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**PROPOSAL FOR THE DEVELOPMENT OF A REGIONAL STANDARD FOR
CANNED PORRIDGE AND COOKED RICE (ASIA)**

(Prepared by China and the Republic of Korea)

BACKGROUND

1. CCASIA22 (2023), noting the similarity of issues raised in the two discussion papers on the development of a standard for cooked rice and on the development of a standard for canned congee, proposed that the way forward be the same in both cases. CCASIA22 requested the Republic of Korea and China to work together to examine the possibility of combining both proposals.¹
2. China and the Republic of Korea have reached an agreement to jointly draft the new work proposal. The proposal name has been determined as “canned porridge and cooked rice”.
3. This discussion paper aims to provide more information on canned porridge and cooked rice, and explain the need to develop a regional standard for these commodities.

INTRODUCTION

Canned Porridge

4. The invention of canned porridge traces back to the early 19th century when the canning process was pioneered by Nicolas Appert and later refined by Peter Durand with tinplated steel cans. Initially used for preserving meats and vegetables, canning technology soon expanded to include ready-to-eat meals, including porridge.
5. By the late 1800s and early 1900s, canned porridge gained popularity as a convenient, non-perishable food for military rations, explorers, and industrial workers. Brands like Heinz and Campbell's experimented with oatmeal and rice-based canned porridge, often marketed as quick, nutritious meals.
6. In the mid-20th century, canned porridge saw a decline in Western markets due to the rise of instant dried cereals. However, it remained a staple in some Asian countries, where canned porridge with meats or preserved eggs is a common shelf-stable food. Today, canned porridge is not only a daily diet for Asian people but also a type of emergency food.
7. Canned porridge is a type of canned food prepared from fresh or dried grains and/or rice which is suitable for human consumption and may contain other edible ingredients, packed in hermetically sealed containers (including metal packaging, high-barrier plastic packaging, glass packaging, aluminum-plastic composite packaging etc.) and shall have received a processing treatment sufficient to ensure commercial sterility. **It should be able to be stored for long-term periods at room temperature.** Canned porridge is widely consumed in Asian countries because of its high nutritional value and its characteristics of being easy to eat and digest.

Cooked Rice

8. In the mid-1900s, instant white rice, which is easy to cook and can be stored at room temperature for a long time, was developed. However, this product still requires cooking for several minutes with the addition of water to the product before consumption. There were also products that could be consumed after simple heating without the addition of water to the product, but they required freezing storage.
9. In the 1980s, products, aimed at standardization through the development of a regional standard, were developed. These products can be consumed within a couple of minutes with simple heating (microwave or boiling water) without the addition of water to the product and can be stored at room temperature for a long

¹ REP23/ASIA, paragraphs 113-114

time without freezing. Therefore, it has been conveniently used in various places such as at home, or while traveling or camping, leading to an increasing number of people consuming cooked rice recently.

10. Cooked rice is a product made from polished or partially polished rice and (or) other edible ingredients that can be consumed after a simple heating process. It is processed by heat or other sterilization technology in an appropriate manner, before or after being hermetically sealed in a container, so as to prevent spoilage and to ensure product stability in normal storage conditions at room temperature for a long-term.

REGIONAL STANDARD

11. The proposed regional standard for canned porridge and cooked rice will specify raw materials, product specifications, processing procedures, hygiene and labeling requirements, so as to improve product quality. It is also important to protect the health of consumers and promote equitable international trade.

NECESSITIES TO DEVELOP THE STANDARD

12. In recent years, canned porridge and cooked rice are common foods in Asian countries and has a broad market prospect. Since 2016, canned porridge and cooked rice have been continuously traded in more than 20 countries with significant increases of the annual output and export volume. They are widely traded among some countries and regions, especially Asian countries (e.g. China, India, Indonesia, Japan, Laos, Malaysia, Myanmar, Republic of Korea, Singapore, Thailand). From 2020 to 2024, the international trade volume of canned porridge and cooked rice increased steadily, with an annual rate of growth of more than 10% and 30%, respectively.
13. Canned porridge and cooked rice are supposed to be vital categories of emergency foods (referred to as food products specifically designed, processed, and packaged to provide essential nutrition during crises, disasters, or situations where conventional food supply is disrupted). In light of the tense international situation and the frequent occurrence of natural disasters worldwide, it is imperative to establish a regional standard at present, and eventually a unified international standard for canned porridge and cooked rice, in order to harmonize the quality systems for them globally.

