

# CODEX ALIMENTARIUS COMMISSION



Food and Agriculture  
Organization of the  
United Nations



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

3<sup>rd</sup> Session

Chennai, India, 6 - 10 February 2017

### PROJECT DOCUMENT

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

(REVISED PROPOSAL 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 one of the most well-known spices'. It is traded internationally. Major clove producing countries are: 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 [eugenol](#) 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, detailed statistics of its world production import and export are shown in Table 1-6.

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

<b>Year</b>	<b>Production (in Tonnes)</b>
2008	99,567
2009	110,755
2010	127,456
2011	101,342
2012	126,956
2013	137,010
2014	152,968

(Source:  
FAOSTAT)

**Table 2. Import data of Nigeria for Cloves 2004 - 2013**

<b>Year</b>	<b>Quantity (in Tonnes)</b>	<b>Value (in US \$1000)</b>
2004	63	230
2005	171	543
2006	164	656
2007	245	398
2008	43	60
2009	43	60
2010	400	2,148
2011	335	2,175
2012	264	3,162
2013	191	2,255

(Source: FAOSTAT)

### Pattern of International Trade

**Table 3: World-wide Export Data**

<b>Year</b>	<b>Export Quantity (in Tonnes)</b>	<b>Value (in US \$1000)</b>
2009	53,283	169,206
2010	43,904	159,871
2011	91,358	734,463
2012	49,077	411,878
2013	37,348	334,091
2014	52,906	433,731
2015	51,800	364,076

(Source: ITC calculations based on UN COMTRADE statistics.)

**Table 4: World-wide Import Data**

<b>Year</b>	<b>Import Quantity (in Tonnes)</b>	<b>Value (in US \$1000)</b>
2009	47,735	153,464
2010	38,594	140,938
2011	64,621	710,526
2012	45,111	437,739
2013	32,269	271,255
2014	50,309	378,470
2015	50,291	371,181

(Source: ITC calculations based on UN COMTRADE statistics.)

**Table 5. Import Statistics of Cloves in 2013**

Rank	Area	Quantity (tonnes)	Value (1000 \$)	Unit value (\$/tonne)
1	India	10,924	93,934	8,599
2	Singapore	6,007	6,3209	10,526
3	United Arab Emirates	3,683	41,377	11,235
4	Viet Nam	2,600	14,785	5,687
5	United States of America	1,970	19,708	10,004
6	Netherlands	1,276	12,219	9,576
7	Pakistan	1,192	2,432	2,040
8	Malaysia	691	3,961	10,130
9	Germany	669	7,020	10,493
10	United Kingdom	432	5,258	12,171
11	Bangladesh	363	3,907	10,763
12	Japan	354	4,031	11,387
13	South Africa	311	1,606	5,164
14	Indonesia	308	3299	10,711
15	Nigeria	191	2,255	11,806

(Source: FAOSTAT)

**Table 6. Export Statistics of Cloves in 2013**

Rank	Area	Quantity (tonnes)	Value (1000 \$)	Unit value (\$/tonne)
1	Madagascar	11,697	104,303	8,917
2	Sri Lanka	5,478	49,297	8,999
3	Indonesia	5,177	25,399	4,906
4	Comoros	4,527	26,039	5,752
5	India	4,298	5,177	1,205
6	Brazil	4,095	37,698	9,207
7	United Republic of Tanzania	4,089	43,061	10,531
8	Singapore	4,019	43,008	10,701
9	Netherlands	723	9,567	13,232
10	United States of America	353	1,458	4,130
11	Germany	222	3,203	14,428
12	Malaysia	163	1,151	7,061

(Source: FAOSTAT)

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

Clove is a traded commodity across the globe with differences with regard to the quality of the product such as moisture levels, ash content and extraneous matter across countries. Trade in cloves as at the moment depends on producing and importing countries mutual agreement in terms of grades and specifications, which lead to having different standards for each producing country.

An international organisation like ISO already has an existing standard for cloves; therefore there is dire need to harmonize grades and specifications for cloves. 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 in line with the Procedural Manual.

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

The import of Cloves by most countries is increasing. India is currently the largest importer of Cloves with 10924 tonnes and Madagascar is the largest exporter globally with 11697 tonnes, according to the current statistic of FAOSTAT.

It can be seen in Table 4 above, that though there are indication of fluctuation generally in the World-import of cloves, there has however been a growth in Quantity of import of cloves from 47.735 tons in 2009 to 50.291 tons in 2015 with also an increase in value from 153,464 thousand dollars (usd) in 2009 to 371,181 thousand dollars (usd) in 2015

**(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. The proposed standard will enhance consumer protection and facilitate cloves fair trade by establishing an internationally agreed and recognized quality standard.

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

**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**

<b>DATE</b>	<b>ADVANCE AND PROCEDURES</b>
3 <sup>rd</sup> CCSC	Consideration of new work by the 3 <sup>rd</sup> session of CCSC
July 2017	Critical review of proposal by CCEXEC; Approval of new work proposals by the Commission
4 <sup>th</sup> CCSC	Consideration at Step 3 by the 4 <sup>th</sup> CCSC Approval at Step 3.
July 2018	Adoption at Step 5 by CAC
5 <sup>th</sup> CCSC	Consideration at Step 6 by the 5 <sup>th</sup> session of CCSC