

**APPENDIX VIII****PROJECT DOCUMENT****PROPOSAL FOR NEW WORK FOR A CODEX STANDARD FOR DRIED AND DEHYDRATED TURMERIC**  
(CCSCH Group category – Dried roots, Rhizomes and Bulbs)

(For Approval)

**1. Purpose and scope of standard**

The scope of the work is to establish a worldwide standard for dried and dehydrated whole, split, crushed or ground turmeric (*Curcuma longa* L.) of the family *Zingiberaceae* to facilitate international trade and consumer protection.

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

**2. Relevance and timeliness**

India is the largest producer, consumer and exporter of turmeric in the world, and other major producers include Pakistan, China, Haiti, Jamaica, Peru, Taiwan and Thailand.

Due to the growing trend of worldwide dried turmeric 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 producing, consuming and trading countries across the world. More significantly, the present status of dried or dehydrated turmeric is not limited to any particular region and hence justifies the elaboration of an international standard commensurate with the dried or dehydrated turmeric's true standing as an increasingly valuable worldwide commodity. In addition, the drafting of a Codex standard for dried turmeric 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 turmeric is used for culinary purposes as well as in confectionery industry. It is also frequently used to flavour or colour curry powders, mustards, butters, and cheeses.

**3. Main aspects to be covered**

The standard entails main aspects related to the definition of the produce, essential quality factors e.g 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 moisture, proper labelling, and other permissible limits among others.

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

- a) Establish the minimum requirements of dried turmeric which shall be complied with, independently from the quality parameters and other requirements regardless of class.
- b) Define the categories to classify dried or dehydrated turmeric in accordance with its characteristics.
- c) Establish the tolerance as regards quality and size that may be permitted of dried or dehydrated turmeric contained in a package.
- d) Include the provisions to be considered relating to the uniformity of the packaged product and the packaging used.
- e) Include provisions for the labelling and marking of the product in accordance with the CODEX general standard for the labelling of pre-packaged foods.
- f) Include provisions for pesticides and contaminants with the reference to the General Standard for Contaminants and toxins in food
- g) Include provisions for hygiene with the reference to the general principles of food hygiene and other relevant codes of hygiene practices.
- h) References to Methods of Analysis and Sampling.

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

Codex standard for dried or dehydrated turmeric 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**

There are as yet no exact figures available on the global production data of turmeric but these will naturally become available as the project advances. Production data of India for Turmeric is listed below in Table 1.

**Table 1: Production data of India for Turmeric**

Year	Production (in Tonnes)
2012-13	986690
2013-14	1092630
2014-15	846250
2015-16	967060
2016-17	925270
2017-18	863460
2018-19	959797
2019-20	938955

Source: Directorate of Arecanut and Spices Development (DASD), Kozhikode

Turmeric is one of the spices of the most traded in the world with a total volume of exports from producing countries such as India, Pakistan and China. Detailed statistics of worldwide import and export of Turmeric are given in Table 2 and 3.

**Table 2: Worldwide Export of Turmeric**

Year	Export Quantity (in Tonnes)	Export Value (in USD thousand)
2013	116496	166470
2014	112810	158298
2015	125237	189366
2016	142608	253942
2017	162058	275016
2018	175817	348625
2019	192527	304000

Source: ITC calculations based on UN COMTRADE and ITC statistics.

Table 3: Worldwide Import of Turmeric		
Year	Import Quantity (in Tonnes)	Import Value (in USD thousand)
2013	88515	137114
2014	105397	165164
2015	137677	218665
2016	**	246287
2017	150623	265440
2018	**	304660
2019	**	294847

Source: ITC calculations based on UN COMTRADE and ITC statistics.

\*\* - In the source, import volume is mentioned as "No quantity"

The available data is updated as of 2019.

