

## CODEX ALIMENTARIUS COMMISSION



Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization

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Agenda Item 6

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**JOINT FAO/WHO FOOD STANDARDS PROGRAMME**

**CODEX ALIMENTARIUS COMMISSION**

**39<sup>th</sup> Session**

**FAO Headquarters, Rome, Italy, 27 June – 1 July 2016**

**PROPOSALS FOR THE ELABORATION OF NEW STANDARDS AND RELATED TEXTS<sup>1</sup>**

A list of proposals to elaborate new standards and related texts is presented below, including the reference of the project document in the relevant report. Projects document which were not included in the report and were finalised after the session of the relevant Committee are attached to the present document as **Annexes**. The Commission is invited to decide whether or not to undertake new work in each case, taking into account the critical review conducted by the Executive Committee, and to decide which subsidiary body or other body should undertake the work. The Commission is invited to consider these proposals in the light of its *Strategic Plan 2014-2019* and the *Criteria for the Establishment of Work Priorities and for the Establishment of Subsidiary Bodies*.

<b>Codex Body</b>	<b>Text</b>	<b>Reference and project document</b>
CCFL	Guidance for the labelling of non-retail containers of food	REP 16/FL, Para. 54, Appendix III
CCAFRICA	Regional Standard for dried meat	REP 15/CCEXEC para. 30, See <b>Annex 1</b> of this document

<sup>1</sup> This document compiles new work proposals submitted by Codex meetings held in April and May 2016

## Annex I

**REVISED PROJECT DOCUMENT ON DRIED MEAT FOR CODEX AFRICA REGIONAL STANDARD**

(Submitted by Botswana and Coordinator for the Regional Coordinating Committee for AFRICA-CCAFRICA)

**BACKGROUND**

Meat is highly perishable and its preservation is therefore important. The most preferred method of meat preservation in developed world is refrigeration. Refrigeration infrastructure and equipment are expensive to install and maintain in Africa hence need for alternative preservation methods like drying. There are many methods used to prepare dried meat. The main method of meat preservation in Africa is that of sun drying including exposure of lean meat to the sun, or a combination of salting followed by air drying as in the preparation of biltong in South Africa. The dried meat product like *kilishi* in Nigeria is prepared by partially drying thin sheets of quality beef in the sun followed by marinating in slurry of ingredients before a second period of sun drying. The quality characteristic of dried meat for long term storage is enhanced by addition of preservatives.

The preparation of dried meat products Africa differs from one region to another. The following are a few examples of dried meat products in Africa:

- a) **Biltong** is a variety of dried, cured meat that originated in South Africa. Various types of meat are used to produce it, ranging from beef and game meats to fillets of ostrich from commercial farms. It is typically made from raw fillets of meat which are cut into strips, spiced and dried.
- b) **Kilishi** is a version of biltong. It is a delicacy in Hausa Land in Nigeria made from beef, sheep or goat meat after the removal of bones. It is prepared by partially drying thin sheets of quality meat in the sun followed by marinating in slurry of ingredients before a second period of sun drying.
- c) **Odka** is sun-dried meat product made of lean beef and is of major importance to pastoralists in Somalia. In the face of perennial incidence of drought in the Horn of Africa, odka has become important since it is often prepared from drought-stricken livestock.
- d) **Qwanta** is produced in Ethiopia and other East African counties from lean beef which are further sliced into long strips hung in the kitchen to dry. Prior to drying, the strips are coated with a sauce containing a mixture of salt and spices.
- e) **Khlii** is preserved meat mainly in Morocco. It is composed of lean and fat of any animal with the exception of swine. It is a traditionally prepared dried cooked meat. It is manufactured by deboning, trimming, lineage, salting / maceration, drying and frying. It is a form of a cooked meat covered in a mixture of fat or oil and packaged in airtight container.
- f) **Nyirinyiri** is a sundried, spiced and or cured dried meat from camel, cattle, goat and sheep meat preserved in oil in small pieces. ***Nyirinyiri is produced mainly by pastoralists in Kenya and Somalia.*** It is made from lean meat cut into thin strips and sun dried for some hours depending on weather condition. It is then cut into small pieces and fried in ghee, camel fat, vegetable oil and animal fat. The Nyirinyiri is then stored in the fat in food grade container and can last for up two years.
- g) **Segwapa** is a variety of sun dried cured meat, mostly beef and game meat enjoyed in all parts of Botswana as relish with great potential for export .