CONCLUSION

14. The Codex Alimentarius Commission (CAC) has not developed a Codex standard for canned porridge and cooked rice yet. Different countries have different classifications and requirements of canned porridge and cooked rice, which to some extent impedes their international trade and development of industry.
15. Therefore, a regional Codex standard will unify the requirements of canned porridge and cooked rice, improve its quality and safety, protect consumers' health, and reduce trade barriers.

RECOMMENDATION

16. CCASIA23 is invited to consider the development of a regional standard for canned porridge and cooked rice and forward the project document (Appendix I) to CAC48 for approval as new work.

PROJECT DOCUMENT

Proposal for the development of a regional standard for canned porridge and cooked rice**1. The purposes and scope of the standard**

The purpose of the proposed regional standard for canned porridge and cooked rice is to protect the health of consumers, ensure the quality of canned porridge and cooked rice and promote fair trade and industry development. This regional standard applies to canned porridge and cooked rice.

Examples of canned porridge and cooked rice are provided in the Annex of this document.

2. Its relevance and timeliness

Recently, canned porridge and cooked rice have become important commodities with noticeable growth rate among food industries in the world. Canned porridge and cooked rice are increasingly being consumed and traded globally in more than 60 countries. According to estimation of relevant industries in China and the Republic of Korea, the annual outputs of canned porridge and cooked rice are more than 1.5 million tons and 0.5 million tons per year respectively. In recent years, as the international situation changes and natural disasters occur frequently, there is a great demand for canned porridge and cooked rice which are important types of emergency foods in the international market. As shown in Table 6 in the Annex, Japan has already designed a type of canned porridge as their emergency food.

In spite of growing canned porridge and cooked rice production and trade, most trading countries do not have national standards and regulations applicable to these products. It may cause various obstacles and quality issues among trading countries and regions due to the lack of unified standards. Therefore, it is necessary to develop a regional standard for canned porridge and cooked rice as these products are more widely consumed across Asian countries. It will ensure fair international trade within the region, enable consumers to access high-quality products and expand the international market in the future. It will also effectively promote food conservation, which is of great significance to the elimination of hunger by the United Nations and the realization of sustainable development goals.

3. The main aspects to be covered

The regional standard for canned porridge and cooked rice will be developed according to the Codex Procedural Manual. The main contents in this standard will include:

- ✓ Scope
- ✓ Terms and definitions of canned porridge and cooked rice
- ✓ Product classification
- ✓ Basic composition and quality elements
- ✓ Food additives
- ✓ Hygiene
- ✓ Contaminants
- ✓ Weights and measures
- ✓ Labeling, packaging
- ✓ Methods of analysis and sampling
- ✓ Annexes for canned porridge and cooked rice

4. An assessment against the criteria for the establishment of work priorities**General Criterion**

The proposed standard should protect consumers from the perspective of health and food safety, ensure fair practices in food trade, and take into account the needs of developing countries. The proposed standard will cover the following points, in order to comply with the above demands:

- ✓ Protect consumers from fraud
- ✓ Improve food quality and solve consumers' concerns
- ✓ Solve trade barriers

Criteria applicable to commodities**a) Volume of production and consumption in individual countries and volume and pattern of trade between countries****1) Total production volume and sales of canned porridge in China**

In recent years, there is a huge and expanding demand of canned porridge in China. The total annual output is more than 1.5 million tons. China is the largest producer and exporter of canned porridge in the world. So far, there are more than 50 enterprises producing canned porridge in China, and their products are exported to more than 20 countries (e.g. Australia, Cambodia, Germany, Italy, Japan, Laos, Malaysia, Myanmar, Portugal, Republic of Korea, Singapore, South Africa, Spain, Thailand, and United Republic of Tanzania). According to the estimation of relevant Chinese Industry Associations, the average annual total sale of canned porridge from 2019 to 2023 was about 1.5 billion USD (see Table 1). In 2023, China's total export of canned porridge was more than 800 tons, with a total value of about 1 million USD. China also imported a small amount of canned porridge from Japan, Republic of Korea and Thailand.

In the international market, canned porridge is becoming more and more popular among consumers due to its convenient consumption, rich nutrition and long-term storage. The international trade volume also increases gradually. The total annual sale of canned porridge is about 1.5 billion USD. China, Japan and the Republic of Korea are the main producers, exporters and consumers in the world. According to relevant data, since 2019, the total export value of canned porridge of a leading enterprise in China has shown an upward trend (see Table 2).

