

# CODEX ALIMENTARIUS COMMISSION



Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization

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**Agenda Items 5**

**ASIA20/CRD7**

## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### FAO/WHO COORDINATING COMMITTEE FOR ASIA

#### Twentieth Session

New Delhi, India, 26-30 September 2016

### DEVELOPMENT OF STANDARD FOR DRIED LONGAN

(Prepared by Thailand)

#### Background

1. At the 19th Session of the FAO/WHO Coordinating Committee for ASIA (CCASIA) (November 2014). The Delegation of Thailand introduced the discussion paper (CRD11) proposing new work on the development of a regional standard for dried longan. The Coordinating Committee agreed to recommend interested members to propose work on dried longan within the framework of the Codex Committee on Processed Fruits and Vegetables (CCPFV) Electronic-Working Group (EWG) on dry and dried produce and, in case there is no support in CCPFV, to prepare a discussion paper and project document for consideration at the next CCASIA.

2. At the 28<sup>th</sup> session of the CCPFV (September 2016), the delegation of Thailand recalled the recommendation of CCASIA on the proposal for new work on dried longan to be undertaken by CCPFV and submitted a project document for this new work. The Delegation of Thailand supported by India explained that the product was traded worldwide, and that CCASIA has noted lack of capacity / expertise as a regional coordinating committee to elaborate such a standard while CCPFV was the subsidiary body of CAC having competence on dry and dried produce. The Committee considered requests for revision of existing / development of new work for processed fruits and vegetables together with the proposal from the host country (USA) to adjourn the CCPFV. The Committee agreed that the Codex Secretariat would issue a CL requesting comments on new work proposals to be submitted by the concerned countries directly to CCEXEC (June 2017) for critical review by means of project document and recommend to CAC for approval. The CAC will determine to the opportunity to convene a physical meeting of CCPFV based on the outcome of CCEXEC and the volume of the approved new work.

#### An overview of dried longan

3. Longan, *Euphoria longana* Lam. (syn. *Dimocarpus longan* Lour.) is a small tropical fruit that closely resembles lychee, both in terms of taste and appearance. Longan is an aromatic, delicious and fairly sweet fresh fruit. The fruit is either round or oval with a translucent pulp and contains one single black seed. Fresh longan fruit appears leathery and light brown in color. When dried, the fruit becomes golden color and has a unique flavor. This fruit is believed to have originated in either the area between India and Myanmar or in China. However, it is now grown in various parts of the world such as Thailand, Sri Lanka, South India, South China, several Southeastern Asian countries as well as Australia.

4. Longan is very popular as it has a lot of health benefits. The longan fruit is a rich source of many vitamins, minerals and other nutrients, such as carbohydrate, proteins, amino acids, vitamins B1, B2, B3, C, phosphorus, potassium, and adenine. It is also a good source of dietary fiber. Most of these nutrients are well preserved after dehydration process. Consuming dried longan fruit is presumably help sleepless, reduce fatigue, calm the nervous system etc. It is believed among the Chinese people that longan is a potent tonic herb.

5. Longan is mostly consumed fresh. It can also be processed to canned, frozen or dried product. The most common form of processing is drying. Longan is normally consumed directly or used to prepare food, desserts, juice etc. The dried longan is also eaten as snack in many countries as China, Thailand, Korea and Singapore.

6. Currently, there are two main types of dried longan traded internationally i.e. dried flesh, and dried whole fruit either with or without seed (Figure 1 and 2) Both types are processed without addition of any ingredient, namely sugar or syrup. The flesh of dried longan may be golden, dark brown or black depending on the processing techniques. Codex has established a commodity standard for fresh longan in 1999 (Codex Stan



220 -1999).

**Figure 1:** Dried longan flesh



**Figure 2:** Dried whole longan

### Relevance of dried longan in international trade

7. Mostly, dried longan is produced in Thailand, China and Vietnam. World production of longan is an average of 144,000 tonnes per year. The major import countries are China, Myanmar, Vietnam, Lao PDR and Korea. The main importers outside Asia are North America and Australia. Statistical data showed increase in export value of dried longan from 118 million US Dollars in 2012 to 169 million US Dollars in 2015 (Table 1).

