



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

18<sup>th</sup> Session  
Phuket, Thailand, 24 – 28 February 2014

PROPOSALS FOR NEW WORK ON CODEX STANDARDS FOR FRESH FRUITS AND VEGETABLES

PROJECT DOCUMENT

PROPOSAL FOR NEW WORK ON A CODEX STANDARD FOR AUBERGINES

(Prepared by India)

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

The scope of the work is to establish a worldwide standard for aubergines obtained from varieties of *Solanum melongena* L, var. *esculentum*, *insanum* and *ovigerum*. of the *Solanaceae* family, which must be supplied fresh to the consumer after proper preparation and packaging. Aubergines for industrial processing are excluded.

The objective of the standard is to consider the essential quality characteristics of aubergines for fresh consumption to aid international trade.

**2. Relevance and timelines**

Due to the growing trend of worldwide aubergines production and trade, it is necessary to establish a standard covering the safety, quality 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 Aubergines will help to protect consumers' health and to promote fair trade practices in accordance with the different international agreements.

Aubergine is a versatile vegetable adapted to different agro-climatic regions and can be grown throughout the year. It is a perennial but grown commercially as an annual crop.

**3. Main aspects to be covered**

The standard will include characteristics relating to the size, categories, quality, contaminants, labelling and packaging. The most relevant items, which may be considered are related to:

- a. Establish the minimum requirements of aubergines, which shall be complied with, independently from the quality class.
- b. Define the quality categories to classify aubergines in accordance with its characteristics.
- c. Consider the sizing classes to commercialize aubergines depending on its length/ shape.
- d. Establish the tolerance as regards quality and size that may be permitted in aubergines contained in a package.
- e. Include the provisions relating to uniformity of the packaged product and the package used.
- f. Include provisions for the labelling and marking in accordance with the *General Standard for the Labelling of Prepackaged Foods*.
- g. Include provisions for contaminants with reference to the *General Standard for Contaminants and Toxins in Food and Feed*.
- h. Include provisions for hygiene and handling with reference to the *General Principles of Food Hygiene* and other relevant codes of hygiene practice.

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

##### General criterion:

Aubergines come in different varieties and size. Therefore, trading of aubergines are done according to its quality, varieties and size. Developing an international standard for aubergines will protect consumers from fraudulent practices while facilitating international trade. The drafting of this standard would thus benefit consumers and the major producing / exporting countries.

##### Criteria applicable to commodities:

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

The main producer countries are China, India, Iran, Egypt and Turkey. There is a considerable export of aubergines to Spain, Netherlands, Mexico, Turkey etc, as these countries consume significantly. Most of the commercially important varieties are from the tropical India and China. World production of aubergines is given in Annex-I.

According to the FAOSTAT, the world production of aubergines is reported to be 46 million Tonnes during the year 2011. It is grown mainly in China, India, Iran, Egypt, Turkey, Indonesia etc. Largest area and production is in China and India followed by Iran, Egypt, and Turkey.

According to FAO in 2010, worldwide production totalled 41.8 million MTs, with China accounting for 59% (or 24.5 million MTs) share of production, India 25% (10.5 million MTs), Egypt 3% (1.2 million MTs) and Iran 2% (778,630 MTs). Source: As provided by UNCOMTRADE

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

As mentioned above, aubergines are traded according to varieties and size. The size of aubergines varies largely ranging from oval or egg-shaped to long club-shaped. Currently, USA, Philippines and India have national legislations (quality and grading standards) for aubergines. ISO does not have standard for aubergines whereas the United Nations Economic Commission for Europe (UNECE) does. This new work will provide guidance, which countries could use to develop their own quality and grading standards for aubergines and, when applied internationally, may assist in providing a harmonized approach.

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

The import of aubergines by most countries is increasing. Export and import trade of aubergines is given in Annex-II. The trade can be enhanced by developing quality and grading standards for aubergines.

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

The characteristics of aubergines from their cultivation to harvest, cultivar varieties, composition, quality and packaging 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), complementary work to come up with an inclusive standard on this worldwide traded produce should be amenable.