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

Imports and exports of turmeric take place for many applications. Trade in turmeric 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 country. However, it would be preferred that the trade in turmeric 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 ISO already has an existing standards for turmeric. 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 import of dried or dehydrated turmeric by most countries is increasing. India, Iran and USA are the largest importers of dried turmeric according to the current statistic of FAOSTAT. India, Indonesia and Myanmar are the major exporters globally according to FAOSTAT.

<b>Table 4, Export of Turmeric from countries in 2019 (Top 15 countries by value)</b>			
<b>SI No</b>	<b>Country</b>	<b>Exported quantity, Tons</b>	<b>Export value, USD (000)</b>
1.	India	131122	194348
2.	Viet Nam	3566	15608
3.	Myanmar	22594	14472
4.	Netherlands	3146	9752
5.	Indonesia	7163	7765
6.	Ethiopia	6319	5313
7.	United Kingdom	846	4912
8.	Germany	1128	4773
9.	Bangladesh	1824	4679
10.	United States of America	924	4664
11.	Peru	1938	3633
12.	China	1118	3196
13.	Fiji	1285	3068
14.	Spain	676	2641
15.	United Arab Emirates	2089	2574

Source: ITC calculations based on UN COMTRADE and ITC statistics.

<b>Table 5, Import of Turmeric into countries in 2019 (Top 15 countries by value)</b>			
<b>SI No</b>	<b>Country</b>	<b>Imported quantity, (Tons)</b>	<b>Import value, USD (000)</b>
1.	India	28019	34258
2.	United States of America	9881	33929
3.	Iran, Islamic Republic of	14638	15477
4.	United Kingdom	8910	14887
5.	Bangladesh	15617	14447
6.	Germany	5041	13173
7.	Malaysia	8410	11039
8.	Japan	4668	10360
9.	Netherlands	4411	9316
10.	Morocco	8198	9225
11.	United Arab Emirates	7608	9064
12.	Saudi Arabia	5966	7853
13.	Canada	1395	6745
14.	Sri Lanka	5517	6409
15.	France	2006	6233

Source: ITC calculations based on UN COMTRADE and ITC statistics.

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

The characteristics of Dried or dehydrated Turmeric 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 general standard specifically covering dried or/and dehydrated Turmeric in international trade. The new work will strengthen consumer protection and will facilitate trade in dried or/and dehydrated Turmeric 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**

The proposed standard will cover the different forms of dried and / or dehydrated Turmeric like whole, sliced, crushed and powdered.

**(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 turmeric are:

- ISO 5562:1983, Turmeric, whole or ground (powdered) - Specification
- ISO 5566:1982, Turmeric - Determination of colouring power - Spectrophotometric method
- European Spice Association quality minima document
- American Spice Trade Association (ASTA)

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

The elaboration of a Codex standard for dried and dehydrated turmeric is in accordance with the strategic objectives as it will address current and emerging issues in the global trade of spices and culinary herbs by establishing a science-based standard developed with full participation of Codex Member countries throughout the process of development of the standard, and thereby promoting adoption of these standards by Member countries in their national legislation, and facilitating fair practices in food trade and protecting consumer health. Therefore this proposal is consistent with the Strategic Plan 2020-25 of the Codex Alimentarius Commission, in particular outcomes 1.2, 2.2, 3.2, and 4.2.

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

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:

- (a) General Principles of Food Hygiene (CXP 1-1969)
- (b) Code of Hygienic Practice for low moisture foods (CXP 75-2015) (Annex III)
- (c) Principles and guidelines for the Establishment and Application of Microbiological Criteria for Foods (CXG 21-1997)
- (d) Maximum limits for maximum residue limits for pesticides adopted by Codex.
- (e) General Standard for Contaminants and Toxins in Food and Feed (CXS 193-1995)
- (f) General Standard for Labelling of Pre Packaged Foods (CXS 1-1985)
- (g) Methods of Analysis and Sampling (CXS 234-1999)

**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.**

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

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

It is expected that the development of this standard would be conducted in three CCSCH sessions or less, depending on the agreement reached by the Committee.