





#### **DAIRY OLYMPICS**

# The Development of International Camel Milk Standard Under Codex Alimentarius

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#### SPEAKER INTRODUCTION

- \*Engineer. Sonia Baldi
- \*Abu Dhabi Agriculture and Food Safety Authority (ADAFSA)~ United Arab Emirates
- \* Policies and Regulation Expert
- \*Coordinator for Codex Work~ADAFSA
- \*Member of UAE National Codex Committee
- \*Rapporteur of the Expert National Working Group on Camel Milk Standard Development-United Arab Emirates





#### OUTLINE

- **1-General Context**
- 2-Amenability of Camel Milk to International Standardization
- **3-Codex Step Procedure For Standard Development**
- **4-Camel Milk Standard Advancement**
- 5-Steps forward: CAC47 Recommendations







#### **General Context**





Raised Interest in Camelids as source of food



Through the provision of milk and meat Camelids contribute to significantly achieve the FAO Sustainable Development Goals (SDG)





SDG (1): No poverty SDG (3): Good health and well being



The amenability of camel milk commodity to standardization based on the Criteria set by Codex



The Distinctive characteristics of this commodity and the possibility of adulteration

CONTEXT

COMMITMENT

**ALIGNMENT** 

**AMENABILITY** 

**DISTINCTIVENESS** 

## PART I

## **Amenability of Camel Milk to International Standard**

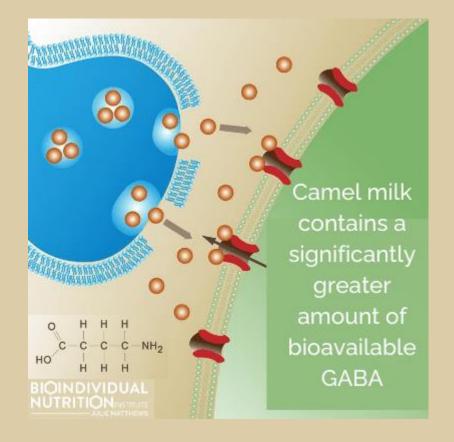


#### **Camel Milk Benefits**



- 2. Contains superior nutritional properties
- 3. Reduces inflammation
- 4. Fights infections
- 5. Rehabilitates the immune system to calm autoimmune conditions
- 6. Supplies beneficial bacteria
- 7. Improves gastrointestinal health
- 8. Supports healthy blood sugar and insulin levels
- 9. Helps reduce anxiety via GABA
- 10. Benefits people with autism

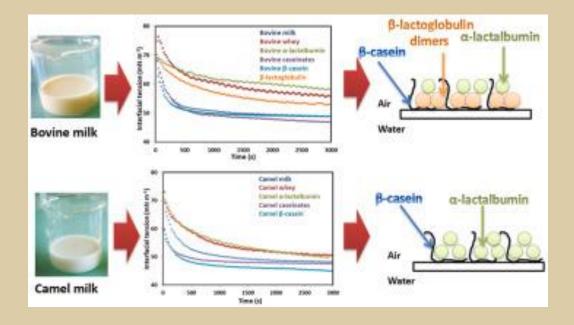






### The Unique Attributes of Camel Milk

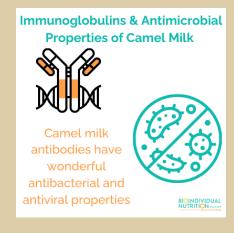
1- The absence of  $\beta$ -lactoglobulin: one of the main milk allergens and a highly prevalent protein found in whey products





#### The Unique Attributes of Camel Milk

2- Characteristics closer to human milk: with a lower allergenic potential that places such products in high market demand.





#### **Fraud Possibilities**

3- Increased interest and trade opportunities making this product subject to **illicit manufacturing** and false representation practices



leading to consumer deception and fraud;



Threatening the integrity of this valuable commodity's supply chain.

