Background

1. On the CCASIA20 held in 2016\(^1\), China presented the discussion paper of *Zongzi* and many countries expressed interest in work on this product. CCASIA20 requested China to revise the discussion paper and the project document for new work for consideration at CCASIA21. Based on the request from the Coordinating Committee, China has made following revisions to the discussion paper and project document:
   - Provide additional information on the varieties of this product, its amenability to standardization, food safety concerns and impediments to trade;
   - The discussion paper addresses all the information requested under “Criteria for establishment of work priorities”.

2. Regarding the suggestion made at the CCASIA20 that “To consider whether drafting a code of practice for this product would be more appropriate”, we made a research and concluded that the current *Zongzi* product category has clear characteristics and the scope. Apart from the *Code of Practice for the Processing and Handling of Quick Frozen Foods* (CXC 8-1976), this standard also involves factors like product quality. Moreover, it is difficult to eliminate the international trade barrier of *Zongzi* by only establishing a code of practice. Therefore, we still propose to formulate a commodity standard for *Zongzi*.

Introduction

3. As one of the traditional food of the Chinese nation, *Zongzi* enjoys a time-honored making and eating history of more than 2,000 years. It is widely consumed by China as well as many neighboring countries, forming a lot of *Zongzi* varieties with unique tastes and local characteristics. Apart from special Chinese festival connotations, *Zongzi* also has high nutritional value. Thus, it has become a kind of popular food in many countries.

4. *Zongzi* is made of glutinous rice as the main raw material with or without adding ingredients such as beans, nuts, meat, poultry and eggs and their products as the fillings, whose proportion is generally not more than 40% of the total weight of *Zongzi*. It is completely wrapped and molded with indocalamus leaves, reed leaves etc., tied with cotton threads and steamed and cooked to make it have the inherent flavor and texture of *Zongzi*. After steaming and cooking, vacuum packaging or quick freezing are adopted to preserve *Zongzi* at normal temperature or low temperature respectively.

5. The proposed regional standard for *Zongzi* is intended to improve the quality of *Zongzi* products, protect the health of consumers, solve food safety concerns and safeguard international fair trade.

Necessity to develop the standard

6. Relevant data reveal that *Zongzi* product has a huge market potential as the consumption of *Zongzi* continuously grows. It is worth noting that CAC has not formulated a regional standard for *Zongzi* at present. The classification of *Zongzi* products in different countries is different, resulting in different requirements of regulations and standards on the products, which have caused certain obstacles to the international trade. Therefore, the formulation of a regional standard for *Zongzi* should ensure the improvement of *Zongzi* product quality, ensure consumer health, solve food safety concerns and reduce trade frictions.

7. China is the world’s largest *Zongzi* exporter. Till now, China has more than 180 registered export

\(^1\) REP17/ASIA para.118
enterprises for Zongzi. In recent years, China’s Zongzi is exported to more than 20 countries and regions, such as America, Canada, Australia, New Zealand, Japan, Saudi Arabia, Korea, Thailand, Hong Kong, Macao and etc. The output and sales of Zongzi in China are increasing year by year, see Table 1.

Table 1 Zongzi production and total sales volume in China, 2013-18

<table>
<thead>
<tr>
<th>Year</th>
<th>Production volume (tons)</th>
<th>Total value (billion US dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>253,197</td>
<td>1.48</td>
</tr>
<tr>
<td>2014</td>
<td>299,458</td>
<td>1.68</td>
</tr>
<tr>
<td>2015</td>
<td>334,000</td>
<td>1.84</td>
</tr>
<tr>
<td>2016</td>
<td>401,107</td>
<td>2.20</td>
</tr>
<tr>
<td>2017</td>
<td>459,000</td>
<td>2.52</td>
</tr>
<tr>
<td>2018</td>
<td>502,300</td>
<td>2.88</td>
</tr>
</tbody>
</table>

Source: estimated by relevant industrial associations in China.

