

CODEX ALIMENTARIUS COMMISSION



Food and Agriculture
Organization of the
United Nations



World Health
Organization

Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - E-mail: codex@fao.org - www.codexalimentarius.org

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CODEX ALIMENTARIUS COMMISSION

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REVISED NEW WORK PROPOSAL ON THE DEVELOPMENT OF A GROUP STANDARD FOR FLOURS FROM ROOTS AND TUBERS

(prepared by Nigeria after considering the responses to Circular Letter 2026/26-CAC)

Approach Nigeria intend to take for discussion of this agenda item at CAC49

1. General Position

Nigeria wishes to thank all Member States for their constructive and valuable feedback on the proposed project document for a Group Standard for Flours from Roots and Tubers.

In light of the overwhelming support regarding the standard's alignment with the Codex Strategic Plan 2026–2031, its role in global food security, and its importance to climate-resilient trade, Nigeria intends to actively seek approval for this new work proposal at CAC49.

To facilitate immediate consensus on the plenary floor, we have reviewed all technical feedback and wish to formally submit our strategic approaches to addressing the specific observations raised by Members.

2. Matrix of Responses to Member Comments

Member State / Region	Specific Comment Summary	Proponent's Formal Response / Clarification
Japan & UAE	Requested clarity on scope, scientific names, and duplication of existing texts.	Scope & Precedent: The proposal utilizes a Codex horizontal approach with product-specific annexes. The initial scope is restricted strictly to Yam (<i>Dioscorea spp.</i>) and Sweet Potato (<i>Ipomoea batatas</i>) flours. Non-Duplication: To prevent regulatory duplication, Edible Cassava Flour was explicitly excluded from the initial work, as it is already managed under CXS 176-1995.
European Union (EU)	Requested a clearer distinction between flours, starches, and other processed products.	Product Definition: The standard applies exclusively to milled whole flours that retain the native compositional integrity, fiber, and protein of the raw material. Isolated starches (pure extracted carbohydrates) and highly processed derivatives are out of scope .
United States (USA)	Requested justification on trade enhancement and whether particle size constitutes a TBT.	Product Identity: Standardizing granularity (particle size) is a critical quality parameter required for product identity and anti-fraud enforcement (preventing economic adulteration with cheap industrial starch fillers), following clear precedents in CXS 152-1985. Trade Stabilization: While trade volume is growing, it suffers from severe market fragmentation. A harmonized standard enhances trade by replacing

		divergent national regulations, reducing costly border rejections, and providing legal predictability.
Sudan, Uruguay, Cabo Verde	Expressed strong support, noting food security, biofortification, and market growth.	Nigeria highly appreciates these submissions. The qualitative data provided, particularly regarding supply chain disruptions forcing a shift from wheat imports to root flours, will be utilized to reinforce the trade justification criteria during the standard's development.
Thailand	Supported in principle; requested strict adherence to subsidiary mandates and physical meetings.	Nigeria fully agrees and support assigning this work to the subsidiary body with the most directly relevant mandate (e.g., CCPFV) as defined by the Codex Procedural Manual.

3. Conclusion

After reviewing the comments in reply to 2026/26-CAC, Nigeria have provided an updated version of the discussion paper (Appendix I) and project document (Appendix II).

Nigeria believes that these clarifications and strategic boundaries successfully address the technical red lines of member states while preserving the core objectives of the proposal. We look forward to collaborating closely with all delegations at CAC49 to secure the approval of this timely and vital work.

APPENDIX I

DISCUSSION PAPER ON THE DEVELOPMENT OF A GROUP STANDARD FOR FLOURS FROM ROOTS AND TUBERS

(Prepared by Nigeria)

BACKGROUND

1. At the 48th session of the Codex Alimentarius Commission (CAC48) (2025), under the agenda item “Other business”, Nigeria proposed development of Codex standards for yam flour, high quality cassava flour, and potato flour.
2. CAC48 noted the strong interest in this area of work but recalled that there was an existing Codex *Standard for edible cassava flour* (CXS 176-1989) and hence the relationship between the proposed and existing standards needed to be established. CAC48 also noted that CCEXEC recommended a horizontal approach to commodity standards, and further consideration needed to be given to possible grouping of these flours.
3. CAC48 therefore recommended Nigeria and interested Members to review and update the new work proposal, noting that this could then be submitted for review to the Codex Secretariat and written comments requested from all Members via a circular letter (CL) for consideration by CCEXEC90 and CAC49.¹
4. While the initial proposal addressed yam, potato, and high quality cassava flour individually, Nigeria, in line with the recommendation by CAC48, proposes the development of a group standard for roots and tubers flours with the objective of addressing yam flour and sweet potato flour first, while cocoyam (taro and tannia) flour, arrowroot flour, and other edible tuber flours can be included as need be.

