

C O D E X A L I M E N T A R I U S C O M M I S S I O N



**Food and Agriculture
Organization of
the United Nations**



**World Health
Organization**

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Agenda Item 8

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**JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON FRESH FRUITS AND VEGETABLES**

**18th Session
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PROPOSALS FOR NEW WORK ON CODEX STANDARDS FOR FRESH FRUITS AND VEGETABLES

PROJECT DOCUMENT

PROPOSAL FOR NEW WORK ON A CODEX STANDARD FOR GARLIC

(Submitted by Mexico)

The National Codex Alimentarius Committee of Mexico appreciates the work of the Codex Committee on Fresh Fruits and Vegetables in the development of world quality standards for fresh fruits and vegetables, and it is pleased to present a project document on a Codex Standard for Garlic to protect consumers' health and promote fair practices in the food trade for consideration as a new work by the Committee.

1. Purpose and scope of the standard

The objective of this standard is to establish quality criteria for garlic, proper labelling, among other relevant points, to protect consumers' health, besides facilitating trade.

This standard applies to bulbs of commercial varieties and types of garlic obtained from *Allium sativum L.*, to be supplied fresh, semi-dry or dry to the consumer after preparation and packaging. Garlic for industrial processing is excluded.

2. Relevance and timeliness

The global trend of garlic production has been increasing in recent years, which can be seen in the table below as reported by FAO from 2005 to 2011.

Year	World consumption of garlic in thousands of tons.
2005	15,066
2006	15,323
2007	20,085
2008	22,790
2009	22,010
2010	22,593
2011	23,770

Garlic is one of the most popular culinary species around the world. In fact, it is widely used in Mediterranean and Asian cuisine. Garlic is a product that is consumed both fresh and processed e.g. in paste, in flakes, dehydrated, crushed, etc. The world market for garlic has grown in recent years due to changes in consumer habits. Garlic is currently associated as one of the main ingredients of the so-called Mediterranean diet and the prophylactic and curative qualities of garlic are fully demonstrated.

The per capita consumption has increased worldwide as can be seen in the following table, according to FAO for 2005-2011.

Year	Daily per capita consumption (kg / day / person)
2005	0.383
2006	0.389
2007	0.503
2008	0.564
2009	0.538
2010	0.545
2011	0.567

A case that can be cited as a precedent for the development of this standard is that Mexico currently represents their interests through the National Committee on Garlic. This Committee is made-up of all stakeholders that are committed to quality and have experience in export to South America and Europe. They also have experience related to the product entering the country, which in some cases have not been the most favourable as the lack of an international standard results in unfair trade practices and consumer misleading information. Mexico has a quality standard for garlic but it is not mandatory so, disadvantages are noted by not having unified international criteria to rate the quality.

3. Main aspects to be covered

The most relevant points that can be considered are those related to the establishment of minimum quality requirements, maturity requirements, definition of quality classes and their tolerances and the section on marking or labelling.

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

General criterion

Relevance to the Codex strategic objectives:

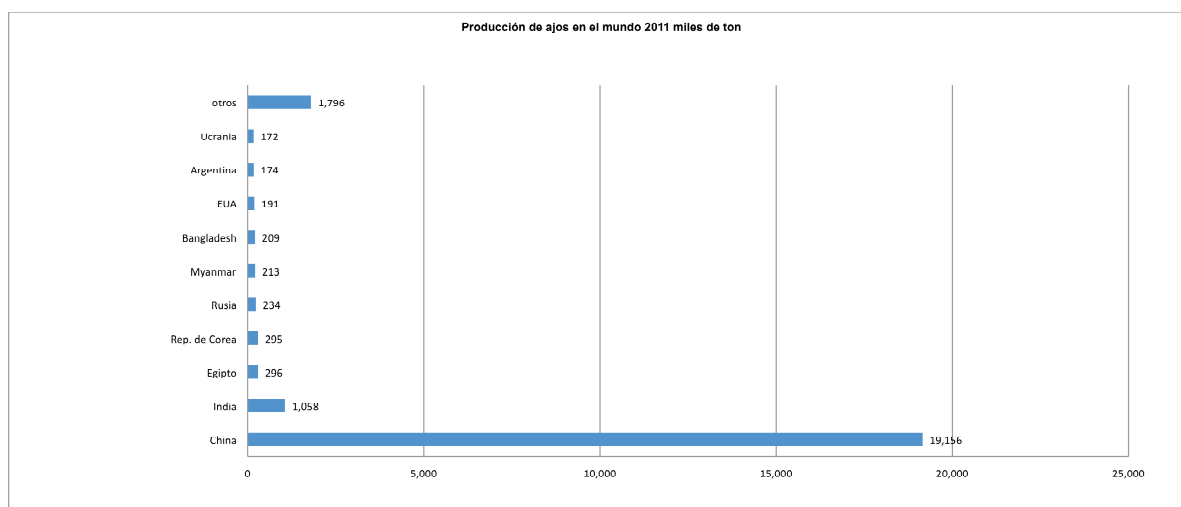
- Protection of consumers by promoting fair trade practices relating to the identification, origin of produce, characteristics according to different regions,
- Standardization of quality parameters.