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

There is no commodity standard covering aubergines. Currently, size and shape are the only criteria taken into the consideration. Therefore, the new work will enhance consumer protection and facilitate trade by establishing an internationally agreed quality standard covering minimum requirements, categories, size, colour, shape, uniformity, packaging and other relevant quality requirements.

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

A single standard for aubergines will cover all varieties of aubergines traded worldwide.

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

UNECE STANDARD FFV-05 concerning the marketing and commercial quality control of aubergines. This new work will consider this standard in formulating the Codex Standard.

#### 5. Relevance to the Codex strategic objectives

The elaboration of a Codex Standard for Aubergines 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. This proposal is relevant to Strategic Goal 1 – *Establish international food standards that address current and emerging food issues* and its corresponding Objectives of the Strategic Plan 2014-2019 in particular Objective 1.1: *Establish new and review existing Codex standards, based on priorities of the CAC.*

The new work will contribute to state the minimum quality requirements for aubergines for human consumption, different categories based on quality parameters and size with the purpose of protecting the consumer's health and achieving fair practices in the food trade.

#### 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 the standard will make references to relevant safety standards and related texts developed by general subject committees.

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

There is no need foreseen for expert scientific advice.

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

There is no need of technical input from external bodies.

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

DATE	PROCEDURE
February, 2014 CCFFV	India - Submit the proposal for aubergines. CCFFV –Agreement to start new work on a Codex Standard for Aubergines.
June/July 2014 CCEXEC/CAC	CCEXEC – Critical Review Process: Recommendation to start new work on a proposed draft Codex Standard for Aubergines. CAC – Approval of new work. Circulation of the proposed draft Standard for comments at Step 3.
May, 2015 CCFFV	CCFFV – Consideration of the proposed draft Standard at Step 4.
June/July, 2015 CCEXEC/CAC	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>
September, 2016 CCFFV	CCFFV- Consideration of the draft Standard At Step 7.
June/July,2016 CAC	CCEXEC – Critical Review Process: Recommendation for adoption at Step 8. CAC – Adoption at Step 8 (Codex Standard for Aubergines).

## Annex-I

## World Production of Eggplants (aubergines)

Qty: MT

Country	Year 2011
China, mainland	27,700,000
India	11,896,000
Iran	1,215,025
Egypt	1,166,430
Turkey	821,770
Indonesia	519,481
Iraq	452,050
Japan	322,400
Italy	243,319
Philippines	207,994
Spain	202,245
Romania	160,010
Syria	141,674
Jordan	116,969
Sri Lanka	116,670
Azerbaijan	98,121
Algeria	94,807
Ukraine	89,000
Côte d'Ivoire	85,729
Pakistan	84,707
Greece	78,000
Sudan	76,850
Rwanda	71,606
Kazakhstan	71,000
Mexico	62,477
United States of America	62,313
Saudi Arabia	55,717
Democratic People's Republic of Korea	46,700
Israel	46,105
Netherlands	46,000
Lebanon	43,000
Ghana	42,000
Morocco	34,823
Thailand	34,289
Kuwait	24,995
Dominican Republic	24,281
Albania	23,700
Honduras	19,645
France	19,040
United Arab Emirates	11,377
Georgia	11,200

<b>Country</b>	<b>Year 2011</b>
Oman	9,185
Belgium	8,800
Moldova	7,094
Portugal	6,936
Bulgaria	6,826
Yemen	6,260
Venezuela	6,192
Republic of Korea	5,825
Uzbekistan	5,300
Libya	4,092
Trinidad and Tobago	3,700
Qatar	3,608
Fiji	3,204
Mauritius	3,202
Cyprus	2,961
Niger	2,951
Colombia	2,616
Guyana	2,552
Lithuania	2,500
Democratic Republic of Congo	2,325
Hungary	2,265
Serbia	1,940
Cameroon	1,912
Madagascar	1,604
Bahrain	1,391
Senegal	1,330
The Former Yugoslav Republic of Macedonia	864
Haiti	835
Malta	753
Peru	422
Austria	409
Kyrgyzstan	400
Jamaica	391
Antigua and Barbuda	351
Brunei Darussalam	348
Tunisia	334
Gabon	163
Djibouti	53
<b>Total</b>	<b>46,825,331</b>