**2. The purpose and scope of the standard****2.1 Purpose of the standard**

The purpose of this new work item is to establish CC Africa regional standard for dried meat products with the aim of protecting the consumers' health and promoting fair regional trade in dried meat.

**2.2 Scope of the standard**

The scope of the proposed standard **shall cover** dried meat products **from cattle, camel, sheep, goat and farmed game free from surface fat, bones, cartilage and tendons** food grade container for direct consumption or for further processing.

**3. Its relevance and timeliness**

Despite the recent advances in refrigeration and packaging technology, more traditional methods of meat preservation, such as salting and drying, continue to play an important role in the meat marketing structure of many African countries. Dried meat products are prepared and traded under different names as shown above, therefore justify elaboration of a regional standard.

Surveys on commercial dried meat products have shown that Sun drying method itself has got some of its

challenges such as exposure to contamination from sources such as air, insects, wind, dirt, rain, rodents and birds; leading to the presence of pathogens such as Enterobacteriaceae, Staphylococci, Salmonella and pathogenic yeasts and moulds. Deterioration of the inherent tissue fats is also a challenge.

Quality deficiencies such as changes in colour, off-flavours, foreign contaminating substances such as dirt, sand and higher surface microbial contamination may occur. Heavy microbial contamination can affect the meat after rehydration, when sufficient moisture for renewed bacterial growth is available, as this will lead to product deterioration and even possible food poisoning. Storage, pH, water activity and packaging are challenges as well.

Developed countries have regulations pertaining to the production of dried meat products. There are strict requirements to ensure safe and wholesome production of dried meat products. In the United States of America for instance, the U.S. Department of Agriculture is responsible for oversight. Many European Union countries presently prohibit the importation of meat products, including dried meat,

The absence of regulations and Africa Regional Codex standards for dried meat product impedes trade within African countries. It is therefore critical to establish an African regional Codex standard covering the safety, quality, hygiene and labelling of dried meat products in order to have a reference that is regionally agreed by consensus among the trading countries.

#### **4. Main aspects to be covered**

The standard shall be a commodity standard following the format of Codex in the procedural manual. This involves the following;

- a) Scope
- b) Product definitions
- c) Raw Material specifications
- d) Processing procedures
- e) Products specifications including categories to classify meat products
- f) Establish the tolerance limits for contaminants and micro-organisms
- g) Food additives provisions
- h) Methods of inspection, sampling, and testing
- i) Packaging, labelling, transportation and storage.

#### **5. Assessment against the Criteria for the Establishment of Work Priorities**

##### **General criterion**

The standard aims at ensuring fair trade practices through the establishment of product identity, composition and designations and at providing consumer protection through inclusion of references to the appropriate Codex related text for food safety and labeling.

The standard would be beneficial for the African region countries in particular, because African countries are the major producers, and consumers of dried meat products.

##### **Criteria applicable to commodities**

##### **(a) Volume of production and consumption in individual countries and volume and pattern of trade between countries:**

Dry meat is produced in many countries within Africa. According to FAO data, the production and trade at African level has been variable. Within the agricultural and food sector in South Africa, the average production of dried meat from 1991-2001 was 1,554 compared to 8,124 in Sub-Saharan Africa. The World Bank Group totals all 2003 exports at 32,179 million and all imports at 26,021 million. **(Source: FAOSTAT)**

2000-2003 Export of Bovine Meat Salted, Dried or Smoked from South Africa.

Period	Trade Flow	Reporter	Partner World	Code	Trade value	Net Weight	Quantity Unit	Trade Quantity
2000	Export	S.Africa	World	021020	\$86,453	38,658	8	38,658
2001	Export	S.Africa	World	021020	\$26,814	14,057	8	14,057
2002	Export	S. Africa	World	021020	\$87,166	56,314	8	56,314
2003	Export	S.Africa	World	021020	\$314,465	100,832	8	200,832

\* United Nations Statistics Division, Commodity Trade Statistics Database

**Dried meat production in Kenya**

County	Volume (MT)	Year	Source
Wajir	1008	2014	Oxfam
Isiolo	5.2	2015	Anolei group
Garissa	13	2015	Bula riig group

**(b) Diversification of national legislation and apparent resultant or potential impediments to regional trade**

Due to lack of regional standard for dried meat products, regional trade has been widely affected. Importers prefer to import food products based on Codex standards. Therefore, the new work would provide regionally recognized specific standards in order to enhance regional trade and to accommodate the importer's requirements.