8. China is also an importer of Zongzi, the main import sources of which include Japan, South Korea, Malaysia, Australia, Italy, Thailand, Netherland, Denmark and etc.

9. In recent years, with the adoption of HACCP, Zongzi production enterprises are becoming increasingly centralized and large-scale. The entire Zongzi industry is also continuously improving and the Zongzi production technology and product quality become more standardized and stricter.

10. The Zongzi commodity standard will bring convenience to international trade. It is expected that Zongzi will have greater consumption demand and trade potential in the international market in the future.

Recommendation

11. China suggests that CCASIA21 agree to submit the new work on the regional standard for Zongzi for approval by Codex Alimentarius Commission. The project document is attached as Appendix I.
1. The purposes and the scope of the standard

The regional standard for Zongzi aims to protect consumers’ health, ensure the quality of Zongzi product and promote fair trade. In the whole regional trade, there is no regional or international standard for this product. Certain countries in the region have formulated standard for Zongzi, but the standards are not uniform. Establishing a Zongzi standard is beneficial to promoting regional and international trade.

2. Product definition

Zongzi is made of glutinous rice as the main raw material with or without adding ingredients such as beans, nuts, meat, poultry and eggs and their products as the fillings, whose proportion is generally not more than 40% of the total weight of Zongzi. It is completely wrapped and molded with Indocalamus leaves, reed leaves etc., tied with cotton threads and steamed and cooked to make it have the inherent flavor and texture of Zongzi. After steaming and cooking, vacuum packaging or quick freezing are adopted to preserve Zongzi at normal temperature or low temperature respectively.

The production process of Zongzi is shown in Figure 1.

For different kinds of Chinese Zongzi, see Figure 2.
There are also many similar products in the international market, see Table 1.

<table>
<thead>
<tr>
<th>Example</th>
<th>Country of origin</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td></td>
<td>Glutinous rice is used as the main raw material or mixed with other ingredients.</td>
</tr>
<tr>
<td>Vietnam</td>
<td></td>
<td>Glutinous rice is used to wrap pork, peas, shrimps, etc., which can be eaten together with fish sauce after being steamed and cooked.</td>
</tr>
<tr>
<td>Philippines</td>
<td></td>
<td>Glutinous rice is used as the main raw material and meat is usually used as the ingredient.</td>
</tr>
<tr>
<td>Thailand</td>
<td></td>
<td>Glutinous rice is used as the main raw material, and coconut milk, tropical fruits and others are used as ingredients.</td>
</tr>
<tr>
<td>Malaysia</td>
<td></td>
<td>It is made of glutinous rice and coconut milk, and wrapped in banana leaves.</td>
</tr>
</tbody>
</table>

Table 1 Similar products in the international market

3.  Its relevance and timeliness
Relevant data show that the trade volume of Zongzi is growing year by year, and the output is also increasing. Due to the adoption of advanced production technology in Zongzi production, the production volume also witnesses a fast increase, which creates broad market potentials. However, since there is no regional standard among trading countries, various obstacles arise in regional trade of Zongzi.

The establishment of Zongzi commodity standard will bring convenience to international trade. It is expected that Zongzi will have greater consumption demand and trade potential in the international market in the future.

4. The main aspects to be covered

The standard for Zongzi will be drafted according to the uniform CAC format. The standard covers the following aspects:

- Specifications of the product, such as identification, description, etc.;
- Processing;
- Essential composition and quality factors;
- Food additives;
- Contaminants;
- Hygiene;
- Packaging, preservation and storage methods;
- Labeling requirements;
- Methods of sampling and analysis.

5. An assessment against the Criteria for the establishment of work priorities

General criterion

The proposed standard should protect consumer from the point of view of health, food safety, ensure fair practices in the food trade and take into consideration the identified needs of the developing countries.

The new standard will cover the following aspects to meet the above requirements:

- Protect consumers and preventing fraud;
- Improve the quality of products, and solve the food safety concerns of consumers;
- Resolve trading barriers.