Table 1 – Chinese canned porridge output and total sales data from 2019 to 2023

Year	Total output (ton)	Total sales (100 million/USD)
2019	1,614,873	13.27
2020	1,595,320	13.85
2021	1,731,141	15.26
2022	1,667,557	16.09
2023	1,759,277	16.89

Source: estimation of relevant Chinese industries

Table 2 – Chinese canned porridge export data (2023)

Countries	Export volume (ton)	Total exports sales (USD)
Japan	168	185,927
Republic of Korea	163	180,259
Singapore	71	78,089
Malaysia	22	24,375
Thailand	20	21,260
Others	419	467,604
Total	863	957,514

Source: estimation of relevant Chinese industries

2) Total production volume and sales of cooked rice in the Republic of Korea

Since 2020, the number of cooked rice trading countries of Korea has been increasing steadily (see Table 3) leading to noticeable growth of total export volume and value of cooked rice. In 2024, the export value of cooked rice marked 85 million USD, with the export volume reaching 29,000 tons (see Table 4). Compared to 2020, the export volume and value of cooked rice have increased dramatically. According to relevant data, since 2020, the total export value of cooked rice of a leading enterprise in Korea to Asia has shown a steady upward trend (see Table 5).

Table 3 - Number of Cooked rice trading countries of Korea by year

Year	2020	2021	2022	2023
Number of countries	70	62	65	80

Source: Korea Trade Statistics Promotion Institute (cited by The Korea Agro-Fisheries Trade Information)

Table 4 - Total export volume and value of cooked rice of Korea by year (ton, USD)

Year	Total export volume (ton)	Total export sales (USD)
2020	12,386	36,744,957
2021	16,640	47,039,390
2022	21,944	64,315,005
2023	26,685	78,840,945
2024	29,587	85,441,997

Source: Korea Trade Statistics Promotion Institute (cited by The Korea Agro-Fisheries Trade Information)

Table 5 - Korea's exports of cooked rice to Asia (tons, 1000 USD)

Country		2020	2021	2022	2023	2024
China	Volume	474	553	579	314	445
	Value	1731	2278	2438	1168	1892
Japan	Volume	0	7	5	11	7
	Value	1	44	19	49	36
Philippines	Volume	111	88	121	161	169
	Value	488	376	461	618	557
Vietnam	Volume	269	306	262	318	336
	Value	739	889	703	841	833
Singapore	Volume	118	128	135	183	200
	Value	540	536	490	828	778
Others	Volume	519	649	617	508	558
	Value	1,952	2,253	2,344	1,846	1,898
Total	Volume	1,491	1,731	1,719	1,495	1,715
	Value	5,451	6,376	6,455	5,350	5,994

Source: The Korea International Trade Association, Korea Trade Statistics Promotion Institute (cited by The Korea Agro-Fisheries Trade Information)

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

Different countries have different requirements on canned porridge and cooked rice such as quality elements, hygiene, additives, labeling, packaging, storage time, etc. Some countries have no national standards. All these requirements will impede fair practices in trade, improvement of quality and development of industry.

c) International or regional market potential

The international market of canned porridge and cooked rice are expanding. Recent data shows that the output, export volume and international trade volume of canned porridge and cooked rice are increasing. From 2019 to 2023, the international trade value of canned porridge increased steadily, with an annual average of about 1 million USD; the international trade value of cooked rice also increased steadily, with an annual average of about 50 million USD.

d) Amenability of the commodities to standardization

At present, CAC has not yet developed relevant standards for canned porridge or cooked rice. Although CAC has already established guidelines on canned food packaging media, hygienic operation specifications for canned food with low acidity, hygienic operation specifications for preventing and reducing inorganic tin pollution in canned food, and cooked rice wrapped in plant leaves, these standards are not specifically aimed at the canned porridge and cooked rice. Therefore, the composition, key process requirements, quality indicators and processing technology of the product have not been standardized yet.

The proposed regional standard will put forward specific requirements for the canned porridge and cooked rice and their raw materials, including product classification, code, requirements and composition, processing, test method, inspection rules, quality indicators (e.g. physical and chemical indicators, sensory requirements, net content, soluble solids, packaging, water, fat, protein), methods of analysis, temperature and environment for product storage and transportation, labeling, packaging and so on. The use of product additives and the limit of contaminants should meet the requirements of relevant Codex standards.

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

The existing Codex tests mainly aim at some hygienic requirements for canned products during processing, but do not include the raw materials, technology, indicators, additives, processing process, hygiene and quality requirements of canned porridge and cooked rice.

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

At present, there is no need for any separate standard other than the proposed standard. Because the proposed standard will cover the raw materials of products of canned porridge and cooked rice.

g) Work already undertaken by other international organizations in this field and/or suggested by the relevant international intergovernmental bodies

None identified at this time.