Source: As provided by FAOSTAT- 2011

## Annex-II

## International Trade Statistics Aubergines (eggplants) fresh/chilled (HS Code: 070930)

Qty: MT

Exporting Country	2009	2010	2011
Spain	115,543.72	121,694.38	121,004.02
Netherlands	61,056.54	62,644.81	51,489.36
Mexico	92,092.74	119,757.37	46,813.17
Turkey	7,145.34	12,219.95	12,066.24
Dominican Republic	4,962.74	6,874.93	8,226.78
United States of America	8,764.13	7,197.78	7,947.63
Italy	5,082.76	7,192.84	6,472.96
Belgium	4,529.84	5,138.60	5,154.38
Germany	4,536.87	6,936.54	4,500.30
China	7,137.39	7,316.22	6,955.39
Malaysia	8,583.87	9,036.17	8,778.13
France	4,956.75	4,703.34	4,346.19
Honduras	19,884.39	10,417.06	4,608.96
Kenya	2,329.57	2,282.15	1,248.75
Canada	1,777.24	2,910.46	1,202.98
Uzbekistan	371.30	4,811.46	4,226.89
Thailand	2,393.03	1,926.89	1,965.25
Syria	3,727.08	4,423.41	4,647.20
Azerbaijan	1,710.15	924.11	1,427.38
Guatemala	343.22	1,331.24	1,514.39
Fiji	452.42	545.69	486.26
Jordan	3,267.24	39,362.70	2,655.91
Greece	802.62	588.06	873.00
Viet Nam	75.28	22.60	183.15
Israel	42.13	669.63	367.70
Dominica	7.65	416.53	199.12
Tunisia	419.21	635.55	840.57
Austria	218.25	288.78	292.74
Suriname	186.51	155.32	168.79
United Kingdom	56.62	20.98	310.59
Ghana	717.47	821.17	216.62
Iran	740.68	1,323.04	386.05
India	412.92	412.15	347.26
Poland	509.56	340.38	264.40
Saudi Arabia	487.96	4,087.45	1,512.21
Lithuania	29.54	56.20	157.11
Morocco	49.21	46.81	313.11
Romania	9.69	346.04	291.58
Czech Republic	104.75	119.66	146.64
Uganda	77.02	112.24	99.40
Georgia	0.00	45.73	126.85
Sri Lanka	131.96	141.33	121.03

Exporting Country	2009	2010	2011
Indonesia	515.44	482.41	577.35
Latvia	22.00	131.42	125.27
Republic of Korea	258.81	78.60	68.36
Ukraine	843.30	964.51	784.58
Denmark	130.55	61.56	91.61
Hungary	17.52	66.78	139.62
Bulgaria	1,074.53	81.93	248.25
Lebanon	9.74	79.43	74.20
Russian Federation	0.61	3.20	82.45
Japan	14.50	11.24	6.98
South Africa	161.73	715.59	125.12
The Former Yugoslav Republic of Macedonia	123.45	455.77	282.47
Cameroon	52.88	60.51	41.10
Turkmenistan	0.00	108.04	130.10
United Arab Emirates	49.02	65.15	60.30
Burkina Faso	0.00	25.55	31.82
Switzerland	149.10	11.84	17.67
Burundi	7.99	10.60	124.83
Kyrgyzstan	714.66	374.34	93.45
Togo	4.16	15.37	26.84
Serbia	191.31	4.79	85.18
Australia	29.15	14.38	9.62
Sweden	104.51	19.98	20.49
Nicaragua	1.67	0.10	50.43
Bosnia Herzegovina	161.75	47.25	35.29
Bangladesh	28.31	33.36	9.48
Cyprus	70.58	31.50	13.79
Trinidad and Tobago	16.42	15.60	13.47
Cambodia	0.00	0.00	5.91
Slovakia	8.85	16.98	19.13
Egypt	22.94	49.93	15.77
Croatia	72.06	9.21	66.12
Guyana	7.88	13.54	20.15
Singapore	0.16	0.44	3.98
Costa Rica	11.15	102.06	12.01
Brazil	9.61	198.67	63.19
Venezuela	25.82	17.84	15.96
Portugal	55.67	125.95	25.64
Oman	84.14	3.10	43.18
Slovenia	20.08	92.22	19.98
Swaziland	6.28	3.62	1.19
Pakistan	8.06	9.86	2.85
Côte d'Ivoire	1.36	2.72	11.31
Luxembourg	0.57	6.39	1.21
Chile	2.74	4.45	3.65