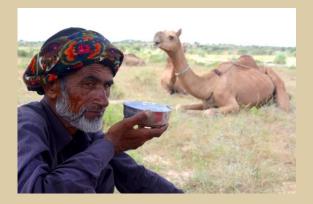


#### **Current Environment of Camel Milk**

Increased production and demand

Produced in different geographical regions





Distinctive Methods of Production

Several Camel Milk Products



Large portion of the production is NOT included in the FORMAL trade



### **National Level Camel Milk Standards**

Criteria	UAE	GSO	Kenya	Morocco	Kazakhsta n	Tunisia	Mongolia
Type of Camel Milk targeted in the standards	<ul> <li>Pasteurized         <ul> <li>Camel Milk</li> </ul> </li> <li>Raw Camel Milk         <ul> <li>included in raw</li> <li>milk standard</li> </ul> </li> </ul>	<ul> <li>Pasteurized         <ul> <li>Camel Milk</li> </ul> </li> <li>Raw Camel         <ul> <li>Milk included</li> <li>in raw milk</li> <li>standard</li> </ul> </li> </ul>	<ul> <li>Raw whole         <ul> <li>Camel Milk</li> </ul> </li> <li>Pasteurized         <ul> <li>Camel Milk</li> </ul> </li> <li>Fermented         <ul> <li>Camel Milk</li> </ul> </li> </ul>	Pasteurized Camel Milk	Powder Camel Milk Camel Milk for Processing  Camel Milk for Processing	<ul><li>Raw whole</li><li>Camel Milk</li><li>Pasteurized</li><li>Camel Milk</li></ul>	<ul> <li>Raw whole         <ul> <li>Camel Milk</li> </ul> </li> <li>Pasteurized         <ul> <li>Camel Milk</li> </ul> </li> <li>Fermented         <ul> <li>Camel Milk</li> </ul> </li> </ul>
Pasteurized Camel Milk standards	<ul> <li>UAE.S/GSO 1970         <ul> <li>:2010(PCM)</li> </ul> </li> <li>UAE.S GSO         <ul> <li>174:2021 (RM)</li> </ul> </li> </ul>	■ GSO 1970: 2021 (PCM) ■ GSO 174:2021 (RM)	DKS 2062: 2016	NM 08.4.300:20 16	<ul><li>CT PK- 3386-2019</li><li>CT PK-166- 2015</li></ul>	<ul><li>NT 14.261(2009)</li><li>NT 14.297 (2010)</li></ul>	
Scope for pasteurized Camel Milk standards 4/12/2025	Pasteurized Camel Milk from Camelus dromedarius — One hump camel	Pasteurized Camel Milk from Camelus dromedarius -One hump camel	Pasteurized Camel Milk from any Kind of Camels (One or Two humps)	Pasteurized Camel Milk from any kind of Camels (One or Two humps)	Pasteurized Camel Milk from any kind of Camels (One or Two humps)	Pasteurized Camel Milk from Camelus dromedarius— One hump camel	Pasteurized Camel Milk from any kind of Camels (One or Two humps) 11

## Strategic Objectives from Proposing a New Codex Work on Camel Willik

- To protect the commodity
- To prevent Fraud and Adulteration
- To address specificities of camel milk/ camel Milk Production
- To support Producing countries to develop this product and its perspectives of market access
- To level the playing field between countries in perspectives of Product development
- To prevent the proliferation of national standards that may become divergent



#### PART II

#### **Codex Step Procedure For Standard Development**



#### CODEX PROCEDURAL MANUAL

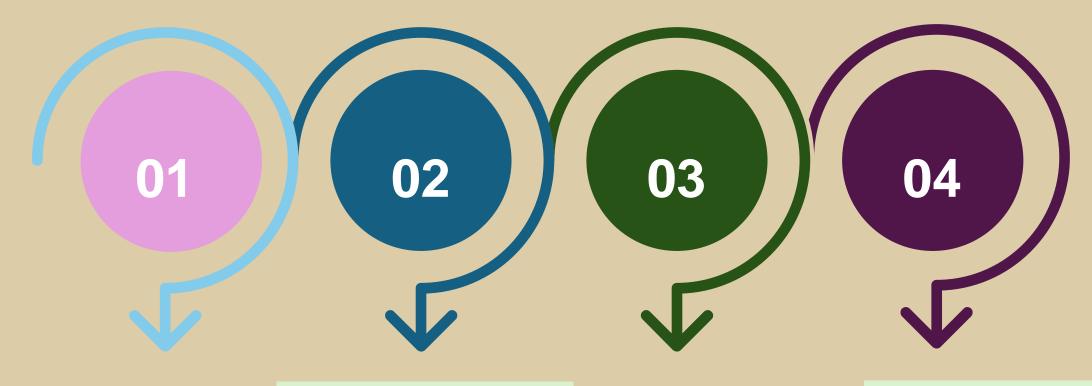
The Procedural Manual of the Codex Alimentarius Commission sets out:

The basic Rules of Procedure, procedures for the elaboration of Codex standards and related texts, basic definitions and guidelines for the operation of Codex committees.