Criteria applicable to commodities

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

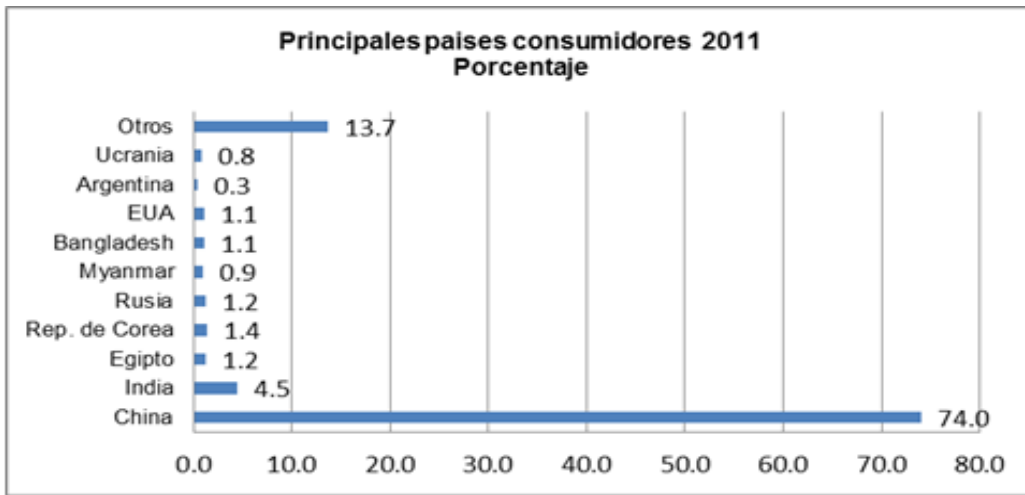
Currently, 103 out of 245 countries are producers of garlic as recorded by the FAO statistics, with a worldwide production for 2011 of 23,769,746 Tons. The volume of production in different countries is presented below, where China stands out with 80.6% of the garlic production worldwide.

According to the FAO statistics, 93.7% of registered countries consume garlic, where China consumes 74% of the world production. The demand from the main garlic consuming countries for 2011 is presented below.



World production of garlic in 2011 (thousand of tons.)

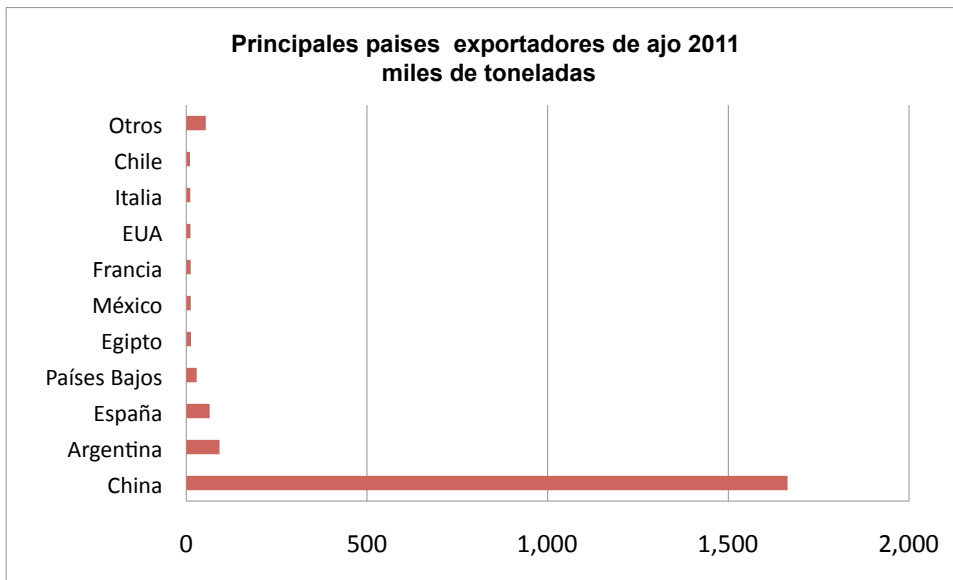
Others, Ukraine, Argentina, USA, Bangladesh, Myanmar, Russia, Republic of Korea, Egypt, India, China.