5. Relevance to the Codex strategic objectives

With regard to the Codex Alimentarius Commission's 2026-2031 strategic plan, the development of regional standard for canned porridge and cooked rice will help to improve product quality and ensure a safer consumption of the product, which are vital issues related to fair international trade practice of these specific foods. Therefore, the development of the regional standard is closely related to the identification of needs and new issues which is mentioned in "Strategic Goal 1: Respond to Members' needs for protecting the health of consumers and ensuring fair practices in the food trade in an evolving global landscape by developing science-based standards and related texts".

The proposal is also closely related to the Codex Strategic Plan 2020-2025, Objective 1.1 (Identify needs and emerging issues) and Objective 1.2 (Prioritise needs and emerging issues), under Goal 1 (Address current, emerging and critical issues in a timely manner).

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

This proposal will take into account existing applicable Codex standards and guidelines, such as the:

- *General principles of food hygiene* (CXC 1-1969)
- *Code of hygienic practice for low and acidified low acid canned foods* (CXC 23-1979)
- *Code of hygienic practice for aseptically processed and packaged low-acid foods* (CXC 40-1993)
- *Code of practice on measures to reduce direct sources of food contamination by chemicals* (CXC 49-2001)

- *Code of practice for the prevention and reduction of inorganic tin contamination in canned foods (CXC 60-2005)*
- *General standard for labeling of prepackaged foods (CXS 1-1985)*
- *General standard for food additives (CXS 192-1995)*
- **General Standard for Contaminants and Toxins in Food and Feed (CXS 193-1995)**
- *Standard for rice (CXS 198-1995)*
- *Recommended methods of analysis and sampling (CXS 234-1999)*

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

The need for expert scientific advice has not been identified.

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

The need for support from external agencies has not been identified.

9. The proposed timeline for completion of the new work

The work is expected to be completed within two sessions of CCASIA, subject to the approval of the new work by CAC.

Annex - Product definitions

The different kinds of canned porridge and cooked rice in Asia are shown in Table 6 and Table 7 respectively.

Table 6 - Different kinds of canned porridge in Asia

Picture	Countries	Product description
	China	Sweet taste, made mainly from eight or more kinds of plant-based raw materials such as grains, beans and dried fruits, with or without the addition of other auxiliary materials, through processing
	China	Sweet taste, made mainly from water, cereal, fish maw and edible bird's nest, sugar, etc.
	China	Salty taste, made mainly from water, rice, meat, preserved egg, salt, etc.
	China	Plain taste, made mainly from water, oat, quinoa, etc.
	China	Plain taste, made only from white rice and water
	China	Sweet taste, main raw materials: water, sugar cane syrup, glutinous rice, Cereals, peanuts, red beans, longan, job's tears, etc.
	China	Salty taste, made mainly from water, white rice, abalone, salt, etc.
	Republic of Korea	Sweet taste, main ingredients: water, pumpkin, red bean, etc.

Picture	Countries	Product description
	Republic of Korea	Salty taste, main ingredients: glutinous rice, abalone, carrot, etc.
	Republic of Korea	Sweet taste, main raw materials: water, pumpkin, etc.
	Japan	Salty, main raw materials: rice, eggs, brown rice, etc.
	Japan	Plain taste, made only from white rice and water
	Thailand	Sweet taste, main raw materials: jasmine rice, oat bran, etc.

Table 7 - Different kinds of cooked rice in Asia

Picture	Countries	Product description
	China	Plain taste, main raw materials: water, rice
	China	Plain taste, main raw materials: water, rice, highland barley, purple rice, black rice, oat, etc.

Picture	Countries	Product description
	China	Plain taste, main raw materials: water, rice, konnyaku, oat, etc.
	China	Cooked rice part: plain taste, main raw materials: water, rice
	China	Cooked rice part: plain taste, main raw materials: water, rice
	China	Salty taste, main raw materials: water, rice, chicken, salt, oil, etc.
	Republic of Korea	Plain taste, made only from water and white rice
	Republic of Korea	Plain taste, made from water, white rice and black rice
	Japan	Plain taste, made only from water and white rice

Picture	Countries	Product description
	Japan	Original taste, main ingredients: rice, Konjac powder, glucan, etc.
	Japan	Original taste, main ingredients: rice, water
	India	Salty taste, main ingredients: cooked organic whole grain brown rice, organic sunflower seed oil, salt
	India	Salty taste, main ingredients: water, rice, carrot, salt, etc.
	Singapore	Cooked rice part: plain taste, main raw materials: water, rice
	Thailand	Cooked rice part: plain taste, main raw materials: water, rice