### **Process to Develop/Revise Codex Text**

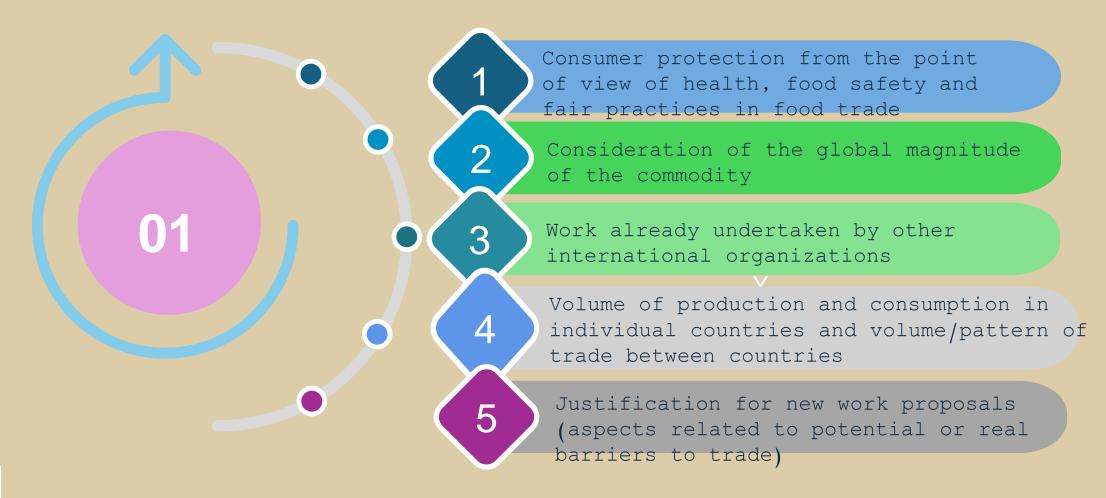


1.Criteria for the Establishment of Work Priorities

2. Project
Document/
Draft
Discussion
Paper

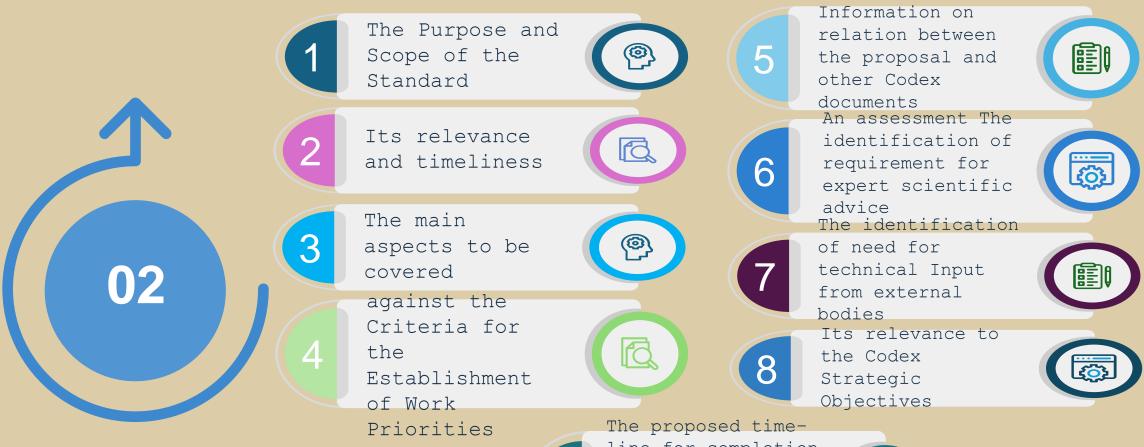
- 3.Critical
  Review Process
- 4. Codex Step Process

