of the Myristica family to be supplied to the consumers or the food industry in its whole, crushed and powdered form; and based on quality characteristics like colour, odour, mould, extraneous matter, insect, and moisture content. Chemical content like ash total, acid insoluble ash and essential oil are also considered.

### 2. Relevance and Timeliness

Nutmeg is one of the oldest traded commodities in the world. The difference interests between the producers and consumers generate diversity of standards. This causes difficulties in trade, especially in consumer protection. Therefore, the harmonization of standards become necessary and the standard will be the world's single reference standard. Nutmeg became a universal commodity and consumed by millions of people as well as a number of industry segments such as food. Therefore nutmeg hygiene and quality standard is needed.

Nutmeg is used extensively in whole, crushed, powdered and in an essential oils form in the food industry. Harmonization will reduce the difference in standards between countries producers, re-exports and consumers. Nutmegs' standard is very relevant to be developed into globally accepted standard through harmonization based on its properties especially chemicals and physical characteristics. Harmonization of nutmeg standard will be a reference in consumer protection and facilitate fair trade in accordance with international agreements as well as a reference internationally agreed through consensus between producers, consumers and traders countries.

Nutmeg Product

1. Dried whole, ground nutmeg

Flavouring in food industry: meat & dairy products (sausages, soups, spice mixes, baked products, eggnog, ice cream etc.) - both domestic and industrial use.

2. Mace – Dried, whole, ground

Domestic culinary uses, Industrial culinary uses as flavourings for sweet foods, cakes, doughnuts, dairy products,

Table 1. Nutmeg products and their uses

#### 3. Main aspects to be covered

The main aspects of the product to be covered in the standard are the minimum quality and safety requirements to protect consumer's health and to ensure fair practices in food trade:

Establish the minimum quality requirements cleanliness specifications and defects action levels as
per the products like quality characteristics of nutmeg like size, colour, odour, ruptured and wrinkled,
uniformity, weight, mould, extraneous matter, insect, broken, moisture content, ash total, acid
insoluble ash, calcium (CaO), essential oil and aflatoxin levels.

 Mace based on quality characteristics like colour, odour, mould, extraneous matter, insect, and moisture content.

- Chemical content like ash total, acid insoluble ash and essential oil.
- Provisions concerning tolerances with respect to quality and size allowed in every classes.
- Provisions concerning presentation the uniformity of the packaged product with respect to same origin, quality, size, etc. Provisions for the marking or labelling of the product in accordance with the General Standard for the Labelling of Pre-packaged Foods,
- Provisions for contaminants maximum levels, pesticide residues and hygiene with reference to preexisting Codex Standards
- Reference to Methods of Analysis and Sampling.

### 4. Assessment against the Criteria for the Establishment of Work Priorities

### **General criterion**

Consumer protection from the point of view of health, food safety, ensuring fair practices in the food trade and taking into account the identified needs of developing countries.

- Consumer protection from the point of view of health and the prevention of fraudulent practices.
- Quality of the produce to meet consumer needs and the minimum requirements of food safety.
- Standardization of products very beneficial for many countries.

### Criteria applicable to commodities

### (a) Volume of production and consumption in individual countries and volume and pattern of trade between countries:

Nutmeg is one of the spices of the most traded in the world with a total volume of exports from producing countries such as Indonesia, Sri Lanka, India and Grenada were as in Table 2 below:

YEAR WORLD EXPORT VOLUME 1999 11.741 tonnes 2000 12.455 tonnes 2001 11.375 tonnes 2002 13.052 tonnes 2003 13.111 tonnes 2004 15.443 tonnes 2005 12.561 tonnes 2006 13.547 tonnes 14.746 tonnes 2007 2008 13.180 tonnes 2009 14.332 tonnes 2010 14.869 tonnes 2011 15.501 tonnes

**Table 2. World Export Volume** 

Source: GTIS "World Trade Atlas"

In 1999-2011, Indonesia export market share was 66-76%, Sri Lanka was 8-13%, India was1-9% and Grenada was 26-3%.

EXPORT FROM MAJOR PRODUCING COUNTRIES Country CAGR & share (1999-2011) 1999-2011, Tonne Estimate Grenadad 14.796 16000 15,443 15.50 2696→396 14,746 14.332 Indiad 6.7% 14000 196→996 13,052 13,11 12,455 Sri Lankad 28.396 12000 8 %→13% Indonesiad 6696→7696 3.5% 10000 8000 6000 4000 2000 0 Source: GTIS "World Trade Atlas" Remark : -> Disclaime

Figure 1. Export form Major producing Countries

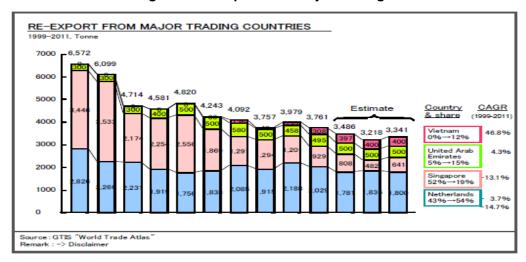
Total volume of re-export nutmeg from traders countries such as Netherlands, Singapore, United Arab Emirates and Vietnam were as in Table 3 below.