INTRODUCTION

5. Roots and tubers, including yam (*Dioscorea* spp.) and sweet potato (*Ipomoea batatas*) are staple crops globally, particularly in Africa, Asia, and Latin America. In recent years, there has been a significant shift toward processing these crops into flour to reduce post-harvest losses, extend shelf life, and provide gluten-free alternatives for the food industry.
6. Fresh yam tubers are highly perishable and subject to deterioration during storage, with postharvest losses caused by physiological, biochemical, and microbial processes such as sprouting, transpiration, respiration, and rot. This perishability, combined with the huge market that exists for yam flour in Europe, America, and Asian countries, has created an urgent need for standardized processing methods that enable long-term storage and international trade.
7. Sweet potato flour on the other hand, is a specialty ingredient derived from the dehydrated and pulverized tubers of the sweet potato plant (*Ipomoea batatas*). It is rapidly gaining recognition in global markets primarily as an all-natural, gluten-free replacement for traditional wheat flour. The production process is straightforward and involves washing, slicing, and thoroughly drying the whole sweet potatoes before they are ground into a fine powder. This minimal processing ensures that the flour retains the beneficial qualities of the root, offering a more nutrient-dense profile than many refined grain flours.
8. While Codex worldwide standards exist for cassava flour (*Standard for edible cassava flour* (CXS 176-1989) and *Standard for gari* (CXS 151-1989)) and there is also a *Codex Regional standard for fermented cooked cassava-based products* (Africa) (CXS 334R-2020), there is currently no harmonized international standard for other major root and tuber flours such as from yam and sweet potato. This regulatory gap leads to inconsistencies in quality, potential food safety risks (such as varying levels of naturally occurring toxins), and barriers to international trade.

PURPOSE AND SCOPE

9. The purpose of the proposed group standard for roots and tubers flour is to establish an international standard to ensure the quality and fair trade of flour produced from roots and tubers.
10. With respect to the scope, the proposed group standard will initially address flours intended for direct human consumption or for further processing (e.g., in bakery products or weaning foods) derived from sweet potato and yam since cassava flours are already covered by existing Codex standards (CXS 176-1989; CXS 151-1989; CXS 334R-2020).

OBJECTIVE

11. The proposal is to develop a group standard for roots and tuber flours, excluding cassava flours at this time since they are covered by existing Codex texts (CXS 176-1989; CXS 151-1989; CXS 334R-2020). The

¹ REP25/CAC paragraphs 188 and 189

standard will adopt a horizontal main text with product-specific annexes, allowing cassava provisions and additional tuber flours to be integrated in future annexes or amendments following Member request.

PRODUCTS TO BE COVERED BY THE PROPOSED GROUP STANDARD

12. Indicative list (non-exhaustive):
 - Yam flour
 - Sweet potato flour
 - Other edible tuber flours (in the future)

JUSTIFICATION FOR NEW WORK

13. The development of a group standard for root and tuber flours is highly relevant as a strategy to formalize the trade of climate-resilient staples like yam and sweet potato. These crops are increasingly vital to the global market, particularly as gluten-free alternatives and biofortified ingredients, such as Orange-Fleshed Sweet Potato flour used to combat Vitamin A deficiency. By establishing a group standard, producers can move beyond localized subsistence trading toward large-scale industrial applications, ensuring that flour quality—ranging from starch viscosity to particle fineness—remains consistent for use in commercial baking and processed food manufacturing.
14. Furthermore, existing Codex standards for flours from tubers/roots, namely CXS 176-1989; CXS 151-1989; CXS 334R-2020, do not have provision for yam flour and sweet potato flour. The lack of a harmonized and internationally accepted standard covering flours from yam and sweet potato is detrimental to the trade, and it leads to fraudulent practices and rejection of exports. Therefore, development of a Codex standard will allow the different stakeholders to harmonize their different requirements to facilitate international trade.
15. This initiative is particularly timely in the current economic landscape as countries prioritize "food sovereignty" to reduce dependence on volatile global wheat imports. With the current focus on climate-adaptive agriculture, roots and tubers offer a more stable harvest profile in the face of erratic rainfall compared to traditional cereal grains.