**Table 1** Export data of dried longan from Thailand to other countries/regions in 2012-2015

Quantity: Tons, Value: 1,000 US dollars

Country	2012		2013		2014		2015	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
VIETNAM	56,163	37,512	75,131	45,778	154,862	114,333	91,083	125,421
CHINA	59,951	69,350	60,960	73,175	34,731	44,126	12,761	21,189
MYANMAR	4,170	2,858	2,723	1,208	5,534	6,505	4,718	15,001
HONG KONG	352	2,559	290	2,114	448	3,492	528	2,998
REP. OF KOREA	150	675	194	961	122	648	238	1,208
SINGAPORE	107	783	108	839	173	1,472	119	1,099
MALAYSIA	62	243	80	105	121	353	196	605
TAIWAN	114	142	100	166	51	75	128	191
LAOS	3,838	1,821	300	443	469	86	240	104
U. ARAB EMIRATES	4	14	3	12	4	8	27	43

Country	2012		2013		2014		2015	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
JAPAN	0	0	0	16	0	0	0	0
U.S.A.	80	649	23	187	58	514	52	552
CANADA	45	317	56	297	36	274	37	374
AUSTRALIA	27	241	25	252	16	173	16	184
VATICAN CITY STATE	3,316	442	195	143	0	0	66	54
FRANCE	5	26	2	17	2	19	2	19
NEW ZEALAND	0	2	9	21	0	3	0	5
NETHERLANDS	22	40	18	39	18	50	0	2
SPAIN	10	6	10	26	0	0	0	0
AUSTRIA	0	3	1	13	0	0	0	0
OTHERS	840	542	1,987	10	21,458	51	516,118	517
<b>TOTAL</b>	<b>129,255</b>	<b>118,223</b>	<b>140,232</b>	<b>125,821</b>	<b>196,666</b>	<b>172,183</b>	<b>110,729</b>	<b>169,566</b>

Source: The Customs Department, Thailand. Available at [www.customs.go.th](http://www.customs.go.th)

### Importance of the development of Codex standard for dried longan

8. Longan can be either dried whole with or without seed, or dried flesh. Hot air drying is commonly used for the production of "semi-dried" or "dried" longans. The moisture content is between 13% and 20%. Although drying is a safe and economical way to preserve food that the microorganisms which cause food spoilage and food safety are unable to grow and multiply in the absence of sufficient water, its effectiveness depends on the right temperature and flow rate during the operation and the hygienic control to avoid the adverse effect to human health. Dried longan with appropriate low moisture content can be stored at ambient temperature for long period without deterioration; whereas semi-dried longan, with higher percentage of moisture content, requires refrigeration during storage and transportation to ensure quality and safety of the products. At present, the process of drying fruits including longan is not only by heat but also freeze-drying, which the latter gives finished produce a crispy texture.

9. Also sizing and grading of whole dried longan are very important. The prices for each grade and size are very distinctive, approximately 50% difference. Therefore uniform sizing and grading are necessary to prevent dispute in international trade. Another concern in trade of the dried longan is the sulphite allergy. Normally, dried whole longan fruits are free from food additives, especially sulphites, however, some types of dried flesh of longan, like other dried fruits, can contain extremely high amounts of sulphites to prevent discoloration and reduce spoilage. Drying also concentrates natural salicylates, in some kind of fruits, which can affect people with asthma and sulphites sensitivity.

10. The proposed new work is aimed to establish appropriate standard and criteria on food safety, essential quality, hygiene and labelling to be used to determining the risk of non-compliance of product and describing the uniform quality and sizing of products in the marketplace supplemented by method of inspection. This would result in the introduction of a safe, fair and marketable quality of dried longan and minimizing potential impediments to international trade.

### Conclusion

11. Trade data of dried longan seemed to indicate that the product was produced and traded in the Asian region as well as globally. The development of a standard for dried longan can ensure the consumer's health protecting and fair trade practices.

### Recommendation

12. The data provided showed that dried longan meet Codex criteria for the establishment of work priorities for either worldwide or regional standard. However, according to the conclusion of the 28<sup>th</sup> CCPFV that the project document on the proposal for new work be submitted to the CCEXEC, and it seemed that some countries may submitted project documents on specific dried fruits standards (eg. raisins, dates), it seems logical to propose to the CCEXEC to consider suggesting the establishment of new work on the general (horizontal) standard on dried fruits with specific annexes.

13. The Coordinating Committee is invited to consider, based on the paragraphs above, starting new work on development of a standard for dried longan with the following recommendation.

- To support project document on new work of dried longan submitted by Thailand to the CCEXEC for consideration and recommendation to CAC for approval, with the possibility to establish a worldwide general standard on dried fruits, as an appropriate first step.
- If the outcome of the critical review from CCEXEC do not reach in advancing to develop such a worldwide standard or the CCEXEC recommend a new work on regional standard, then the Coordinating Committee would consider this work to be handled by CCASIA as a regional standard.

14. The Project Document for Proposal of New Work for the elaboration of standard for Dried Longan has been prepared and attached as Appendix.