YEAR **WORLD RE- EXPORT VOLUME** 1999 6.572 tonnes 2000 6.099 tonnes 2001 4.714 tonnes 2002 4.581 tonnes 2003 4.820 tonnes 2004 4.243 tonnes 2005 4.092 tonnes 2006 3.757 tonnes 2007 3.979 tonnes 2008 3.761 tonnes 2009 3.486 tonnes 2010 3.218 tonnes 2011 3.341 tonnes

Table 3. World Re-Export Volume

In 2009-2011, Netherland re-export market share Was 43%-54%, Singapore were 52%-19%, United Arab Emirates was 5%-15% and Vietnam was 0-12%.

Figure 2. Re-Export form Major Trading Countries



Major importing countries of nutmeg are European Union (Netherlands, Germany, Italy, Belgium and France), United States, Vietnam, Japan, United Arab Emirates and Vietnam. In 2010, total market size of import nutmeg was US\$ 115.000. European Union is the largest importers.

**Figure 3. Major Importing Countries** 

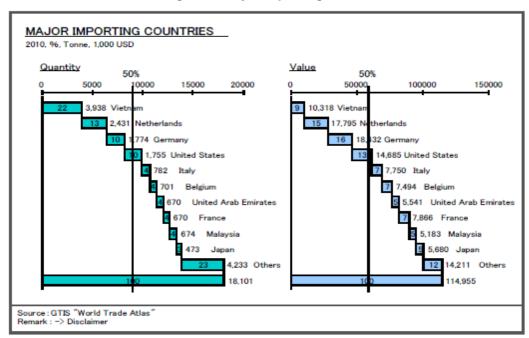


Table 4. Pattern of International Trade of Nutmeg

Year	Imp	oort	Export		
	Quantity Value		Quantity	Value	
	(Tons)	(US\$ Thousands)	(Tons)	(US\$ Thousands)	
2009	19135	119.190	20.890	109.361	
2010	102656	147.310	20.489	134.234	
2011	24073	259.188	23.767	253.285	
2012	3891	37.944	4.936	50.040	

Source: ITC, Geneva

Year	Import		Export		
	Quantity	Value	Quantity	Value	
	(Tons)	(US\$ Thousands)	(Tons)	(US\$ Thousands)	
2009	3014	24.489	5109	31.370	
2010	3648	44.849	4996	53.123	
2011	4620	70.797	5026	70.469	
2012	636	10.070	429	5.502	

Table 5. Pattern of International Trade of Mace

Source: ITC, Geneva

### (b) Diversification of national legislations and apparent resultant or potential impediments to international trade:

International organizations like ISO have dealt with the standards for Nutmeg. Many conventions including that of the International Spice Conference (ISC, 2013) has addressed the issue of harmonization of grades and specifications for Nutmeg. Nutmeg being produced in several countries and traded globally not only by the exporters but also through re-exports by importers is subject to various national legislations. To overcome the resultant or potential impediments to international trade, it is essential to incorporate all existing different standards in a single improved comprehensive standard acceptable across board internationally.

### (c) International or regional market potential:

Consumption and total imports of Nutmeg are expected to increase along with the increase of world population and economic development. On average, between 2009 and 2010, 17.520 tons and 37.439 tons for exports and imports respectively were traded globally. The averages of mace traded in the recent 4 years (2009-2012) are 3.890 tons for export and 2.979 tons for import (ITC, Geneva). EU and US are major importing countries for Nutmeg and other emerging markets include: Japan, Middle East, and Eastern Europe.

### (d) Amenability of commodity to standardization:

The characteristics of nutmeg and mace, from its cultivation through to harvest, cultivar varieties, quality and packaging all lend to adequate parameters for the standardization of the product. This will include defining quality characteristics like size, colour, odour, ruptured and wrinkled, uniformity, weight, mould, extraneous matter, insect, broken, moisture content, ash total, acid-insoluble ash, calcium (CaO), essential oil and aflatoxin level which should be considered to protect the health of consumers and ensure fair practices in food trade. Mace based on quality characteristics like colour, odour, mould, extraneous matter, insect, and moisture content. Chemical content like ash total, acid insoluble ash and essential oil.

# (e) Coverage of the main consumer protection and trade issues by existing or proposed general standards.

There is no general commodity standard covering nutmeg under Codex and so the new work will facilitate nutmeg trade and enhance consumer protection by establishing an internationally agreed quality standard and thus harmonise the many existing standards.

### (f) Number of commodities which would need separate standards including whether raw, semiprocessed or processed.

The standard will be for Nutmeg and Mace from Myristica fragrans Houtt of the Myristica family.