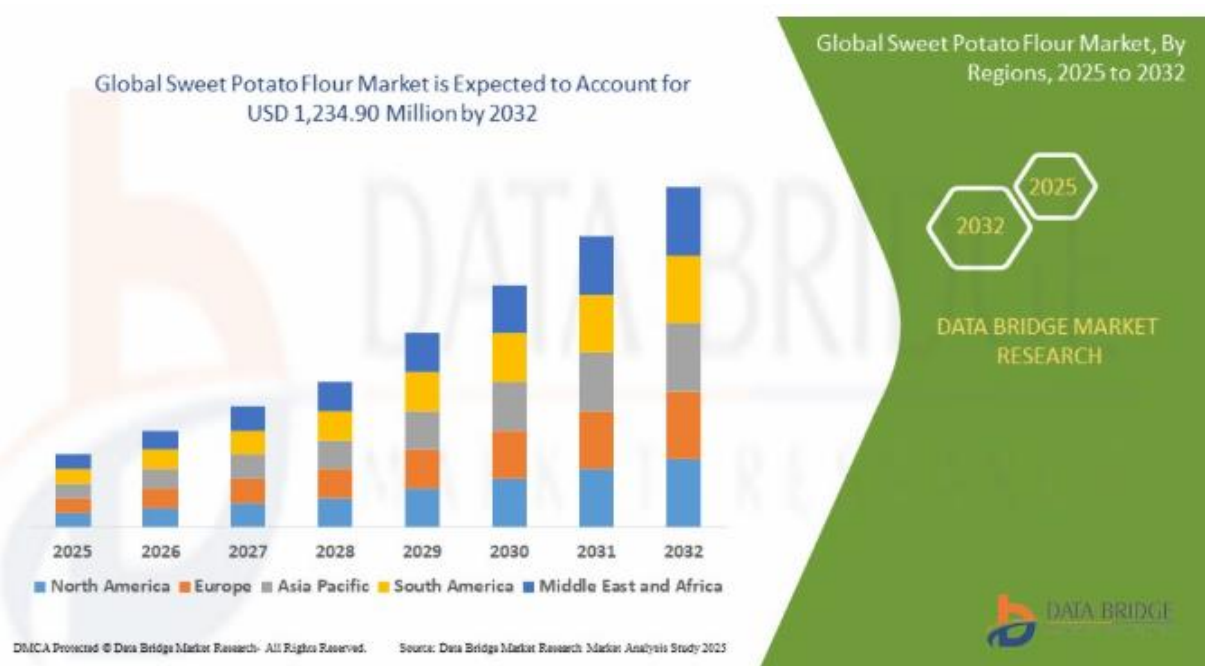
KEY TRADE INSIGHTS (STATISTICS)

16. **Sweet Potato Flour:** The global sweet potato flour market is experiencing rapid growth, driven by increasing demand for gluten-free and nutrient-rich, clean-label ingredients. Valued at approximately USD 850–860 million in 2024, the market is projected to reach over USD 1.2 billion by 2032, growing at a CAGR of 4.6% to 5.1%.²
17. **Yam Flour Global:** The yam flour market size is expected to grow from \$913.3 million in 2021 to over \$2 billion by 2033, expanding at a 7.2% CAGR. Nigeria is the leading exporter of yam products, including flour, with major shipments going to the US, Singapore, and Mali³.