Exporting Country	2009	2010	2011
Senegal	21.02	8.18	1.30
Peru	4.51	12.15	3.66
Mali	2.20	2.70	2.00
New Zealand	86.65	6.93	1.15
Albania	2.62	6.64	18.36
Ireland	71.65	45.56	4.94
Tajikistan	8.84	0.00	1.41
Lao People's Democratic Republic	0.00	18.00	0.28
Democratic Republic of Congo	1.96	2.43	1.08
Liberia	0.00	0.21	0.31
Argentina	0.01	7.29	0.80
Eritrea	0.00	2.26	1.10
Armenia	0.88	0.00	0.89
Ecuador	0.00	1.15	0.45
Moldova	0.00	44.05	2.55
Colombia	2.03	1.02	0.26
Montenegro	1.32	2.03	0.31
El Salvador	0.00	0.01	0.30
Yemen	0.00	1.38	1.00
Rwanda	0.15	0.24	0.13
Cook Islands	0.00	0.00	0.14
Mauritius	0.83	0.00	0.05
Estonia	10.01	13.98	0.17
Finland	1.25	5.30	0.10
Afghanistan	0.60	0.00	0.05
Nigeria	1.07	0.00	0.00
Madagascar	1.00	0.00	0.00
Namibia	0.04	0.00	0.00
Bolivia	0.31	0.00	0.00
Jamaica	0.00	0.01	0.00
Nepal	0.05	0.03	0.03
Belize	0.03	0.28	0.02
Malta	5.71	0.00	0.00
Panama	1.11	0.45	0.00
Bhutan	0.01	0.00	0.00
Guinea-Bissau	0.30	0.00	0.00
Kazakhstan	670.53	0.00	0.00
Gabon	5.44	0.00	0.02
Democratic People's Republic of Korea	1.70	0.00	0.00
Algeria	0.14	5.46	0.00
Qatar	0.00	0.05	0.00
Botswana	0.53	0.03	0.01
Zimbabwe	1.36	0.01	0.00
<b>Total</b>	<b>371,805.17</b>	<b>455,577.66</b>	<b>318,848.20</b>

Source: UNCOMTRADE



Qty: MT

Importing Country	2009	2010	2011
United States of America	106,436.57	128,594.28	52,157.25
Germany	35,625.70	37,884.70	37,744.55
France	44,614.30	45,481.20	45,007.00
Russian Federation	19,316.57	21,211.28	21,865.67
United Kingdom	38,579.62	44,676.62	18,413.76
Netherlands	8,958.84	10,667.49	15,586.24
Canada	19,961.14	20,166.21	18,793.32
Italy	21,741.98	17,288.11	19,977.96
Lithuania	3,485.26	6,494.93	9,433.44
Belgium	5,708.08	5,641.44	6,238.30
Switzerland	4,291.58	4,967.27	4,714.42
Singapore	9,322.35	9,759.01	9,598.91
Sweden	3,414.02	3,897.44	3,980.06
Georgia	3,511.57	7,746.98	5,063.41
Czech Republic	3,412.83	3,463.83	3,879.34
Austria	2,812.80	3,300.66	3,193.77
Denmark	2,064.33	1,974.04	2,345.27
Kazakhstan	1,749.16	5,144.47	4,677.43
Poland	1,658.71	1,874.18	2,254.08
Norway	1,967.35	2,191.70	1,119.10
Lebanon	6,110.98	6,574.44	6,583.63
Finland	714.69	771.99	943.41
Ireland	780.53	848.36	988.49
Romania	2,492.00	1,964.03	2,367.78
Portugal	3,665.24	2,424.89	2,084.67
Latvia	738.89	662.86	830.31
Greece	2,369.98	2,338.40	1,227.27
Ukraine	958.81	1153.12	1,340.66
Hungary	773.20	773.40	853.90
Slovenia	957.52	1,090.74	970.42
Belarus	988.03	1,214.48	1,020.15
New Zealand	451.00	545.12	488.35
Croatia	728.46	700.61	633.73
Slovakia	513.55	457.57	442.30
Malaysia	1,415.71	1,300.42	1,687.74
Luxembourg	299.39	316.32	331.86
Bulgaria	708.85	773.60	1368.14
Bahrain	619.32	745.63	1916.93
Estonia	340.30	342.37	323.64
Armenia	6.94	130.35	225.73
Maldives	194.98	203.28	198.27
Spain	355.01	323.45	469.05
Albania	243.69	332.85	424.03