### (g) Work already undertaken by other international organization in this field

ISO specification for Nutmeg (ISO 6577:2002)

### 5. Relevance to the Codex Strategic Objectives.

This proposal is consistent with the Strategic Plan of the Codex Alimentarius Commission 2014-2019, in particular Objective 1.1, 1.3, 2.3 and 3.1 and aims at setting up international accepted minimum quality requirements of nutmeg for human consumption.

### 6. Information on the relation between the proposal and other existing Codex documents

This proposal is for a new global standard and has no relation to any other existing Codex text on this item, except that this standard will make reference to relevant standards and related texts developed by general subject Committees.

### 7. Identification of any requirement for and availability of expert scientific advice

No need for expert scientific advice is foreseen at this stage. Published research documents by international bodies will be referred in the process of preparing the standard.

# 8. Identification of any need for technical input to the standard from external bodies so that this can be planned for.

The technical input from ISO might be sought and used in the development of the standard.

### 9. Proposed Time Schedule

The following tentative timeline is proposed, subject to the decisions taken during the Second Session of Codex Committee on Spices and Culinary Herbs:

DATE	ADVANCE AND PROCEDURES	
2 <sup>nd</sup> CCSCH	Consideration of new work by the 2 <sup>nd</sup> session of CCSCH	
July 2016	Critical review of proposal by CCEXEC;	
	Approval of new work proposals by the Commission	
3 <sup>rd</sup> CCSCH	Consideration at Step 3 by the 3 <sup>rd</sup> CCSCH	
	Approval at Step 3.	
July 2017	Adoption at Step 5 by CAC	
4 <sup>th</sup> CCSCH	Consideration at Step 6 by the 4 <sup>th</sup> session of CCSCH	
July 2019	Adoption at Step 8 by the CAC	

**Annex VII** 

### PROJECT DOCUMENT

### PROPOSAL FOR NEW WORK ON A CODEX STANDARD FOR SAFFRON

### (Submitted by Iran)

### 1. Purpose and the scope of the standard

The scope of the work is to establish a worldwide standard for filaments, cut filaments and powder of Saffron derived from stigma flowers of *Crocus sativus* L. which must be dried to consume after appropriate preparation

The objective of the standard is to consider the essential quality characteristics of Saffron as a spice in many culinary products including for catering purposes or for repackaging, as required to aid international trade in this product.

### 2. Relevance and timeliness

Due to the growing trend of worldwide Saffron production and trade, it is necessary to establish a commodity standard covering the safety, quality, and hygiene and labelling in order to have a reference that has been internationally agreed by consensus between the main producing and trading countries. The Codex standard for saffron will help to protect consumers' health and to promote fair trade practices in accordance with the different international agreements.

The current and historical significance of Saffron shows, Saffron is the endemic herb which is a strategic product of Iran.

Iran's share of Saffron from the world production and export is almost 96 %. Labour requirement for Saffron production is 200 man day per hectare.

Saffron is a drought tolerant plant that grows in arid and semiarid climate. Furthermore, due to suitable climate, quality of Iranian saffron is the best among commercially available in international trade. Economics of this valuable crop from different dimensions such as marketing, employment, household's income, globalization and nonoil export.

### 3. Main aspects to be covered

The standard will include characteristic relating to the size. Categories, quality, contaminants, labelling and packaging.

The most relevant items which may be considered are related to:

- Establishing the minimum requirements of saffron which shall be complied with, independently from the quality parameters and other requirements regardless of class.
- Defining the categories to classify saffron in accordance with its characteristics.
- Establishing the tolerance as regards quality, quantity and size that may be permitted in saffron contained in a package.
- Provisions to be considered relating to the uniformity of the packaged product and the packaging used.
- Provisions for the labelling and marking of the product in accordance with the General Standard for the labelling of Prepackaged Foods.
- Provisions for pesticides and contaminants with the reference to the General Standard for Contaminants and toxins in food.
- Provisions for hygiene and handling with the reference to the general principles of food hygiene and other relevant codes of hygiene practices.
- References to methods of analysis and sampling

#### 4. Assessment against the Criteria for the Establishment of Work Priorities

#### **General criterion**

Saffron come in different colouring strength, odour, flavour and moisture .Therefore, trading of saffron is done according to its quality. Developing an international standard for saffron will protect consumers from fraudulent practices while facilitating international trade. The drafting of this standard would thus benefit consumers and major producing /exporting countries.

The elaboration of a Codex standard for saffron would be beneficial for developing countries in particular, because they are the major producers, exporters and consumers of saffron. It is necessary that the quality of produce meets consumer and needs minimum requirements of food quality and safety.

### Criteria applicable to commodities:

### (a) Volume of production and consumption in individual countries and volume and pattern of trade between countries

Saffron is one of the most important export products and plays significant role in income and employment of Saffron producers. The world's total saffron production was estimated at 312 metric tons in 2013.Iran (96%), Greece, Morocco, India, Spain and Italy are among main countries dealing with Saffron production. Major importer countries of Saffron are United Kingdom, Ireland, the United Arab Emirates (UAE), Spain, Saudi Arabia, France and Italy.