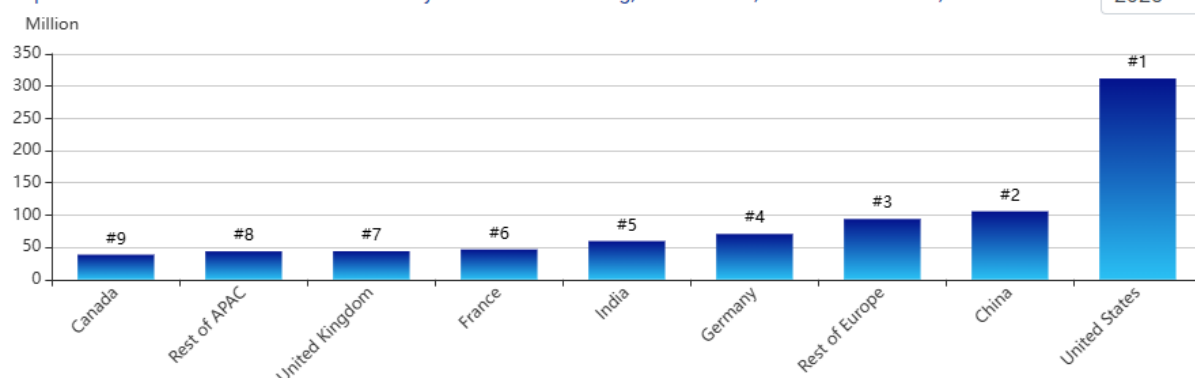


² <https://www.databridgemarketresearch.com/reports/global-sweet-potato-flour-market>

³ <https://tradedata.pro/trade-database-demo/nigeria/export-data/product/yam-flour/>



Top 10 Countries Yam Powder Market Analysis includes Ranking, Market Size, Revenue in Million, Market Volume 2025



INTERNATIONAL TRADE VALUES OF ROOTS AND TUBER PRODUCTS

a. Sweet Potato Flour (HS Code 110620/Variety specific)

18. The sweet potato flour market is seeing rapid growth as it is marketed as a "superfood" alternative in sports nutrition and baking.

- **Market Valuation (2025):** The global sweet potato flour market is valued at approximately **\$860.3 million** as of 2025.
- **Growth Projections:** It is expected to grow at a CAGR of **5.1%**, reaching roughly **\$1.22 billion by 2032**.
- **Regional Dominance:** **Asia-Pacific** leads this market, accounting for **42.5%** of global revenue in 2024, largely driven by production and consumption in China and Japan.
- **Key Export Hubs:** While the US and Egypt are massive exporters of fresh sweet potatoes, their flour-processing capacity is expanding to meet European demand, where the market is valued at **\$43.9 million**.

b. Yam Flour and "Other" Tuber Flours (HS Code 110620)

19. Trade data for yam flour is often grouped under the general HS Code **110620** (Flour, meal, and powder of sago or roots/tubers).

- **Global Segment Value:** The combined market for sago, root, and tuber flours (excluding cassava-specific codes) was estimated at **\$110 million** in 2024.

- **Recent Trends (2024-2025):** Recent data indicates a short-term contraction in import volumes (down **13.1%** in some regions like the Netherlands), while prices have risen by roughly **10.6%** due to supply chain costs.
- **Top Importers for the Category (2024):**
 - **United States:** \$32.9 Million
 - **European Union:** \$15.9 Million
 - **Canada:** \$13.1 Million
 - **Malaysia:** \$13.1 Million

Sources

- **World Bank WITS (2024-2025):** Trade statistics for HS 110510 (Potato) and HS 110620 (Roots/Tubers).
- **Persistence Market Research (2025):** "Sweet Potato Flour Market Size & Share Report, 2025-2032." (<https://www.persistencemarketresearch.com/market-research/potato-and-yam-derivatives-market.asp#:~:text=The%20global%20potato%20and%20yam,and%20proteins%20in%20industrial%20and>)
- **Spherical Insights (2025):** "Global Potato and Yam Derivatives Market Size Report." (<https://www.sphericalinsights.com/our-insights/potato-and-yam-derivatives-market#:~:text=Global%20Potato%20and%20Yam%20Derivatives,Aug%202025%20Author%3A%20Spherical%20Insights>)
- **Fact.MR:** "Global Sweet Potato Flour Market Analysis."
- **OECD-FAO Agricultural Outlook (2023-2032):** Long-term trends for root and tuber utilization.
- **Error! Hyperlink reference not valid.**

Market Comparison Summary (2025 Estimates)

Tuber Flour Type	Approx. Market Value (2025)	Primary Trade Driver
Sweet Potato Flour	\$860.3 Million	Sports nutrition, gluten-free baking
Yam/Other Tuber	\$110 Million (HS 110620 segment)	Ethnic food markets, sago-based starches

Nigeria – Processed Root/Tuber Flour Exports

Indicator	Details
Export Volume (HS 110620)	1,192,190 kg (2019)
Export Value (HS 110620)	USD 615,770
Key Destinations	USA, Canada, UK, Niger, Greece