## 1. Criteria for the Establishment of Work Priorities





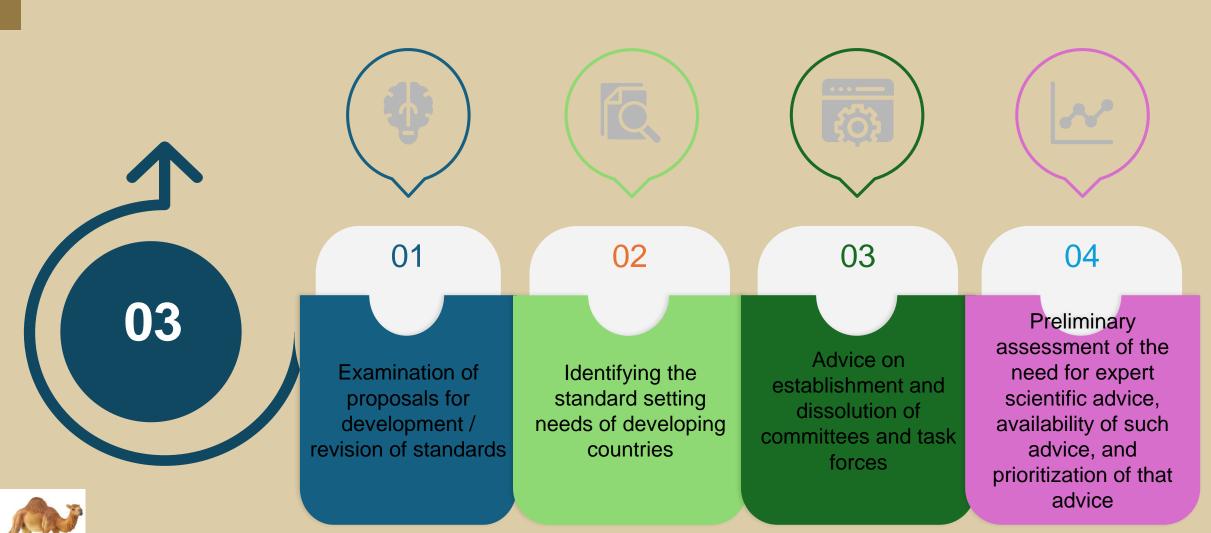
## 2. Project Document Must Include





line for completion of the work (start date, proposed date for adoption at Step 5, proposed date for adoption at Step 8)

## 3. Critical Review (Done by CCEXEC)



### PART III

#### **Camel Milk Standard Advancement**



#### **Pathway Towards a Standard Development**





Informed about Nev

CCNE 11: UAE to
Undertake further
work on camel milk
standard
development

Data gathering
Benchmarking
Literature
review

Engagement guidance Discuss Adjust

New Work

CAC47

5

#### Standard Development Requirements: global work (Multi-stakeholders)





## **Technical Expert Working Group –National**





















## Standard Development Workflow: drafts developing

Literature Review on Characteristics of Camel Milk: identification of nutritional distinctive criteria Documenting conditions of production of Camel Milk, with focus on the requirements of the CCMMP