**Table 1: Pattern of International Trade** 

Export	Value, US Dollar thousand
2010	409,886
2011	382,473
2012	160,746
2013	157,857
2014	169,940

Source: ITC, Geneva

Import	Value, US Dollar thousand	World (In Metric Tons)
2010	1312,154	806,68
2011	274,381	950,979
2012	166,432	1,003,220
2013	164,130	1,049,103
2014	167,515	996,796

Source: ITC, Geneva

### (b) Diversification of national legislations and apparent resultant or potential impediments to International trade:

As mentioned above, Saffron is traded according to purity, quality and forms. The form of Saffron varies filaments, cut filaments and powder. There are three national standards for Saffron. International organization like ISO has two standards for Saffron. Many conventions including those of the world Spice Congress and the World Spice Organization have addressed the issue of harmonization of grades and specification for Saffron

This new work will provide a recommendation, which countries could use to develop their own quality and grading standards for Saffron and, when applied internationally, may assist in providing a harmonized approach.

### (c) International or regional market potential

The import of Saffron by most countries is increasing. Total export of it during 2010 as per International Trade Center (ITC), Geneva is 1,487 MT. The major exporters are Iran, Spain, Portugal, France, Afghanistan, Germany, Italy, India, United Arab Emirates.

Table 2: Exporters of saffron in worldwide

Unit: US\$ thousands

Exporters	Exported value in 2010	Exported value in 2011	Exported value in 2012	Exported value in 2013	Exported value in 2014
World	409,886	382,473	160,746	157,857	169,940
Iran (Islamic Republic of)	293,231	292,432	79,949	73,440	70,074
Spain	66,915	50,283	51,423	47,315	47,516
Portugal	5,982	4,435	3,849	10,776	18,285
France	4,846	6,247	2,368	3,976	7,100
Afghanistan	7,920	2,225	0	0	5,531
Germany	2,791	3,393	2,647	3,337	3,040
Italy	730	835	922	800	2,509
India	1,496	1,516	2,171	1,885	1,850
United Arab Emirates	1,187	621	760	934	1,645

Source: ITC, Geneva

Global demand for Saffron in all forms is expected to increase in future, mainly on account of increased culinary applications and functional foods. It can lead to increase Saffron trade .Due to importance the quality control of Saffron specifications, it's necessary to develop an international harmonized standard.

(d) Amenability of commodity to standardization The characteristics of Saffron from its cultivation to retail sale e.g. cultivar varieties, composition, quality characteristics, processing, packaging, etc. all lead to adequate parameters for the standardization of the product. Taking into account that technical information is available and certain degree of harmonization at regional/international levels has already been achieved on certain aspects relevant to consumer's protection and trade facilitation as mentioned in point (b). Using ISO standards as well as ASTA and ESA technical inputs from saffron producing countries shall constitute as the basis to develop a global harmonized standard by considering other countries / regions needs to facilitate worldwide harmonization.

### (e) Coverage of the main consumer protection and trade issues by existing or proposed general standards

There is no general commodity standard covering saffron under Codex. The proposed standard will heighten consumer protection and facilitate saffron trade by establishing an internationally agreed quality standard.

### (f) Number of commodities which would need separate standards including whether raw, semiprocessed or processed

A single standard for saffron will cover all forms of saffron traded worldwide. The different forms of saffron like powder, filaments and cut filaments will be examined under this standard individually.

# (g) Work already undertaken by other international organizations in this field and/or suggested by the relevant international intergovernmental body (dies)

The existing standards which may be considered while developing a codex standard for saffron are:

- ISO international standard 3632-1:2011(Edittion2): Specifications, ISO international standard 3632-2:2010 (Edittion1)
- European Commission directives

### 5. Relevance to the Codex strategic objectives

The elaboration of a Codex standard for saffron is in line with the strategic objective to promote the maximum application of codex standards by countries in their national legislation and to facilitate international trade by protecting the health of the consumers. Therefore this proposal is consistent with the Strategic Plan of the Codex Alimentarius Commission 2014-2019, in particular strategic objectives 1.1, 1.3, 2.3 and 3.1.

### 6. Information on the relation between the proposal and other existing Codex documents.

This is proposed as a new global standard and has no relation to any other existing Codex text on this item, except that this standard will make reference to relevant standards and related texts developed by General Subject Committees.

### 7. Identification of any need for any requirements for and availability of expert scientific advice

No expert scientific advice is foreseen at this stage. Published research documents by international bodies will be referred in the process of preparing the standard, if found necessary.

# 8. Identification of any need for technical input to the standard from external bodies so that this can be planned for.

The technical inputs from other external bodies can be effect on developing process of this standard. The existing standards which may be considered while developing a codex standard for saffron are:

 ISO international standard 3632-1:2011(Edition2): Specifications, ISO international standard 3632-2:2010 (Edition1)

### 9. Proposed Time Schedule

The following is the proposed timetable for the completion of the standard, subject to the decisions taken during the Second Session of Codex Committee on Spices and Culinary Herbs.