METHODOLOGY FOR THE WORK

20. While developing the group standard for roots and tubers, the scope and common quality parameters and common reference to safety parameters such as contaminants, hygiene, food additives and labelling requirements are to be considered in accordance with the *Codex Procedural Manual*. The new work will focus on provisions for yam and sweet potato and exclude consideration/inclusion of provisions for cassava flours for the time being, since this is covered by existing Codex standards (CXS 176 1989; CXS 151 1989; CXS 334R 2020).
21. If this new work proposal is approved, CAC will need to identify the most appropriate committee to undertake the work. The establishment of an electronic working group (EWG) could be considered to advance the work efficiently.
22. Codex Members and Observers may wish to consider the inclusion of cassava in this group standard at a later stage, once the group standard has been developed.

23. The group standard will be developed in a format that supports innovation and allows for the addition of new root and tuber flours over time. Its structure will mirror other group standards—such as *the Standard for certain canned vegetables* (CXS 297-2009) and similar standards for processed fruits and vegetables—by outlining common composition and quality requirements that apply broadly to all root and tuber flours, while providing product specific provisions in annexes. This approach has proven to be flexible and easily adaptable, enabling the inclusion of updates driven by scientific and technological advancements or by the specific needs of individual products.

CONCLUSION

24. The information provided in the discussion paper indicates the importance and need to develop a group standard for flours from certain types of roots and tubers, taking into account that setting minimum requirements for quality parameters could be the single reference point for certain roots and tubers flours. The proposed group standards will be dynamic and open to include other roots and tubers flours in the future.

RECOMMENDATION

25. CAC49 is invited to:
- i. consider the project document contained in Appendix II of the document with a view to determining the need and appropriateness to develop a group standard for root and tubers group and, in the affirmative, to approve the new work proposal;
 - ii. recommend that the group standard follows the format applied by other horizontal commodity standards i.e. general provisions commonly applied to root and tuber flours in the body of the standard, with specific annexes addressing particular provisions of the given root or tuber flour to ensure consistency in the presentation of group commodity standards approved by CAC;
 - iii. consider establishing an Electronic Working Group (EWG) or request Nigeria together with other interested Members to work on the draft standard; and
 - iv. consider recommending an appropriate reporting mechanism to progress the work.

PROJECT DOCUMENT
PROPOSAL FOR THE DEVELOPMENT OF A
GROUP STANDARD FOR FLOURS FROM ROOTS AND TUBERS

(Prepared by Nigeria)

1. PURPOSE AND SCOPE OF THE STANDARD

The purpose of the proposed standard is to establish a global quality group standard for flours derived from edible roots and tubers, including specific requirements for sweet potato (*Ipomoea batatas*) and yam (*Dioscorea spp.*), since cassava flours are covered by existing Codex standards (CXS 176-1989; CXS 151-1989; CXS 334R-2020).

The scope covers flours intended for human consumption, ensuring they are processed under proper conditions and meet common and specific physical and chemical requirements.

2. RELEVANCE AND TIMELINESS

With the rising global demand for gluten-free ingredients, trade in flours from roots and tubers has moved beyond local markets into international retail. Without a standard, exporters face arbitrary "quality rejections," and consumers are at risk of purchasing adulterated or improperly processed products.

It is proposed to develop a Codex group standard for flours from roots and tubers to ensure the overall quality of the product and in doing so to ensure fair practices in the international trade of these products. This streamlined approach allows for the rapid development of quality and safety benchmarks by focusing on shared physico-chemical traits. The proposed standard aims to resolve current trade barriers for the benefit of all global stakeholders.

3. MAIN ASPECTS TO BE COVERED

The standard will focus on a "horizontal" approach, grouping common composition, quality and other parameters for flours from tubers and roots while allowing for species-specific requirements separately (e.g., specific annexes for sweet potato and yam where the common provisions for root and tuber flours are not sufficient to ensure the overall quality of these particular products).

Proposed technical specifications:

- **Product definition:** Defining the roots and tubers according to the common, trade and scientific names.
- **Essential composition and quality factors e.g.** physico-chemical characteristics such as:
 - **Moisture content:** Necessary to prevent microbial growth ($\leq 13\%$ m/m).
 - **Ash content:** To monitor the level of mineral impurities and proper peeling/cleaning.
 - **Texture, flavour**, etc.
 - **Particle size:** Defining "fine" vs. "coarse" flour to ensure consistency in baking.

