



## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

## FAO/WHO COORDINATING COMMITTEE FOR ASIA

## Twenty-second Session

## Virtual

12, 13, 14, 17, 18 and 21 October 2022

PROPOSAL FOR THE DEVELOPMENT OF A REGIONAL STANDARD FOR  
TRADITIONAL SWEETS

(Prepared by India)

**BACKGROUND**

1. At the 21<sup>st</sup> Session of FAO/WHO Coordinating Committee for Asia (CCASIA), India proposed to start new work on a standard for traditional sweets. Sweets forms an integral part of Asian cuisine in closure or start of meal. Various countries have varieties of traditional sweet based products. Among other countries, Asian countries have their tradition of sweets that goes back to Indus Valley Civilizations. The market for sweets has grown over the last few decades, which was greatly increased by the commercialism of traditional sweets and the rise of food productions. These sweets are being prepared from different base raw materials that are locally and seasonally available in different regions developed over ages utilizing locally available equipment, utensils and manufacturing procedures. These sweets are being prepared from base materials such as grains, nuts, seeds, dry fruits, milk etc.

**INTRODUCTION**

2. India has had a long and rich tradition of sweets or '*mithais*', which have a boundless significance in the Indian culture. Sweets are integral part of Indian heritage with high social, ethnic, cultural and economic values. These sweets are made by various processed such as baking, roasting, frying, cooking, cooked, steaming, etc. Most of the sweets available in Asian region falls within this ambit of preparation and may be presumed under the following classification based on the raw materials for their preparation:

**a. Milk based Sweets**

3. In this class of products, milk is primary raw material and forms the major constituent of the product. This may be further sub-classified as:

**i. Milk concentrated based**

Prepared by concentration of milk and is widely used in India and in neighboring countries as a base material for preparation of numerous sweets like milk cake, Gulab Jamun, peda, burfi etc.

**ii. Heat/Acid Coagulated milk based**

Coagulated products are obtained upon addition of acidulant(s) to heated milk and extent of removal of moisture controls their texture. Sweets made from coagulated milk include Rasgulla, Milk bean curd, milk drags.

**b. Non-Milk based sweets**

4. In this class of products, non-milk based ingredients such as grains, dry fruits, nuts, seeds etc forms the major constituent of the product. This may be further sub-classified as:

**i. Grain Based****ii. Fruit and vegetable based****iii. Dry fruits, nuts and seeds based****c. Composite sweets**

5. In this class, products are made from combination of above two categories/innovative products that are made from traditional recipes.

#### **NEED FOR DEVELOPMENT OF CODEX STANDARDS FOR TRADITIONAL SWEETS**

- Traditional sweet products are having strong foothold not only in Indian market but also having a great export potential because of presence of Indian diaspora across the globe.
- Even today many codex standards are there for Indian traditional dairy based products like Curd (*Dahi*), concentrated milk (*shrikhand*), dairy based fermented drinks (*chaach, lassi* etc.). Similarly, we are proposing the standards for traditional sweets in Codex.
- Cause of large variations in the samples available in the market is due to non – existence of any regulatory standards worldwide.
- Major problem encountered in these products are its rampant adulteration, especially during the festive seasons. During festive seasons, the demand for milk and non-milk-based sweets increase dramatically creating a huge supply demand gap. The festival season sales in many areas account for 30 to 40 per cent of the annual sales of traditional milk-based sweets.
- In order to meet the increased demand, traditional product manufacturers often resort to addition of cheaper and inferior quality ingredients. Due to absence of stringent product and additive standards, contaminants standards and formal quality control system in the whole chain, the adulteration goes unchecked.
- India is the largest milk producer contributing 23% of global milk production. Hence India has diverse varieties of sweets with milk as a major constituent. There are more than one hundred and fifty milk based indigenous products available in India and milk produced more than the daily requirements for direct consumption was traditionally converted into various dairy products with a longer shelf life and thus the different methods of preservation of milk began.
- The products being developed are made following age-old methods of preservation and conservation through heat desiccation, fermentation, coagulation and clarification. The aim is to recover the maximum output through tiny scale or household level processes and technologies that are adequate and appropriate to local situations, resources and food habits.
- Traditional Indian Sweets confectionary market is valued at USD 664 million. While this only accounts for branded segment, the main market of Traditional sweets is prevailing in unorganized sector which accounts for majority of the market domestically.
- The small-scale operations are associated with inefficient use of energy, fatigue of operators, poor hygiene and sanitation and non-uniform product quality, little or no packaging and labelling for protection and communication of nutritional quality and shelf life.
- Therefore, there is a need for the development of standards for monitoring the quality and composition of these products without compromising consumers' interest.