DATE	ADVANCE AND PROCEDURES
2 <sup>nd</sup> CCSCH	Consideration of new work by the 2 <sup>nd</sup> session of CCSCH
July 2016	Critical review of proposal by CCEXEC;
	Approval of new work proposals by the Commission
3 <sup>rd</sup> CCSCH	Consideration at Step 3 by the 3 <sup>rd</sup> CCSCH
	Approval at Step 3.
July 2017	Adoption at Step 5 by CAC
4 <sup>th</sup> CCSCH	Consideration at Step 6 by the 4 <sup>th</sup> session of CCSCH
July 2019	Adoption at Step 8 by the CAC

**Annex VIII** 

### PROJECT DOCUMENT

# PROPOSAL FOR NEW WORK ON A CODEX STANDARD FOR CLOVES (Submitted by Nigeria)

### Introduction

Cloves are the aromatic flower buds of the tree in the family of *Myrtaceae Syzygium aromaticum*. They are sold whole or ground and can be used as a spice.

Cloves are widely cultivated in India, Madagascar, Zanzibar, Pakistan, Sri Lanka and Tanzania; and with world production estimated over 2 00,000 metric tonnes. The major component of clove taste is imparted by the presence of <u>eugenol</u> and the quantity of the spice required in foods is typically small as it pairs well with other flavours.

### 1. Purpose and the scope of the standard

The scope of the work is to establish a worldwide quality standard for whole dried cloves, and (ground) powdered cloves.

The objective is to consider the essential quality characteristics of Cloves for industrial food production and for direct consumption, including for catering purposes and other essential uses

### 2. Relevance and timeliness

Due to the growing trend of worldwide Clove production and trade, it is necessary to establish a commodity standard covering the safety, quality, hygiene and labelling in order to have a reference that has been internationally agreed by consensus between the main producing and trading countries across the world. More significantly, the present status of Cloves is not limited to any particular region as Cloves are used in the cuisine of Asian, African, and the Near and Middle East, lending flavour to meats, curries, and marinades, as complement to fruit such as apples, pears, or rhubarb (Culinary use), Hence, justifying the elaboration of an international standard commensurate with Clove's true standing as an increasingly valuable worldwide commodity. In addition, the establishment of a Codex standard for Cloves will help to protect consumers' health and promote fair trade practices in accordance with the international agreements in particular the absence of a Codex Standard that would be used by governments in World trade thus affecting WTO SPS and TBT Agreements.

### 3. Main aspects to be covered

The standard entails main aspects related to the definition of the produce, essential quality factors e.g. moisture, acid insoluble ash and labelling requirements in order to provide certainty to the consumer on the nature and characteristics. The standard will supply high quality and safe products to protect consumer's health and against misleading practices by including all the necessary parameters such as, moisture, proper labelling, and other permissible limits among others.

The most relevant items which may be considered are related to:

- Establish the minimum requirements of cloves which shall be complied independently from the quality parameters and other requirements regardless of class.
- Define the categories to classify cloves in accordance with its characteristics.
- Establish the tolerance as regards quality and size that may be permitted of cloves contained in a package.
- Include the provisions to be considered relating to the uniformity of the packaged product and the packaging used.
- Include provisions for the labelling and marking of the product in accordance with the General Standard for the labelling of Pre-packaged Foods.
- Include provisions for pesticides and contaminants with the reference to the General Standard for Contaminants and toxins in food.
- Include provisions for hygiene with the reference to the general principles of food hygiene and other relevant codes of hygiene practices.
- · References to methods of analysis and sampling

### 4. Assessment against the Criteria for the Establishment of Work Priorities

### (a) Volume of production and consumption and volume and pattern of trade between countries

Clove is an important trade crop globally because it is of great importance in the spices and culinary industry in many of the countries that produce and import the commodity. Thus to countries like: Indonesia, Singapore, India, Tanzania and Nigeria just to mention a few. The consumption of cloves globally is immense and thus reflects in the trade data illustrated in 4(c).

### Import data of Nigeria for Cloves 2007-2008

	mport   I	Export	201	1,2010,2009,2008,200	7,2006	5,2005,
J	commod	ity				
country	reporter	element	years	countries		ves ty Value
7	Nigeria	Import	2007	India	0	4
	Nigeria	Import	2007	Singapore	172	368
	Nigeria	Import	2007	United States of America	73	26
	Nigeria	Import	2008	Belize	11	42
	Nigeria	Import	2008	China	29	15
	Nigeria	Import	2008	China, mainland	29	15
	Nigeria	Import	2008	United States of America	3	3

Source: FAOSTAT

## (b) Diversification of national legislations and apparent resultant or potential impediments to International trade:

In view of the fact that clove is a traded commodity across the globe, there are differences with regard to the quality of the product in terms of: moisture levels, ash content, extraneous matter etc across countries. As a result, each producing country has its own grades and specifications that they utilized this lead to having different standards for each producing country.