Review of existing Standards established at regional and international level

Gather data related to trade and other economic aspects related to Camel Milk

### **Field visits**





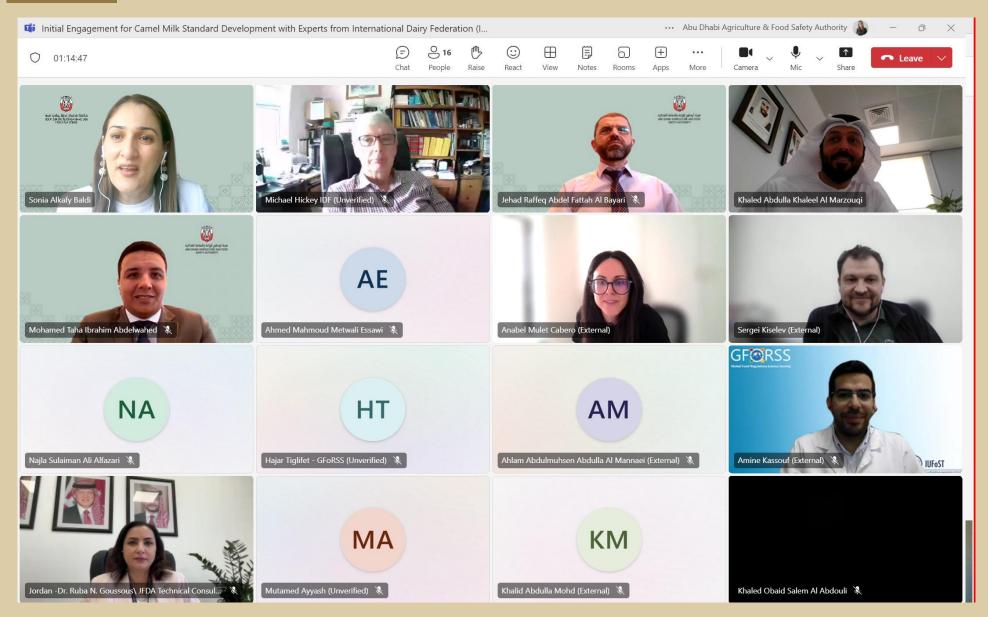






- -Practices in camel farming and milk processing
- -Challenges facing the industrials in both research or innovation or regulation levels

#### **International Consultations**





Codex
Secretari
at
CCMMP

IDF

## Consultatiom Meetings with Codex Regional Committees



**CCNE** 

**CCAFRICA** 

**CCASIA** 

**CCLAC** 

**CCEURO** 

#### **Output** Of International Consultations

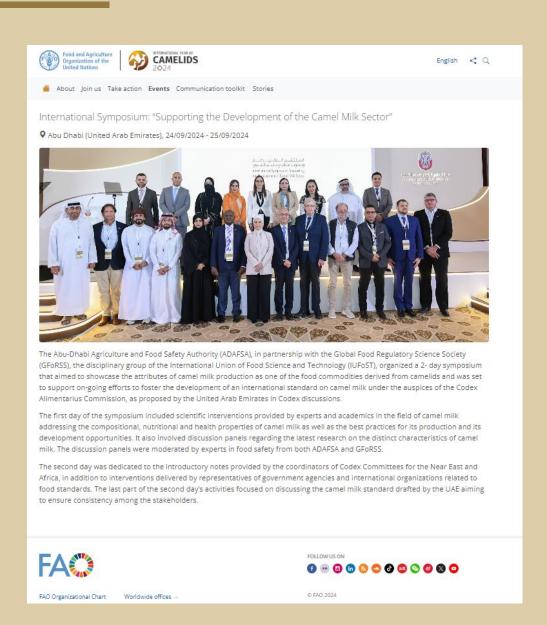


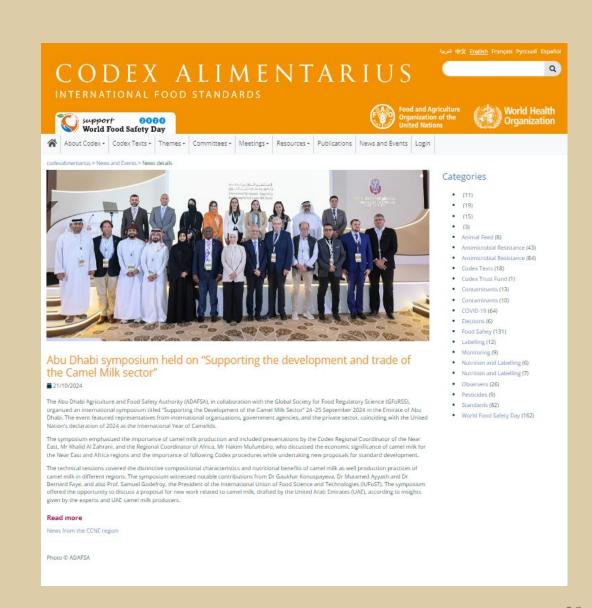
1- Highlight the efforts done by UAE in seeking guidance and support

- 2- Support the proposal on Camel Milk products standard that will promote the trade on this commodity
- 3- Provide comments on the drafts
- 4- Participate in the co-authoring
- 5- Contribute actively in promoting the proposal