Furthermore, this group standard will also specify:

- requirements for homogeneity in package and packing methods to be considered;
- provisions for the labelling and marking of the product with reference to the Codex standard for the labeling of pre-packaged foods;
- provisions for hygiene, contaminants, and pesticides residues by cross-referencing relevant Codex standards and related texts; and
- methods of analysis identified for compliance with provisions in the standard

4. ASSESSMENTS AND CRITERIA FOR THE ESTABLISHMENT OF WORK PRIORITIES

General Criterion

The standard will meet general criterion with regard to consumer protection and fair trade practice by:

- Promotion of consumer protection by stipulating requirements for quality of millets: and
- Ensuring fair trade practice, referring to proper product name and definition.

Criteria applicable to commodities

4.1. Volume of production and consumption in individual countries

Roots and tubers are second only to cereals in global carbohydrate production. While traditionally staple foods in developing nations, their consumption as flour is increasing globally due to the demand for gluten-free alternatives.

Country	Primary Tuber Crop Production (Approx. Annual)	Estimated Processing & Consumption Dynamics (Flour Focus)
Nigeria	Yam: ~61.9 Million MT Sweet Potato: ~3.9 Million MT	Yam Flour: The world's largest consumer and producer. An estimated 20–30% of harvested yams are lost post-harvest or processed into dehydrated chips (<i>elubo</i>) and milled into flour. Domestic consumption dominates. Sweet Potato Flour: Emerging rapidly, heavily driven by the commercial adoption of Orange-Fleshed Sweet Potato (OFSP) flour for nutritional baking and wheat-substitution strategies.
China	Yam: Negligible (mainly Chinese Yam / <i>Dioscorea polystachya</i>) Sweet Potato: ~47.8 Million MT	Sweet Potato Flour: China is the global superpower for sweet potato processing. Unlike Africa, where it is a rural dietary staple, a massive portion of China's output is industrialized directly into flour, starches, and noodles for both domestic consumption and industrial food export.
Ghana	Yam: ~10.5 Million MT Sweet Potato: Lower commercial scale	Yam Flour: Significant processing infrastructure. Ghana stands as a key regional exporter of premium, packaged unadulterated yam flour tailored for international West African diaspora markets (primarily the US, UK, and Canada).
Côte d'Ivoire	Yam: ~7.6 Million MT Sweet Potato: Low	Yam Flour: Substantial domestic consumption base. Processing is traditionally localized but shifting toward standardized, industrial milling to reduce high urban market entry costs for fresh tubers.
Malawi	Yam: Negligible Sweet Potato: ~7.4 Million MT	Sweet Potato Flour: Highest per-capita fresh consumption in Sub-Saharan Africa. Value-added agro-processing into flour is scaling rapidly under state food-security and nutrition programs.
Tanzania	Yam: Negligible Sweet Potato: ~4.9 Million MT	Sweet Potato Flour: High domestic smallholder base. Flour milling is expanding to serve urban markets as a climate-resilient alternative to maize and wheat.
United States	Yam: Minimal (Import-reliant) Sweet Potato: ~1.3 Million MT	Yam Flour: Purely an import market (~17.3 Million kg imported annually under HS 110620 to serve culinary diversity and industrial gluten-free applications). Sweet Potato Flour: Specialized commercial export and domestic processing hub utilizing advanced dehydration and mechanical milling technologies.

4.2. Volume and pattern of trade between countries

4.2.1. Yam flour

The market for yam and its derivatives (flour/powder) is currently experiencing a "dynamic shift" toward health-conscious and industrial applications.

- **Yam powder market size:** Projected to reach **\$1.5 billion** by 2025 and **\$1.6 billion** by 2026.
- **Annual growth (CAGR):** Approximately **6.8%** for processed yam powder/flour through 2033.

- **Valuation:** The broader "Potato and Yam Derivatives" market is estimated to reach **\$689 billion** by 2026, with yam-based starches and flours representing a significant portion of the growth in the food processing sector.

Global trade patterns

Trade in yam flour is highly concentrated in West Africa, which accounts for over 90% of global yam production.