Most imported cloves are utilized for culinary purpose in whole, split dried or ground form, hence the trade takes shape based on customer requirements. Trade in cloves as at the moment depends on producing and importing countries mutual agreement in terms of grades and specifications. So it would be useful to have Codex Standard.

International organisation like ISO already has an existing standard for cloves; therefore there is dire need to harmonize grades and specifications for cloves. Cloves that are being produced in developing countries are traded globally, not only by the exporters but also through re-exports by importers are subjected to various national legislations. To overcome the resultant or potential impediments to international trade, it is necessary to integrate all existing national and private standards in a single comprehensive standard that provides level playing ground for international trades in cloves.

### (c) International or regional market potential:

Rank	Area	Quantity (tonnes)	Flag	Value (1000 \$)	Flag	Unit value (\$/tonne)
1	Indonesia	14979	61	345151	10	23042
2	Singapore	17634	62	164519	16	9330
3	India	13244	40	75861	24	5728
4	United Arab Emirates	2449	166	27036	80	11040
5	Viet Nam	2595	66	13535	57	5216
6	Malaysia	927	196	10682	118	11523
7	United States of America	1259	265	10075	232	8002
8	Netherlands	1477	271	8633	234	5845
9	Germany	726	288	5922	266	8157
10	Japan	449	242	3801	224	8465

Rank	Area	Quantity (tonnes)	Flag	Value (1000 \$)	Flag	Unit value (\$/tonne)
11	Bangladesh	486	84	3664	51	7539
12	United Kingdom	332	288	3040	275	9157
13	South Africa	381	172	2713	124	7121
14	Pakistan	1211	93	2653	77	2191
15	Nigeria	335	92	2175	63	6493

Rank	Area	Quantity (tonnes)	Flag	Value (1000 \$)	Flag	Unit value (\$/tonne)
1	Madagascar	22014	1	172638	1	7842
2	Singapore	7023	44	46780	27	6661
3	Sri Lanka	5195	19	35400	10	6814
4	United Republic of Tanzania	2306	43	31416	9	13624
5	Brazil	4274	96	22351	67	5230
6	Comoros	3709	1	20846	1	5620
7	India	1870	131	19312	72	10327
8	Indonesia	5397	67	16304	51	3021
9	Netherlands	759	281	7537	233	9930
10	Germany	280	281	2890	258	10321
11	Malaysia	768	152	2197	133	2861
12	United States of America	246	283	1062	272	4317

Source: FAOSTAT

### (d) Amenability of commodity to standardization

The characteristics of cloves from its cultivation to retail sale e.g. cultivar varieties, composition, quality characteristics, packaging, etc. all lead to adequate parameters for the standardization of the product. Using ISO standards as well as ASTA and ESA technical inputs from other cloves producing countries like Indonesia, Madagascar, Tanzania, to mention a few, shall be welcomed as the basis to develop a global harmonized standard by considering other countries / regions needs should therefore be amenable to / facilitate worldwide harmonization.

### (e) Coverage of the main consumer protection and trade issues by existing or proposed general standards

There is no commodity standard covering cloves in international trade considering that globally, cloves represent 15-16% of the tonnage of spices imported from 1996 to 2000 according to FAO. The proposed standard will heighten consumer protection and facilitate cloves trade by establishing an internationally agreed quality standard.

### (f) Number of commodities which would need separate standards including whether raw, semiprocessed or processed

A single standard for cloves will cover all varieties of cloves traded worldwide. The varieties of cloves like whole cloves, split dried cloves, and (ground) powder of cloves and its products will be examined under this individually.

# (g) Work already undertaken by other international organizations in this field and/or suggested by the relevant international intergovernmental body(ies)

The existing standards which may be considered while developing a codex standard for cloves are:

- ISO 2254:2004 specifies requirements for whole and ground (powdered) Cloves (Syzyguim aromaticum L).
- European Commission directives

### 5. Relevance to the Codex strategic objectives

The proposal is in line with the Strategic Vision Statement of the Strategic Plan 2014 - 2019, in particular, Objectives 1.1, 1.3, 2.3 and 3.1 and aims at setting up internationally accepted minimum quality requirements of cloves for human consumption with the purpose of protecting the consumer's health and achieving fair practices in food trade. It also contributes to fair practices in trade wherein the farmers will be able to assess their produce with reference to the quality standards thereby empowering them to realize more monetary values.

### 6. Information on the relation between the proposal and other existing Codex documents.

This proposal is for a new global standard and it is believed not to have any relationship to other existing Codex text on this item, except that this standard will make reference to relevant standards and related texts developed by General Subject Committees.

### 7. Scientific advice related to expert input from FAO, WHO, JECFA and such related bodies.

No expert scientific advice is foreseen at this stage. Published research documents by international bodies will be referred in the process of preparing the standard, if found necessary.

# 8. Identification of any need for technical input to the standard from external bodies so that this can be planned for.