**(c) Regional market potential**

The import of dried meat products by most countries is increasing. Dried meat products come from different animal species, with different textures and flavours and packaging to meet different markets. Therefore, development of standards for dried meat products will not only enhance trade, but also quality and safety. These products are traded in some African countries such as Sudan, Uganda, Ethiopia, South Sudan, Tanzania, Egypt, Somalia, Djibouti, Eritrea, Kenya, Botswana, and South Africa, which has got an estimated population of 550 Million people.

**(d)** According to studies conducted in Kenya, a considerable number of dried meat value chain actors are aware of the need for quality and safety requirements

There is no documented data on production and traded volumes on dried meat in Kenya which is still informal. It is emphasized that the above data provided does not give the complete information on production and trade as it has not been possible to retrieve data from other countries that are producing dried meat. Regarding consumption data on dry meat, such data are not available.

**(e) Diversification of National legislation and apparent resultant or potential impediments to Regional trade**

No regional standards are currently available. Some related products exist and are sold under different names, these products may have a problem of quality and safety and difficulties in continuing trade in such products if can be brought up for discussion during drafting of the Regional standard.

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

The availability of national standards for different types of dried meat products will lead to adequate parameters for the Codex regional standard of the product. A single standard for dried meat products may cover all available products in the market traded- regionally. Currently the exportation of biltong/ dried meat is limited due to the trade barriers placed by neighboring countries and restriction of trading unpackaged dried meat.

### **(g) Work already undertaken by other international or regional organizations**

There is no international organization that has undertaken an international standard for dried meat products. However, the regional standard for dried meat was developed in 2008 by the Gulf Cooperation Council (a regional standardization organization for Gulf States). National standards, guidelines and regulations have been developed by USA, Australia, etc. FAO Animal Production and Health Technical Papers have covered some aspects of safety and quality of dried meat products. The existing regional and national standards and guidelines may be considered while developing the regional Codex standard for dried meat products.

### **6. Relevance to the Codex Strategic Objectives**

The elaboration of this Codex regional standard for dried meat products is in line with the Codex Strategic Plan 2014-2019 to promote the application of Codex standards by countries in their national legislation and to facilitate international trade.

It meets the specified goal one of the strategic plan of 2014- 2019 under activity 1.2.2 – “Develop Regional Standards as needed, in response to needs identified by Regional members and in response to factors that affect food safety, nutrition and fair practices in the food trade”.

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

The proposal for elaboration of a Codex regional Standard for dried meat products is one of the activities in accordance with and part of the terms of reference of the CCAFRICA. There is no other international standard for dried meat.

This standard will include references to relevant pre – existing Codex texts developed by general subject committees, i.e. Code of hygienic practice for meat (CAC/RCP 58-2005), General principles of food hygiene (CAC/RCP 1-1969), Principles and Guidelines for the establishment and application of Microbiological criteria related to foods (CAC/GL 21-1997).

### **8. Requirement for and availability of expert scientific advice**

No need for expert scientific advice is foreseen at this stage. Published research documents by international bodies will be referred in the process of preparing the standard. .

### **9. Requirement for technical input to the standard from external bodies**

Recognized Regional experts and organizations will be requested to advice on methods of analysis and sampling.

### **10. Proposed time-line for completion of the new work**

Elaboration of the standard will take place according to the following timeline.

<b>STEP PROCEDURE</b>	<b>DATE</b>
Consideration of the revised Project document by CCEXEC71	June 2016
Approval of new work by the Commission	June/July 2016
Consideration at Step 3 by CCAFRICA22	January 2017
Adoption by the Commission (at Step 5)	June/July 2017
Consideration by CCAFRICA (at Step 6)	January 2019
Adoption by the Commission (at Step 8)	June/July 2019