## PROJECT DOCUMENT

## PROPOSAL FOR NEW WORK ON A STANDARD FOR DRIED LONGAN

**1. Purposes and scope of the Standard**

The purpose of this work is to establish a standard with the aim of protecting the consumer's health and ensure fair trade practices.

The scope of the standard covers dried longan obtained from fresh longan fruit of *Dimocarpus longan Lour* of Sapindaceae which offers for direct consumption. Currently, there are two main types of dried longan traded internationally i.e. dried flesh, and dried whole fruit with or without seed. Both types are without addition of any ingredients, namely sugars or syrups

**2. Relevance and timeliness**

Longan is grown in many countries e.g. Thailand, China, Sri Lanka, South India, and Australia. Since longan provides a lot of health benefits, it is traded globally, not only limited to Asian region. Hence, it is justified to elaborate a regional standard covering the safety, quality, hygiene and labeling for dried longan to be used as an agreed reference in regional trade.

**3. Main aspects to be covered**

The proposed draft standard will address the general requirements for each type of dried longan. The relevant requirements include safety and quality criteria, uniformity of size, allowance for defects, food additives, contaminants, hygiene, weight and measures, labelling and method of analysis and sampling.

**4. Assessment against the Criteria for the establishment of work priorities****General criterion**

Apart from food safety, regional trading of dried longan is done according to its quality and size. A regional standard for dried longan will greatly assist in removing obstacles to regional trade and to protect the consumers from fraudulent practices.

**Criteria applicable to commodities**

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

Mostly, dried longan is produced in Thailand, China and Vietnam. World production of longan is an average of 144,000 tonnes per year. The major import countries are China, Myanmar, Vietnam, Lao PDR and Korea. The main importers outside Asia are North America and Australia. Statistical data showed increase in export value of dried longan from 118 million US Dollars in 2012 to 169 million US Dollars in 2015 (Table 1).

**Table 1** Market for dried longan in 2012-2015

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Source: The Customs Department, Thailand. Available at [www.customs.go.th](http://www.customs.go.th)

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

Dried longan is traded according to quality and size. The prices for each grade and size are very distinctive, approximately 50% difference. Therefore sizing and grading agreed between trading partners are necessary to prevent trade dispute in regional trade. Thailand and some countries in Asia have national standards (safety, quality and grading standards) for dried longan. ISO and UNECE, on the other hand, do not have standard for dried longan. This new work will assist in developing a harmonised standard for dried longan.

(c) International or regional market potential

Dried longans are often used in Chinese cuisine and Chinese sweet dessert soups. Chinese foods are also becoming more and more popular. Consequently, this significantly contribute to increased consumption of dried longan worldwide. Currently, dried longan has been exported from Thailand and Vietnam to many countries in all continents.

(d) Amenability of the commodity to standardization

The characteristics of dried longan, packaging and labelling allow the establishment of parameters for the harmonisation of standards. The availability of some national standards will also facilitate the development of a standard, which is an appropriate forum where the consumer point of view and requirements of importing country can be incorporated to ensure quality and safety of the products.

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

Currently, there is no worldwide / regional standard for dried longan to help consumer in making an informed decision about the product in the market. The proposed standard will address both issues relating to food safety and commercial specifications such as quality grading and sizing. In addition, semi-dried longan with high moisture content, which requires refrigeration during storage and transportation to ensure its quality and safety, is becoming a popular product. Therefore, the standard requirements and labelling information will be of great value to consumer.

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

This proposed new work does not duplicate work undertaken by other international organizations.

## 5. Relevance to the Codex strategic objectives

This proposal is 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. The proposed new work will certainly provide an agreed essential requirements and specifications for dried longan that contribute to food safety and fair practices in the food trade.

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

The work will take into consideration:

- *General Principles of Food Hygiene* (CAC/RCP 1-1969)
- *General Standard for Labelling of Pre Packaged Foods* (Codex STAN 1-1985)
- *Method 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)
- *General Standard for Food Additives* (Codex STAN 192-1995)
- *General Standard for Contaminants and Toxins in Food and Feed* (Codex STAN 193-1995)

**7. Identification of any requirement 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 so that this can be planned for**

None.

**9. Proposed date for adoption at Step 5, and the proposed date for adoption by the Commission; the time frame for developing a Standard should not normally exceed four year**

Procedures	CCEXEC consideration to work under specify meeting	
	CCPFV	CCASIA
Consideration of the proposal for new work	2017	2017
Consideration of the Proposed draft	2018	2018
Adoption at step 5 or 5/8	2020	2020
Adoption at step 8	2022	2022