#### **TRADITIONAL SWEETS PRODUCTION VOLUME**

6. In India, the packaged food industry was valued at INR 3.61 trillion approx. (In 2020). Dairy products contribute to 38% i.e., INR 1.38 trillion followed by Snacks & Sweet and biscuits segments at 33.2% and 14.5% respectively. Over the last few years India has emerged as one of the major exporters of Indian Sweets.

7. The Indian sweet market is valued at INR 589 billion with major share coming from unorganized players. The market is predicted to reach INR 843 billion by 2025 owing to the sweet tooth Indians. Based on fruits, dairy, pulses and cereals or different combinations of different ingredients, the traditional Indian sweets, boast of a nearly inconceivable range. Adding to this diversity, majority of the sweets have been nurtured and relished for ages in different regions of the country signifying regional specialties and tastes. (Annual report, Frost & Sullivan)

8. Indian sweets market is largely unorganized with INR 533 Billion market value and share of almost 90%. Standalone mithai shops are spread across the geography in India which sale regional as well as traditional sweets such as Gulab-Jamun, Rasgulla and plethora of Barfis. Organized players in sweet market have product offerings such as tinned Gulab Jamun, Rasgulla, Bengali mithai etc. Gradually there has been increase in demand of packed sweets owing to the pressed issues of hygiene and safety because of Covid-19 pandemic.

9. Traditional products account for over 40% of all dairy products consumed in the country. Although authentic statistical data are not available.

**Table 1: Market Size of Traditional Sweets**

Type of products	End products	Estimated market size (Rs. in billion)
Milk based Sweets	Rasogolla, rasmalai, cham-cham, chhana murki, rajbhog etc. Burfi, peda, gulabjamun, kalakand, Milk cake, Kulfi, rabri, basundi etc.	520

10. A major market for Indian milk-based sweets is developing overseas. The Indian migration presents an exciting avenue for globalization of sweetmeats (Rao & Raju, 2003; Patil, 2011). In North America alone, this market is estimated at **US\$ 500 million (INR 3500 Cr.)** (Aneja, 2007).

#### INTERNATIONAL TRADE OF TRADITIONAL SWEETS

11. The trade among various countries is increasing. It is therefore necessary to establish a regional standard for dairy based sweets covering quality and safety aspects. It will help to protect consumer health and to promote fair practices in food trade. The regional export data for four years is given below:

**Table 2: SWEET RASGULLA EXPORT DATA- ASIA- REGIONAL (Milk based sweets)**

**Total Value of Exports (India) Total Value \$859,000**

**Total Value INR 60 (Million)**

S.NO	Description	Year				Total
		2013	2014	2015	2016	
1	Nepal	16	20	25	20	81
2	Bangladesh	10	11	0	13	34
3	Malaysia	7	21	19	17	64
4	Singapore	97	163	199	160	619
5	Srilanka	0.3	0.8	0.2	0.9	2.2
6	China	0	0	5	0	5
7	Korea	4.6	4.6	4.6	4.6	18
8	Pakistan	0.1	0.1	0.1	0.1	0
9	Japan	3.2	3.2	3.2	3.2	13
10	Maldives	0.2	0.2	0.2	0.2	1
11	Myanmar	1.1	1.1	1.1	1.1	4
12	Philippines	2.2	2.2	2.2	2.2	9
13	Thailand	0.8	0.8	0.8	0.8	3
14	Vietnam	1.3	1.3	1.3	1.3	5
<b>Total</b>		<b>130.3</b>	<b>215.8</b>	<b>248.2</b>	<b>210.9</b>	<b>859</b>

#### DISCUSSION

12. Absence of harmonized standards potentially results in non-compliances at the import end. To overcome the resultant or potential impediments to international trade, it is appropriate to develop a single comprehensive standard acceptable internationally.

13. Due to lack of uniformity commodity standards in the region, the regional trade of these products are affected to some extent, which makes it difficult to protect consumer's health and fair trade. The difference of

processing and consuming habits leads to different classifications and quality requirements for traditional dairy based sweets. The regional standard for traditional sweets should eliminate the quality problems, solve the safety concerns of consumers, and is expected to expand the trading opportunity of exporting countries.