Country:	Culton	oto of Omon									
Organization:	Sultanete of Oman  Ministry of Agricultural Wealth, Fisheries and Water Resources										
Date	31/10/2024										
Data Source: Link or reference	ali.alghafri@mafwr.gov.om										
Data Source. Link of reference	an.aignam@marwr.gov.om										
	Herd details ( official statistics)										
Number of Camels (Unit= Millions)	0.296										
Number of milking Camels(Unit= Millions)	0.4										
Types of Herd (If known)	one humped										
Average Age of the Camels	40 - 50										
Main diseas and corresponding vaccines	Prucellosis ( vaccine Rv1 ) , Trepansomasis ( treatment ) , Jhons (paratuperclosis vaccine)										
Production											
Item (Unit= Tons)	2020	2021	2022	2023	(1-9) 2024						
Production of Raw Camel Milk	0	0	1149.7	2367.15	3755						
Production of pasteurized Camel Milk	0	0	1149.7	2367.15	3755						
Production of Powder Camel Milk	0	0	0	0	0						
Production of ice cream	0	0	0	0	0						
Production of ghee	0	0	0	0	0						
Production of other camel milk products	0	0	0	0	0						
	0010		xport		0000						
Item (Unit= Tons)	2019	2020	2021	2022	2023						
Quantity of Camel Milk Exported	0	0	0	0	2367						
Country Exporter	0	0	0	0	KSA						
Camel Milk Properties (as per standard)	Full cream	low fat	skimmed								
Protein content %	0	2.65	0								
lactose	0	3.2 - 3.6	0								
total ash	0	0	0								
Total solids %	0	MIN 10	0								
total non -fat solids (%)	0	MIN 8.0	0								
Fatty acid profile	0	Fat max 2	0								
Casein (%)	0	0	0								

#### The International Symposium: Supporting The Development of Camel Milk Sector





#### Discussion paper on the development of new work on a camel milk commodity standard

DISCUSSION PAPER - New Work on a Camel Milk Commodity Standard - CCMMP

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON MILK AND MILK PRODUCTS

Discussion Paper on the Development of New Work on

A Camel Milk Commodity Standard

Author: United Arab Emirates,

Co-authors: Kenya, Chad, Mali, Niger, Somalia, China, Oman, Tunisia, Morocco Kazakhstan, Mongolia, Bahrain, Syria, Qatar, Iraq, Iran, Jordan, Egypt and the International Union of Food Science and Technology' (UFOST)

#### 1. Background

The United Nations has designated 2024 as the International Year of Camelids (IYC 2024) to spotlight the overlooked potential of camelids.

Raising awareness and encouraging increased investment in the camelid sector aligns with the objectives of this year, with added support to research, capacity development, and the adoption of innovative practices and technologies in the food production sector. Camelids, through the provision of milk and meat, contribute significantly to the advancement of Sustainable Development Goals (SDGs), specifically those addressing hunger, the elimination of extreme poverty, the empowerment of women, and the sustainable utilization of terrestrial ecosystems.

Furthermore and during the 11th session of the Codex Committee for the Near East (CCNE11), which was held at FAO Headquarters, Rome, Italy, from 18 September to 22 September 2023, the United Arab Emirates (UAE) introduced a proposal to develop a regional standard for pasteurized Camel Milk of the species Camelus dromedarius (one-humped camel), highlighting the increase in Camel Milk production and trade, at regional

#### **Prepared by United Arab Emirates**

18 Co-authors

Kenya, Chad, Mali, Niger, Somalia, China, Mongolia, Oman, Tunisia, Morocco, Kazakhstan, Qatar, Bahrain, Iraq, Iran, Jordan, Egypt and the International Union of Food Science and Technology (IUFoST)



<sup>&</sup>lt;sup>1</sup> Through the contribution of UEASTA disciplinary group on food regulatory science: the Global Food Regulatory Science Society (GFoRSS).

### **Steps Forward: CAC47 RECOMMENDATIONS**





Codex Secretariat and Host of CCMMP to review the discussion paper and the project document.



UAE, New Zealand and IDF will conduct a GAP ANALYSIS



Codex secretariat will issue a **Circular Letter** for comments (Members, observers)



CCEXEC89 to conduct a critical review on the Project Document and Discussion Paper incorporating any further refinements based on the comments received to the CL



# Thank You!