Criterion applicable to commodities

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

- In 2018, China’s production volume of Zongzi is 502,170 tons.
- China is the world’s leading exporter of Zongzi. At present, there are more than 180 registered export enterprises for Zongzi in China. In recent years, Zongzi is exported from China to more than 20 countries and regions, such as America, Canada, Australia, New Zealand, Japan, Saudi Arabia, Korea, Thailand, Hong Kong, Macao and etc. According to the estimation of relevant industry associations in China, the total sales from 2016 to 2018 reached 36.4 million, 39.04 million and 42.31 million US dollars respectively.
- China is also an importer of Zongzi, the main import sources of which include Japan, South Korea, Malaysia, Australia, Italy, Thailand, Netherland, Denmark and etc. In 2018, the total import volume amounted to 257 tons with the total sales of 2.79 million US dollars (see Table 3).
- In the international market, the trade value of Zongzi is 110 million US dollars per year, which is expected to grow rapidly along with increasing production capacity. China, Japan and South Korea are the major producers and exporters of Zongzi.
- Trade amount of Zongzi increases at a rate of 10% each year. China, Southeast Asian countries, North America and European countries are also the major consumer markets.
Table 2 Export data of Zongzi from China to some countries/regions in 2018

<table>
<thead>
<tr>
<th>Country / Region</th>
<th>Export volume</th>
<th>Export value</th>
</tr>
</thead>
<tbody>
<tr>
<td>America</td>
<td>1,267,356</td>
<td>10,138,848</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>262,021</td>
<td>2,358,189</td>
</tr>
<tr>
<td>South Korea</td>
<td>364,400</td>
<td>3,279,600</td>
</tr>
<tr>
<td>Japan</td>
<td>380,742</td>
<td>2,958,678</td>
</tr>
<tr>
<td>Canada</td>
<td>83,658</td>
<td>752,922</td>
</tr>
<tr>
<td>Singapore</td>
<td>90,145</td>
<td>631,015</td>
</tr>
<tr>
<td>Australia</td>
<td>85,665</td>
<td>959,448</td>
</tr>
<tr>
<td>Thailand</td>
<td>28,068</td>
<td>224,500</td>
</tr>
<tr>
<td>Other regions</td>
<td>2,618,485</td>
<td>21,016,280</td>
</tr>
<tr>
<td>Total</td>
<td>5,180,540</td>
<td>42,319,480</td>
</tr>
</tbody>
</table>

Source: estimated by relevant industrial associations in China.

Table 3 Import data of Zongzi from some countries/regions to China in 2018

<table>
<thead>
<tr>
<th>Country / Region</th>
<th>Import volume</th>
<th>Import value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaysia</td>
<td>56,000</td>
<td>616,000</td>
</tr>
<tr>
<td>South Korea</td>
<td>53,208</td>
<td>585,288</td>
</tr>
<tr>
<td>Chile</td>
<td>2,877</td>
<td>34,524</td>
</tr>
<tr>
<td>Australia</td>
<td>17,014</td>
<td>187,159</td>
</tr>
<tr>
<td>Japan</td>
<td>20,138</td>
<td>181,242</td>
</tr>
<tr>
<td>Thailand</td>
<td>20,334</td>
<td>223,674</td>
</tr>
<tr>
<td>Canada</td>
<td>10,483</td>
<td>115,318</td>
</tr>
<tr>
<td>Other regions</td>
<td>77,451</td>
<td>851,961</td>
</tr>
<tr>
<td>Total</td>
<td>257,505</td>
<td>2,795,166</td>
</tr>
</tbody>
</table>

Source: estimated by relevant industrial associations in China.

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

Countries in the region have different classifications for Zongzi products. The applicable standards or regulations for Zongzi are quite different. For example, there are different requirements on Indocalamus leaves, reed leaves and etc. to wrap Zongzi, additives as well as sterilization and vacuum packaging measures for Zongzi.