14. Currently, there are no Codex standards for traditional sweets. Hence, there is a need to develop standard for traditional sweets by Codex. To overcome the resultant or potential impediments to international trade, it is appropriate to develop a single comprehensive standard acceptable internationally. Development of the standard is expected to benefit consumers and major producing / exporting countries, most of whom are developing countries.

#### **RECOMMENDATION**

15. The Committee is invited to consider the proposal for new work and make suitable recommendation to the Codex Alimentarius Commission for consideration. The detailed project document is attached as Appendix I.

**PROJECT DOCUMENT****Proposal for the Development of a Regional Standard for Traditional Sweets****(Prepared by India)****1. The purpose of the standard**

The purpose of this project document is formulation of standards for traditional Sweets, also called *Mithais* a significant element in Indian cuisines. Sweets forms an integral part of Asian cuisine in closure or start of meal. Various countries have varieties of traditional sweet based products. Traditional sweet products are having strong foothold not only in Indian market but also having a great export potential because of presence of Indian diaspora across the globe. Even today many codex standards are there for Indian traditional dairy based products like Curd (Dahi), concentrated milk (shrikhand), dairy based fermented drinks (chaach, lassi etc.). Similarly, we are proposing the standards for Traditional sweets in Codex.

**2. The scope of the standard**

India has had a long and rich tradition of sweets or '*Mithais*', which have a boundless significance in the Indian culture. Sweets are integral part of Indian heritage with high social, ethnic, cultural and economic values. These sweets are made by various processed such as baking, roasting, frying, cooking, cooked, steaming, etc. These sweets are being prepared from different base raw materials that are locally and seasonally available in different regions developed over ages utilizing locally available equipment, utensils and manufacturing procedures. These sweets are being prepared from base materials such as grains, nuts, seeds, dry fruits, milk etc. Traditional Indian Sweets confectionary market is valued at USD 664 million. While this only accounts for branded segment, the main market of Traditional sweets is prevailing in unorganized sector which accounts for majority of the market domestically.

**3. relevance and timeliness**

Traditional sweets are those products that originates from ancestral heritage with high social, ethnic, cultural and economic values. These sweets are made by various processed such as baking, roasting, frying, cooking, cooked, steaming, etc. Most of the sweets available in Asian region falls within this ambit of preparation and may be presumed under the following classification based on the raw materials for their preparation:

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**4. The main aspects to be covered**

The main aspects to be covered by proposed standard are:

- Specifications of the product- Definition, essential composition
- Essential hygiene and quality factors;

- Packaging, preservation and storage methods;
- Labeling requirements;
- Methods of sampling and analysis

#### 5. Its relevance and necessity to develop the standard

Traditional sweet products are having strong foothold not only in Indian market but also having a great export potential because of presence of Indian diaspora across the globe. Cause of large variations in the samples available in the market is due to non – existence of any regulatory standards worldwide. Major problem encountered in these products are its rampant adulteration, especially during the festive seasons. During festive seasons the demand for milk and non-milk-based sweets increased dramatically creating a huge supply demand gap. The festival season sales in many areas account for 30 to 40 per cent of the annual sales of traditional milk-based sweets.

India is the largest milk producer contributing 23 % of global milk production. Hence India has diverse varieties of sweets with milk as a major constituent. There are more than one hundred and fifty milk based indigenous products available in India and milk produced more than the daily requirements for direct consumption was traditionally converted into various dairy products with a longer shelf life and thus the different methods of preservation of milk began. The products being developed are made following age-old methods of preservation and conservation through heat desiccation, fermentation, coagulation and clarification. The aim is to recover the maximum output through tiny scale or household level processes and technologies that are adequate and appropriate to local situations, resources and food habits. Therefore, there is a need for the development of standards for monitoring the quality and composition of these products without compromising consumers' interest

#### 6. Assessment against the Criteria for the establishment of work priorities

##### a. Volume of production and consumption in India

In India, the packaged food industry was valued at INR 3.61 trillion approx. (In 2020). Dairy products contribute to 38% i.e., INR 1.38 trillion followed by Snacks & Sweet and biscuits segments at 33.2% and 14.5% respectively. Over the last few years India has emerged as one of the major exporters of Indian Sweets.