The technical inputs from ISO, EU, European Spice Association and World Spice Organization as well as from cloves producing countries shall be welcomed as they have already done work related to the subject. Also ISO standards can be used as a step process to frame the codex standards for cloves.

### 9. Proposed timeline for completion of the new work

DATE	ADVANCE AND PROCEDURES	
2 <sup>nd</sup> CCSCH	Consideration of new work by the 2 <sup>nd</sup> session of CCSCH	
July 2016	Critical review of proposal by CCEXEC;	
	Approval of new work proposals by the Commission	
3 <sup>rd</sup> CCSCH	Consideration at Step 3 by the 3 <sup>rd</sup> CCSCH	
	Approval at Step 3.	
July 2017	Adoption at Step 5 by CAC	
4 <sup>th</sup> CCSCH	Consideration at Step 6 by the 4 <sup>th</sup> session of CCSCH	
July 2019	Adoption at Step 8 by the CAC	

**Annex IX** 

### PROJECT DOCUMENT

### PROPOSAL FOR NEW WORK ON A CODEX STANDARD FOR DRIED GINGER

(WHOLE AND GROUND)
(Proposal submitted by Nigeria)

### Introduction

Ginger (*Zingiber officinale* Roscoe) is a flowering plant widely used as a spice in most part of the world. It is grown in West Africa, Asia and the Caribbean. Ginger is widely cultivated in the tropical regions as a commercial crop, with world production estimate of 1.6 million tonnes.

### 1. Purpose and the scope of the standard

The scope of the work is to establish a worldwide quality standard for whole dried ginger, split dried ginger, and (ground) powdered ginger obtained from the rhizome of *Zingiber officinale* to facilitate international trade and consumer protection.

The objective of the standard is to consider the essential quality characteristics of dried ginger for industrial food production and for direct consumption, including for catering purposes and other essential uses as required, to aid international trade in this product.

#### 2. Relevance and timeliness

Due to the growing trend of worldwide dried ginger production and trade, it is necessary to establish a commodity standard covering the safety, quality, hygiene and labelling in order to have a reference that has been internationally agreed by consensus between the main producing and trading countries across the world. More significantly, the present status of dried ginger is not limited to any particular region and hence justifies the elaboration of an international standard commensurate with the dried ginger's true standing as an increasingly valuable worldwide commodity. In addition, the drafting of a Codex standard for dried ginger will help to protect consumers' health and to promote fair trade in accordance with the international agreements in particular the WTO SPS and TBT Agreements.

Traditionally, dried ginger is used for both medicinal and culinary (kitchen) purposes as well as in confectionery industry. It is also used as a spice in many culinary products ranging from bakery products (ginger bread, ginger cake, ginger biscuits), ginger tea, ginger ale, ginger beer all of which are of importance in the world food industries

### 3. Main aspects to be covered

The standard entails main aspects related to the definition of the produce, essential quality factors e.g. colouring strength, moisture and labelling requirements in order to provide certainty to the consumer on the nature and characteristics. The standard will supply high quality and safe products to protect consumer's health and against misleading practices by including all the necessary parameters such as colouring strength, moisture, proper labelling, and other permissible limits among others.

The most relevant items which may be considered are related to:

- Establish the minimum requirements of dried ginger which shall be complied with, independently from the quality parameters and other requirements regardless of class.
- Define the categories to classify dried ginger in accordance with its characteristics.
- Establish the tolerance as regards quality and size that may be permitted of dried ginger contained in a package.
- Include the provisions to be considered relating to the uniformity of the packaged product and the packaging used.
- Include provisions for the labelling and marking of the product in accordance with the General Standard for the labelling of Pre-packaged Foods.
- Include provisions for pesticides and contaminants with the reference to the General Standard for Contaminants and toxins in food.
- Include provisions for hygiene with the reference to the general principles of food hygiene and other relevant codes of hygiene practices.
- · References to methods of analysis and sampling

### 4. Assessment against the Criteria for the Establishment of Work Priorities

#### **General Criteria**

Codex standard for Dried Ginger would be beneficial for developing countries because they are the major producers, exporters and consumers. Establishing a standard for the commodity as a spice is necessary to meet minimum requirements for food quality and safety to ensure consumer protection.

### (a) Volume of production and consumption in individual countries and volume and pattern of trade between countries

Dried Ginger is an important export product that plays significant role as source of income and employment for its producing countries. China, India, Netherlands, Thailand, Ethiopia, Nigeria are currently among the countries most involved in ginger production globally, detailed statistics of its world import and export are shown in table 1 and 2 (respectively).

### (b) Diversification of national legislations and apparent resultant or potential impediments to International trade

Import of dried ginger takes place for many applications. It could be in fresh, powdered, dried split or just dried form depending on the requirement of customers. However it would be preferred that trade in the special form is carried under an international criteria based on Codex Standard. Therefore the new work would provide internationally recognized specific standards in order to enhance international trade and to accommodate the importers requirement.