The lack of regional standard for Zongzi commodity hinders regional fair trade, so the formulation of this standard should ensure the improvement of Zongzi product quality, ensure consumer health, solve food safety concerns and reduce trade frictions.

c) International or regional market potential

According to the statistics, the demand for Zongzi has been increasing in recent years and is expected to continue to grow steadily in the future. From 2015 to 2018, the total sales of international trade of Zongzi reached 71.93 million, 79.07 million, 107.07 million and 117.78 million US dollars respectively, representing an annual increase of approximately 10 percent.

The international trade data of Zongzi show that the global demand for this product is growing rapidly. With the support of the advancement of science and technology and international logistics, more and more traditional food with distinctive characteristics of various countries are circulating in the international market.
Thus, cross-regional purchases have become much easier. Zongzi can be used as daily consumer goods due to its characteristics of easy storage, satiety, low price and delicious taste, and its consumer population and consumption will continue to increase.

d) Amenity of the commodity to standardization

China has already formulated national standard for Zongzi as early as more than ten years ago. The implementation of the standard plays a positive role in guiding the healthy development of the industry and improving the quality of Zongzi. It can be seen that the standardization of Zongzi is feasible.

CAC has not formulated relevant standards for Zongzi commodities at present. Although Code of Practice for the Processing and Handling of Quick Frozen Foods (CXC 8-1976) can provide guiding principles for major categories of frozen food, it is not targeted at specific product of Zongzi. The proposed Zongzi standard will put forward specific requirements for raw materials, such as glutinous rice and plant leaves; ingredients of the product and types of ingredients; product processing technology, such as cooking temperature, time and pressure; processing process management; quality indexes (moisture, fat, protein, stuffing content, etc.); sampling and analysis methods; temperature and environment of product storage and transportation; product labeling and etc. The use of additives and the limit of pollutants in Zongzi should comply with the requirements of existing CAC related documents.

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

There are no existing standards specifically covering Zongzi.

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

Currently there is no need of any other separate standard other than the proposed, since the proposed standard will cover both raw and processed products of Zongzi and the 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.

6. Relevance to the Codex strategic objectives

With regard to the CODEX STRATEGIC PLAN 2020 – 2025, developing such a regional standard of Zongzi is closely associated to the objective 1.1 Identify needs and emerging issues, and 1.2 Prioritize needs and emerging issues. As the regional standard of Zongzi will help to enhance food safety of Asian consumers and ensure fair international trade practice on this specific food product.

7. Information on the relation between the proposal and other existing Codex documents as well as other ongoing work

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

- Code of Practice General Principles of Food Hygiene (CXC 1-1969),
- Code of Practice for the Processing and Handling of Quick Frozen Foods (CXC 8-1976),
- Code of Practice Concerning Source Directed Measures to Reduce Contamination of Food with Chemicals (CXC 49-2001),
- General Standard for the Labeling of Prepackaged Foods (CXS 1-1985),
- General Standard for Food Additives (CXS 192-1995),

8. Identification of any requirement for and availability of expert scientific advice

Currently there is no identified need for expert scientific advice.

9. 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.

10. The proposed time-line for completion of the new work
Subject to consideration by CCASIA21 in 2019, proposal for standard development will be submitted for review and approval by CAC in 2020. As per proposed time schedule the process will take approximately five years.

<table>
<thead>
<tr>
<th>Procedures</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consideration of the proposal by the 21st CCASIA</td>
<td>2019</td>
</tr>
<tr>
<td>Critical review by Executive Committee and approval by CAC for new work</td>
<td>2020</td>
</tr>
<tr>
<td>Preparation of draft standard and circulation for comments</td>
<td>2020-2021</td>
</tr>
<tr>
<td>Consideration of draft standard by the 22nd CCASIA</td>
<td>2021</td>
</tr>
<tr>
<td>Adoption by the CAC as draft standard</td>
<td>2022</td>
</tr>
<tr>
<td>Consideration of draft standard by the 23rd CCASIA</td>
<td>2023</td>
</tr>
<tr>
<td>Adoption as regional standard by CAC</td>
<td>2024</td>
</tr>
</tbody>
</table>