Top exporting nations

Rank	Country	Market role
1.	Nigeria	Largest producer (approx. 70% of global supply); leads in processed "Poundo Yam" and "Amala" flour.
2.	Ghana	Top commercial exporter; known for high-quality certification and consistent supply to Europe/USA.
3.	Côte d'Ivoire	Emerging processor focusing on regional West African trade and European exports.
4.	China	Growing presence in the "Purple Yam" powder market, targeting health-food industries in Asia and North America.

Top importing nations

- **United States:** Largest market outside Africa, driven by the African and Caribbean diaspora.
- **United Kingdom & France:** Major European hubs, particularly for West African "Amala" and "Poundo" varieties.
- **Netherlands:** Functions as the primary European distribution hub for further re-export to Germany and Scandinavia.

4.2.2. Sweet potato flour

As of early 2026, the global sweet potato flour market has reached a valuation of approximately \$860.3 million, with projections to grow to \$1.22 billion by 2032 (a CAGR of 5.1%). Trade is increasingly driven by the "clean label" movement and the expansion of the gluten-free bakery sector.

Global trade flow (exporters & importers)

While China dominates production, the trade of processed flour is more distributed across specialized manufacturing hubs.

Top exporting hubs

Country	Trade role	2024–2025 Dynamics
China	Global Leader	Controls ~50% of global output; exports high-volume industrial-grade flour.
Netherlands	European Hub	Primary re-exporter; processes raw imports for the EU bakery market.
United States	Premium Exporter	Focuses on organic and non-GMO varieties; exports to Canada and UK.
India	High-Growth	Fastest growing production; focus on cost-effective B2B supply.
Malawi / Nigeria	Emerging	Gaining ground in Africa with investments in drying and milling tech.

Top importing regions

- **Asia-Pacific (42.5% market share):** Lead by China, Japan, and South Korea for noodle and traditional snack production.
- **North America:** High demand for gluten-free baking and pet food applications.
- **Europe:** Germany, UK, and France are the major drivers, focusing on "clean label" food ingredients.

4.3 International or regional market potential

- **Gluten-free segment:** Massive growth potential in North America and Europe where sweet potato flours among other flours of roots and tubers marketed as "grain-free" and "Paleo-friendly."
- **Industrial substitution:** High potential in Sub-Saharan Africa and Southeast Asia to reduce reliance on expensive wheat imports.
- **Resilience:** Roots and tubers are more climate-resilient than wheat/maize, making them strategic for future food security.

4.4 Amenability of the commodity to standardization

Roots and tuber flours are highly amenable to standardization because their quality can be objectively measured through:

- **Physicochemical properties:** Moisture content (typically <12-13%), starch content, and pH.
- **Functional properties:** Particle size (fineness), water absorption capacity, and swelling power.

4.5 Number of commodities needing separate standards indicating whether raw, semi-processed or processed

The proposal is to develop a group standard for roots and tubers flours, focusing initially on flours from yam and sweet potato. However, proposals could be submitted for flours from other sources in the future.

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

There is no group standard covering the proposed tuber flours, namely from yam and sweet potato, however, there are Codex standards for different cassava flours i.e. *Standard for edible cassava flour* (CXS 176-1989), *Standard for gari* (CXS 151-1989 and *Regional standard for fermented cooked cassava-based products* (Africa) (CXS 334R-2020). Therefore, the new work will facilitate trade by establishing an internationally agreed group standard encompassing a range of roots and tuber flours in a single reference comprehensive standard.

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

- **FAO/WHO:** Extensive data on production and food safety (JECFA evaluations on cyanide).
- **IITA & ASARECA:** Developed harmonized standards for roots and tubers in East and Central Africa.
- **ISO:** Some specific standards exist (e.g., ISO 10520 for native starch), but these do not fully cover "edible flour" characteristics.
- **CGIAR (RTB Program):** Research on post-harvest loss reduction and value-added processing technologies.

CAC has adopted the following standards:

- *Standard for edible cassava flour* (CXS 176-1989) (worldwide)
- *Standard for gari* (CXS 151-1989 (worldwide)
- *Standard for cooked fermented cassava* (CXS 334R-2020) (regional)

National/Regional Standards

- Uganda: DUS 1845:2017 (Sweet potato flour specification)
- Kenya: KS 2023:2013 (Sweet potato products)
- East African Community: Draft standard for sweet potato flour
- Nigeria: NIS ARS 827: 2021 Sweet Potato Flour-Specification
- China: National standards for sweet potato processing
- Nigeria: Nigerian Industrial Standard (NIS) for yam flour
- Ghana: Ghana Standards Authority specifications
- ECOWAS: Regional harmonization efforts underway
- Other national standards may exist in producing countries

5. RELEVANCE TO THE CODEX STRATEGIC OBJECTIVES

The proposal for the elaboration of a group standard for roots and tuber flours is in line with the following strategic objectives of the Codex Strategic Plan 2026-2031:

I. 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 (Strategic Goal 1)

The proposal is aligned with the 2026–2031 plan's focus on developing standards that respond to an "evolving global landscape."