Export data of Indian sweets to Other major countries		
S.No	Country	Export Volume (MT)
1.	USA	30570
2.	Canada	10094
3.	UAE	680
4.	Nepal	5471
5.	Singapore	2716
6.	Malaysia	1172.46
7.	Afghanistan	1219
8.	Bhutan	922

*For the year 2021-2022 as available with APEDA, Govt. of India*

The Indian sweet market is valued at INR 589 billion with major share coming from unorganized players. The market is predicted to reach INR 843 billion by 2025 owing to the sweet tooth Indians. Based on fruits, dairy, pulses and cereals or different combinations of different ingredients, the traditional Indian sweets, boast of a nearly inconceivable range. Adding to this diversity, majority of the sweets have been nurtured and relished for ages in different regions of the country signifying regional specialties and tastes. (Annual report, Frost & Sullivan)

##### b. Diversification of national legislations and apparent resultant or potential impediments to international trade

Due to lack of uniformity commodity standards in the region, the regional trade of traditional sweets is affected to some extent, which makes it difficult to protect consumer's health and fair trade. The difference of processing and consuming habits leads to different classifications and quality requirements for traditional dairy based

sweets in India. The regional standard for these traditional sweets should eliminate the risk of food safety and is expected to expand the trading opportunity of exporting countries. There is no existing national legislation covering Traditional Sweets however, India has National standards for condensed milk-sweetened and unsweetened, khoa, chhana, skimmed-milk chhana, paneer, Canned rosgolla, Gulab jamun. India is also in the process of drafting standards for Indian *Mithais* and *Namkeens*.

### **c. International or regional market potential**

Indian sweets market is largely unorganized with INR 533 Billion market value and share of almost 90%. Standalone mithai shops are spread across the geography in India which sale regional as well as traditional sweets such as Gulab-Jamun, Rasgulla and plethora of Barfis. Organized players in sweet market have product offerings such as tinned Gulab Jamun, Rasgulla, Bengali mithai etc. Gradually there has been increase in demand of packed sweets owing to the pressed issues of hygiene and safety because of Covid-19 pandemic. Traditional products account for over 40% of all dairy products consumed in the country. Although authentic statistical data are not available.

**Strength:** Traditional sweet products has very significant trade potential among Asian and global counterparts. The Indian sweet market is valued at INR 589 billion with major share coming from unorganized players. The market is predicted to reach INR 843 billion by 2025 owing to the sweet tooth Indians. Based on fruits, dairy, pulses and cereals or different combinations of different ingredients, the traditional Indian sweets, boast of a nearly inconceivable range. Adding to this diversity, majority of the sweets have been nurtured and relished for ages in different regions of the country signifying regional specialties and tastes

**Opportunity:** Traditional sweet sector offers vast scope for innovation, value addition and product diversification. With the fast moving globalization and high rate of population diversity and movement, these products finds its way to all parts of world.

### **d. Amenability of the commodity to standardization**

Regional standard for traditional sweets will play a positive role in guiding the healthy development of the industry. CAC has not established relevant standards for these products at present. The proposed regional standards for Traditional sweets will put forward specific requirements for raw materials of the products, ingredients, processing, quality parameters, sampling and analysis methods, temperature and environment for product storage and transportation, labelling, use of additives and other aspects.

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

The proposed standard will cover quality and safety requirements of these products to ensure safety of consumers and fair practice in international trade

### **f. Number of commodities which would need separate standards indicating whether raw, semi-processed or processed**

The proposed standard will cover the requirements for raw as well as processed final product hygienic conditions of production.

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

None identified.

## **7. Relevance to the Codex strategic objectives**

This proposal is relevant to Codex Strategic Plan 2020-2025, Goal 1 (Objective 1.1 & 1.2).

The new work will contribute to state the quality parameters and safety requirements for Traditional sweets for human consumption, with the purpose of protecting the consumer's health and achieving fair practices in the food trade.

## **8. Information on the relation between the proposal and other existing codex Documents**

The proposed standard will take into account existing applicable codex guideline documents such as:

- Inclusions of standards under Codex Committee on Milk and Milk Products (CCMMP)
- Code of Practice General Principle of Food Hygiene (CXC 1- 1969)
- General Standards for the labelling of Pre-packaged Foods (CXS 1- 1985)
- General Standards for Food Additives (CXS 192-1995)

- Recommended methods of Analysis and Sampling (CXS 234- 1999)

**9. Identification of any requirement for and availability of expert scientific advice**

Currently there is no identified need for expert scientific advice.

**10. Identification of any need for technical input to the standard from external bodies so that this can be planned for**

Currently there is no identified need for technical input from external bodies.

**11. The proposed time-line for completion of the new work**

Subject to consideration by CCASIA22 in 2022, proposed time schedule will take approximately five years.