### (c) International or regional market potential

The import of dried ginger by most countries is increasing. Japan is currently the largest importer of dried ginger with 65459 tonnes according to the current statistic of FAOSTAT. China is the largest exporter globally with408848, Nigeria ranks 6<sup>th</sup> exporting 6653tonnes of dried ginger according to FAOSTAT.

Table 1. Import Statistics of Dried ginger

Rank	Area	Quantity (tonnes)	Flag	Value	Flag	Unit value	
				(1000 \$)		(\$/tonne)	
1	Japan	65459	67	123483	66	1886	
2	United States of America	52521	125	68076	141	1296	
3	Pakistan	60112	15	51033	17	849	
4	Netherlands	30189	151	45529	160	1508	
5	Bangladesh	47939	17	38061	21	794	
6	Germany	10841	223	38036	195	3509	
7	United Arab Emirates	26587	57	30884	72	1162	

Source FAOSTAT

**Table 2. Export Statistic of Dried ginger** 

Rank	Area	Quantity (tonnes)	Flag	Value (1000 \$)	Flag	Unit value (\$/tonne)
1	China, mainland	408848	18	409484	20	1002
2	India	29747	61	55356	42	1861
3	Netherlands	20322	160	38610	163	1900
4	Thailand	24391	49	26591	60	1090
5	Ethiopia	7220	15	23586	8	3267
6	Nigeria	6652	14	18463	10	2776
7	Brazil	6668	85	7369	96	1105
8	Germany	1455	245	7146	229	4911
9	China, Province	2103	56	5373	48	2555
10	Nepal	17215	4	4839	8	281
11	Peru	2214	53	4363	52	1971
12	Lithuania	2526	111	4344	108	1720
_						l .

Source FAOSTAT

#### (d) Amenability of commodity to standardization

The characteristics of Dried ginger from its cultivation to retail sale e.g. cultivar varieties, composition, quality characteristics, packaging, etc. all lead to adequate parameters for the standardization of the product

### (e) Coverage of the main consumer protection and trade issues by existing or proposed general standards

There is no commodity standard covering dried ginger as spices in international trade considering that globally, dried ginger represents 15-16% of the tonnage of spices imported from 1996 to 2000 according to FAO. The proposed standard will heighten consumer protection and facilitate dried ginger trade by establishing an internationally agreed quality standard.

### (f) Number of commodities which would need separate standards including whether raw, semiprocessed or processed

A single standard for dried ginger will cover forms of dried ginger traded worldwide. The varieties of dried ginger like, split dried ginger, and (ground) powder of dried ginger and its products will be examined under this individually.

# (g) Work already undertaken by other international organizations in this field and/or suggested by the relevant international intergovernmental body(ies)

The existing standards which may be considered while developing a codex standard for dried ginger are:

- ISO international standard ISO 1003:2008 specifies requirements for dried ginger (*Zingiber officinale* Roscoe)
- European Commission directives

### 5. Relevance to the Codex strategic objectives

The proposal is in line with the Strategic Vision Statement of the Strategic Plan 2014 - 2019, in particular, Objectives 1.1, 1.3, 2.3 and 3.1 and aims at setting up internationally accepted minimum quality requirements of dried ginger for human consumption with the purpose of protecting the consumer's health and achieving fair practices in food trade. It also contributes to fair practices in trade wherein the farmers will be able to assess their produce with reference to the quality standards thereby empowering them to realize more monetary values.

### 6. Information on the relation between the proposal and other existing Codex documents.

This proposal is for a new Codex Standard on Dried Ginger has a relationship with *Standard for Ginger* (CODEX STAN 218-1999) which deals with fresh ginger.

### 7. Identification of any need for any requirements for and availability of expert scientific advice:

Scientific advice from external global bodies like FAO/WHO; JECFA and others are welcomed, but no expert scientific advice is foreseen at this stage. Published research documents by international bodies will be referred in the process of preparing the standard, if found necessary.

# 8. Identification of any need for technical input to the standard from external bodies so that this can be planned for.

The technical inputs from ISO, EU, American Spice Trade Association, European Spice Association and World Spice Organization shall be welcomed as they have already done work related to the subject. Also ISO standards can be used as a step process to frame the codex standards for dried ginger.

### 9. Proposed timeline for completion of the new work

DATE	ADVANCE AND PROCEDURES	
2 <sup>nd</sup> CCSCH	Consideration of new work by the 2 <sup>nd</sup> session of CCSCH	
July 2016	Critical review of proposal by CCEXEC;	
	Approval of new work proposals by the Commission	
3 <sup>rd</sup> CCSCH	Consideration at Step 3 by the 3 <sup>rd</sup> CCSCH	
	Approval at Step 3.	
July 2017	Adoption at Step 5 by CAC	
4 <sup>th</sup> CCSCH	Consideration at Step 6 by the 4 <sup>th</sup> session of CCSCH	
July 2019	Adoption at Step 8 by the CAC	