Main consuming countries in 2011 (percentage)

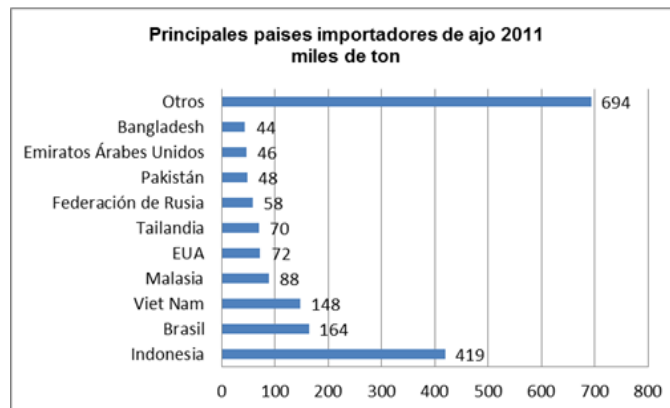
Others, Ukraine, Argentina, USA, Bangladesh, Myanmar, Russia, Republic of Korea, Egypt, India, China.

It is noted that for exports and imports, the main exporting countries are China, Argentina, Spain, Netherlands, Egypt, Mexico, France, the United States of America, while Indonesia, Brazil, Viet Nam, Malaysia and the United States of America are the main importing countries. The figures below summarize these data (FAO 2011).



Main garlic exporting countries (2011) (thousand of tons.)

Others, Chile, Italy, USA, France, Mexico, Egypt, Netherlands, Spain, Argentina, China



Main garlic importing countries (2011) (thousand of tons.)

Others, Bangladesh, United Arab Emirates, Pakistan, Russian Federation, Thailand, USA, Malaysia, Viet Nam, Brazil, Indonesia

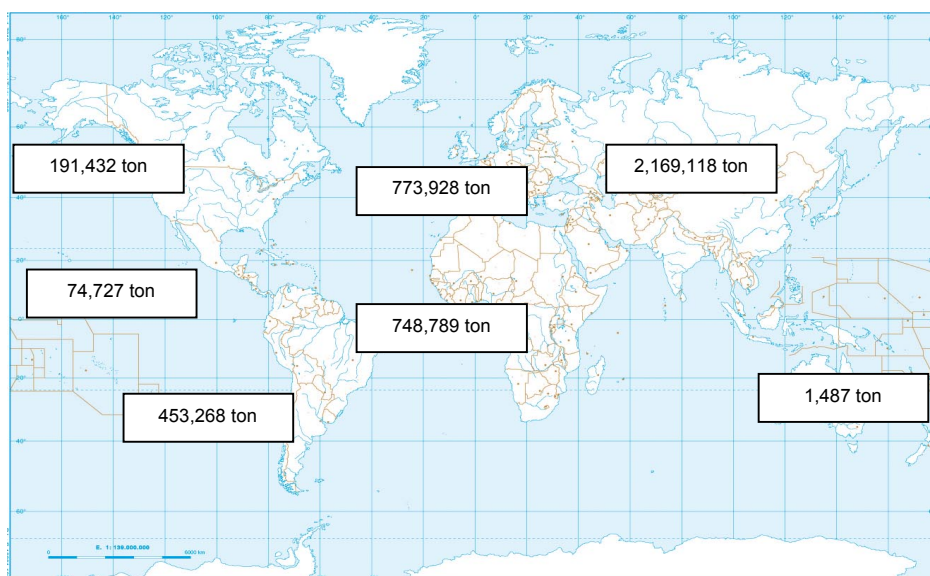
(b) Diversification of national legislation and apparent resultant or potential impediments to international trade

There are different national and regional standards that contribute particularly to the quality regulation of garlic at local or regional level, for example:

- European Union. EU Commission Regulation No 2288/97 of 18 November 1997 laying down marketing standards for garlic. Official Journal No L 315 de 19/11/1997 p. 0003 – 0006.
- Mexican Standard NMX-FF-018-SCFI-2006. Non-processed foodstuff for human consumption – Specie: Garlic (*Allium Sativum* L.) – Specifications.
- Argentinean Standard IRAM-INTA 155003-1:2002 - Consumption of fresh vegetables: Garlic (Part 1: Definitions) and IRAM-INTA 155003-2:2002 – Consumption of fresh vegetables: Garlic (Part 2: Requirements).
- United States of America – United States standards for grades of garlic, 1997.
- Cuban Standard NC-225-2002 establishing the quality of garlic.
- Venezuelan Standard COVENIN 2198:2000 – Garlic for direct consumption.
- Quality standards for foreign trade of garlic. Ministry of Trade and Tourism. January 7, 1980. Technical Regulation of the Southern Common Market (MERCOSUR) laying down the identity and quality of garlic. Resolution IASCAV N° 100/95. Buenos Aires, September 15, 1995.

(c) International or regional market potential

There is potential for the consumption and production of garlic, as can be seen worldwide for each continent, according to FAO in relation to the production of this produce in 2011.