Climate change & food security: Roots and tubers are vital "climate-resilient" crops. By grouping them, Codex can more quickly establish safety and quality parameters for a wider range of crops that are becoming essential for food security in the face of changing climates.

II. Enhance Codex work management systems and practices that support the effective and efficient development of standards and related texts (Strategic Goal 2)

A central pillar of the 2026–2031 plan is "Work management systems and practices."

Speed of standard setting: Creating group standards is significantly faster than the traditional commodity-by-commodity approach. This allows Codex to keep pace with the rapid growth in international trade of these specific products.

Following the recommendation of the Codex Alimentarius Commission to develop more horizontal standards, by grouping similar products, when possible, in order to facilitate their development and application by Codex members.

Reducing "standard burnout": Developing a single group standard for "Roots and Tubers" replaces the need for dozens of individual standards and Electronic Working Groups (EWGs). This prevents the exhaustion of resources for member countries, especially developing nations with limited technical staff.

Simplifying standards setting: This shift follows the recommendation of the Executive Committee (CCEXEC) to use "group commodity standards" as a model for future work to avoid the "excessive establishment" of committees and documents.

III. Strengthen relationships with relevant international organizations, promoting a coordinated approach to address global challenges (Strategic Goal 3) and Maximize the impact of Codex by increasing the visibility and use of standards (Strategic Goal 4)

The new strategic plan aims to "Maximize the impact of Codex" by increasing the use of its standards worldwide.

Supporting developing economies: Roots and tubers are primary exports for many countries in Africa, Asia, and Latin America. Individual standards can be too technical or numerous for small producers to navigate. A clear, unified group standard makes it easier for these countries to harmonize their national regulations with Codex, facilitating fairer trade.

One Health & sustainability: The strategic goals highlight "Sustainable and Resilient Food Systems." Grouping these crops allows for a more holistic approach to safety (such as managing pesticide residues across a whole category) rather than fragmented, crop-specific rules.

6. INFORMATION ON THE RELATION BETWEEN THE PROPOSED AND OTHER EXISTING DOCUMENTS AS WELL AS OTHER ONGOING WORK .

Aside from Codex standard for cassava flours, there are no Codex standards that have specific provisions related to roots and tuber flours. However, the horizontal food safety Codex texts on food safety relevant to processed roots, and tubers apply. In accordance with Section 2.6. Format for Codex commodity standards of the Codex *Procedural Manual*, the proposed group standard will include references to such as:

- (a) *General principles of food hygiene* (CXC 1-1969)
- (b) *Code of hygienic practice for low moisture foods* (CXC 75-2015)
- (c) *Principles and guidelines for the establishment and application of microbiological criteria related to foods* (CXG 21-1997)
- (d) Maximum residue limits (MRLs) for pesticides residues established by the Codex Alimentarius Commission.
- (e) *General standard for contaminants and toxins in food and feed* (CXS 193-1995)
- (f) *General standard for the labelling of prepackaged foods* (CXS 1-1985)

(g) *General standard for the labelling of non-retail containers of foods* (CXS 346-2021)

(h) *Recommended methods of analysis and sampling* (CXS 234-1999)

7. IDENTIFICATION OF ANY REQUIREMENT FOR AND AVAILABILITY OF EXPERT SCIENTIFIC ADVICE

While none have been identified yet, specialists in roots and tubers will participate through Codex Members or Observers.

8. IDENTIFICATON OF ANY NEED FOR TECHNICAL INPUT FROM EXTERNAL BODIES

No requirement for external technical consultation has been established at this stage. However, the process allows for the involvement of relevant organizations as Codex Observers during the development of the group standard.

9. PROPOSED TIMELINE

Anticipated development time for this group standard is three sessions or less, subject to the degree of consensus achieved during the discussions.