Importing Country	2009	2010	2011
Serbia	225.32	339.29	253.21
Bosnia and Herzegovina	451.93	522.99	359.11
Moldova	314.94	305.27	269.15
Japan	258.80	78.01	68.36
Iceland	43.05	48.18	55.14
Malta	62.35	40.05	74.79
Turkey	139.13	368.74	104.71
Montenegro	76.97	83.15	126.29
Mexico	159.62	138.19	97.39
The Former Yugoslav Republic of Macedonia	56.95	33.81	45.73
Botswana	33.76	704.56	106.12
Azerbaijan	29.84	177.41	106.87
Oman	393.73	242.08	67.24
Cyprus	1.09	10.00	19.63
Israel	18.39	0.00	47.76
Bhutan	93.31	111.20	120.04
Pakistan	0.61	7.02	9.16
Saint Kitts and Nevis	5.43	4.86	8.11
Paraguay	3.95	50.03	61.64
Nicaragua	14.38	28.10	10.15
Côte d'Ivoire	3.37	2.15	1.49
Rwanda	2.35	0.00	103.65
Guatemala	0.47	0.00	1.24
Barbados	2.64	4.12	5.57
El Salvador	1,286.03	42.40	39.85
Cape Verde	10.13	9.96	10.27
Saint Vincent and the Grenadines	0.60	3.83	2.20
Ghana	0.11	2.93	2.76
Namibia	5.37	3.23	2.24
Costa Rica	0.00	1.09	1.93
Thailand	0.06	15.72	0.37
Brazil	0.00	0.00	1.14
Mozambique	0.00	0.06	0.36
Dominican Republic	0.03	12.66	0.40
Cambodia	0.00	0.00	0.14
Morocco	0.03	0.04	0.05
Indonesia	1.22	1.10	0.16
Madagascar	0.00	0.00	0.19
Jordan	0.00	0.21	0.00
Syria	0.00	33,836.01	0.00
Chile	0.38	0.00	0.00
Qatar	0.00	5,743.24	0.00
Zambia	0.02	0.00	0.00
Niger	0.46	0.56	0.00

Importing Country	2009	2010	2011
Uruguay	3.52	3.04	0.00
Tunisia	0.00	0.11	0.00
Saudi Arabia	0.00	714.00	0.00
Tanzania	0.00	0.51	0.00
Trinidad and Tobago	0.00	0.16	0.00
Democratic Republic of Congo	0.02	0.02	0.00
Guyana	0.15	0.30	0.00
Nepal	0.00	11.33	1.26
Kyrgyzstan	0.00	3.00	0.00
Uganda	0.53	0.00	0.00
Panama	0.00	0.21	0.00
Yemen	0.66	0.20	0.00
Jamaica	8.60	0.92	0.01
Algeria	0.00	1.51	0.00
South Africa	0.00	1.12	0.00
Zimbabwe	0.01	0.42	0.12
Honduras	177.33	0.00	0.00
Kenya	0.11	0.01	0.00
Dominica	0.00	0.10	0.00
Gabon	0.04	0.00	0.00
Senegal	0.00	0.16	0.00
Fiji	0.00	0.59	0.00
Mauritius	0.03	0.02	0.00
Argentina	0.40	145.14	0.00
<b>Total</b>	<b>371,805.20</b>	<b>455,577.57</b>	<b>318,848.22</b>

Source: UNCOMTRADE