(d) Amenability of commodity to standardization

The characteristics of garlic from cultivation to retail sale, composition, quality characteristics, packaging and labelling allow the establishment of parameters for the harmonization of national standards. These parameters have been harmonized by regions and group of countries e.g. in the UNECE and the OECD, which will facilitate the development of a global standard in the CCFFV that will consider the needs of all countries or regions trading this bulb.

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

In relation to this point, the section on marking or labelling will be very important in particular when developing commercial specifications such as class and size. This information will be of great value to the consumer, as it will facilitate the understanding of the produce characteristics, which will allow the consumer to make an informed decision about the produce acquired. The standard will also give certainty of fair trade practices.

In Mexico, the different labels on the market confuse consumers. The Mexican quality standard for garlic is of voluntary application while the Mexican official standard for labelling is mandatory but does not request information on the produce quality. There is no standardization for reporting grades, sizes, colours, origin, etc. on the Mexican market, which mislead consumers. This or similar situations could occur in other countries or regions affecting trade in this product.

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

A single standard that could include various commercial, same types that do not vary significantly is proposed. If necessary, tables could be developed with comparative values for cases that merit and justify.

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

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

- ISO 5560:1997. International Standard. Dehydrated garlic (*Allium sativum* L.) – Specification.
- ISO. 6663: 1995. International Standard. Garlic-cold storage.
- ISO 5567:1982. International Standard. Dehydrated garlic - Determination of volatile organic sulphur compounds.

Other relevant standards / regulations that apply in trade:

- UNECE STANDARD FFV-18 GARLIC 2011 EDITION.
- European Union. EU Commission Regulation No 2288/97 of 18 November 1997 laying down marketing standards for garlic.
- MERCOSUR/GMC/RES No 41/94: Identity and Quality of Garlic – Resolution of the Common Market Group: Southern Common Market (MERCOSUR).

5. Relevance to the Codex strategic objectives

The goal of Codex is to ensure safe and quality food to everyone, anywhere. Given the volume of production and marketing of garlic worldwide, the Codex Alimentarius contributes, through its standards, guidelines and codes of practice, to the safety, quality and fair trade practices worldwide. Consumers can be confident that the food products they buy are safe and have good quality. Importers can also be confident that the food they have ordered fit the specifications. This proposal is also in line with Strategic Goal 1 – *Establish international food standards that address current and emerging food issues* and its corresponding objectives of the Codex Alimentarius Commission Strategic Plan 2014-2019.

Due to the lack of a global standard for the commercial quality of garlic, international trade has been greatly affected. Importers prefer to import fruits and vegetables taking Codex standards as a reference therefore, the technical work carried out by countries in the CCFFV will provide the required worldwide standard. The standard will also provide a tool to regulate the market by facilitating commercial transactions between importers and exporters while ensuring product quality to the consumer.

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

Codex does not have a standard that put together quality and safety provisions for garlic in a single standard agreed at international level. Therefore, it is considered that the Codex Standard for Garlic can provide a harmonized worldwide standard that will ensure the safety and quality of garlic. As previously indicated, the UNECE and OECD standards can be taken as a starting point to become more inclusive standards, promoting consensus among all producing countries and marketers of this product.

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

No need for expert scientific advice is foreseen.

8. Identification of any need for technical input to the standard from external bodies

The need for technical input will depend on the commercial types that will be included in the standard, there is scientific work carried out in this regard. If the Committee determines the need for technical input, there are institutions that could provide technical advice. The need for technical input should be identified since the submission of the draft in order to schedule meetings and receive the information in a timely manner.

9. Proposed timeline for completion of the new work

PROCEDURE	DATE
Mexico – Submit the proposal for garlic. CCFFV – Agreement to start new work on a Codex Standard for Garlic.	February, 2014 CCFFV
CCEXEC – Critical Review Process: Recommendation to start new work on a proposed draft Codex Standard for Garlic. CAC – Approval of new work. Circulation of the proposed draft Standard for comments at Step 3.	June/July 2014 CCEXEC/CAC
CCFFV – Consideration of the proposed draft Standard at Step 4.	May, 2015 CCFFV
CCEXEC – Critical Review Process: Recommendation for adoption at Step 5. CAC – Adoption at Step 5. Circulation for comments at Step 6. <u>Effort will be made for adoption of the proposed draft Standard at Step 5/8 in June/July 2015 depending upon relevant inputs and agreement from members.</u>	June/July, 2015 CCEXEC/CAC
CCFFV – Consideration of the draft Standard at Step 7.	September, 2016 CCFFV
CCEXEC – Critical Review Process: Recommendation for adoption at Step 8. CAC – Adoption at Step 8 (Codex Standard for Garlic).	June/July, 2016 CAC