

## DAIRY OLYMPICS

# The Development of International Camel Milk Standard Under Codex Alimentarius

Engineer. Sonia Baldi  
Agriculture Policies and Regulation Expert  
Abu Dhabi Agriculture and Food Safety Authority  
07 April 2024

# SPEAKER INTRODCUTION

- \*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

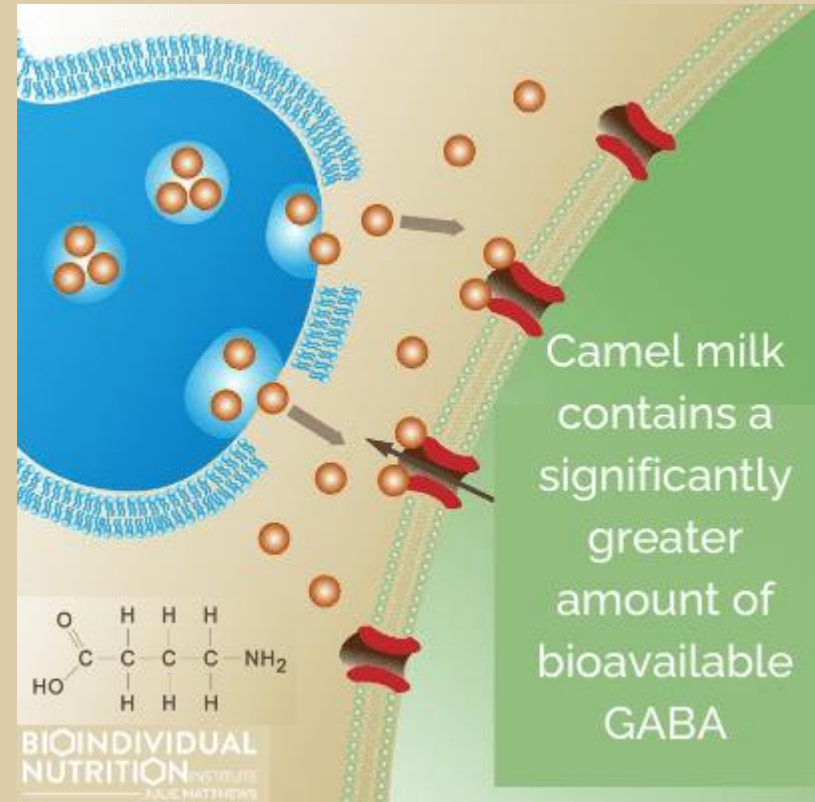


## Camel Milk Benefits



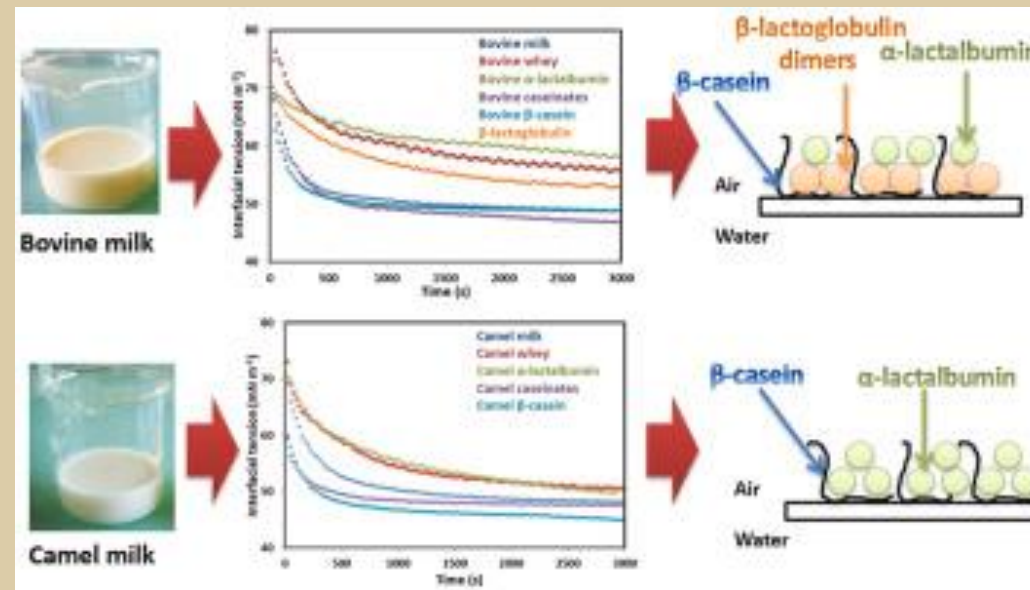
1. Helpful for those with food allergies
2. Contains superior nutritional properties
3. Reduces inflammation
4. Fights infections
5. Rehabilitates the immune system to calm autoimmune conditions
6. Supplies beneficial bacteria
7. Improves gastrointestinal health
8. Supports healthy blood sugar and insulin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

BIOINDIVIDUAL  
NUTRITION INSTITUTE  
JULIE MATTHEWS



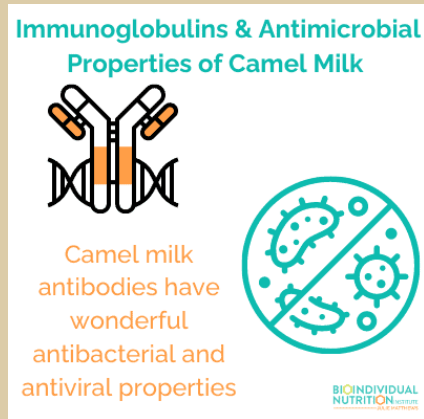
# The Unique Attributes of Camel Milk

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	Kazakhstan	Tunisia	Mongolia
Type of Camel Milk targeted in the standards	<ul style="list-style-type: none"> <li>Pasteurized Camel Milk</li> <li>Raw Camel Milk included in raw milk standard</li> </ul>	<ul style="list-style-type: none"> <li>Pasteurized Camel Milk</li> <li>Raw Camel Milk included in raw milk standard</li> </ul>	<ul style="list-style-type: none"> <li>Raw whole Camel Milk</li> <li>Pasteurized Camel Milk</li> <li>Fermented Camel Milk</li> </ul>	Pasteurized Camel Milk	Powder Camel Milk  Camel Milk for Processing  Camel Milk for Processing	<ul style="list-style-type: none"> <li>Raw whole Camel Milk</li> <li>Pasteurized Camel Milk</li> </ul>	<ul style="list-style-type: none"> <li>Raw whole Camel Milk</li> <li>Pasteurized Camel Milk</li> <li>Fermented Camel Milk</li> </ul>
Pasteurized Camel Milk standards	<ul style="list-style-type: none"> <li>UAE.S/GSO 1970 :2010(PCM)</li> <li>UAE.S GSO 174:2021 (RM)</li> </ul>	<ul style="list-style-type: none"> <li>GSO 1970: 2021 (PCM)</li> <li>GSO 174:2021 (RM)</li> </ul>	<ul style="list-style-type: none"> <li>DKS 2062: 2016</li> </ul>	<ul style="list-style-type: none"> <li>NM 08.4.300:2016</li> </ul>	<ul style="list-style-type: none"> <li>CT PK-3386-2019</li> <li>CT PK-166-2015</li> </ul>	<ul style="list-style-type: none"> <li>NT 14.261(2009)</li> <li>NT 14.297 (2010)</li> </ul>	
Scope for pasteurized Camel Milk standards  4/8/2025	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)

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

- ❖ 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





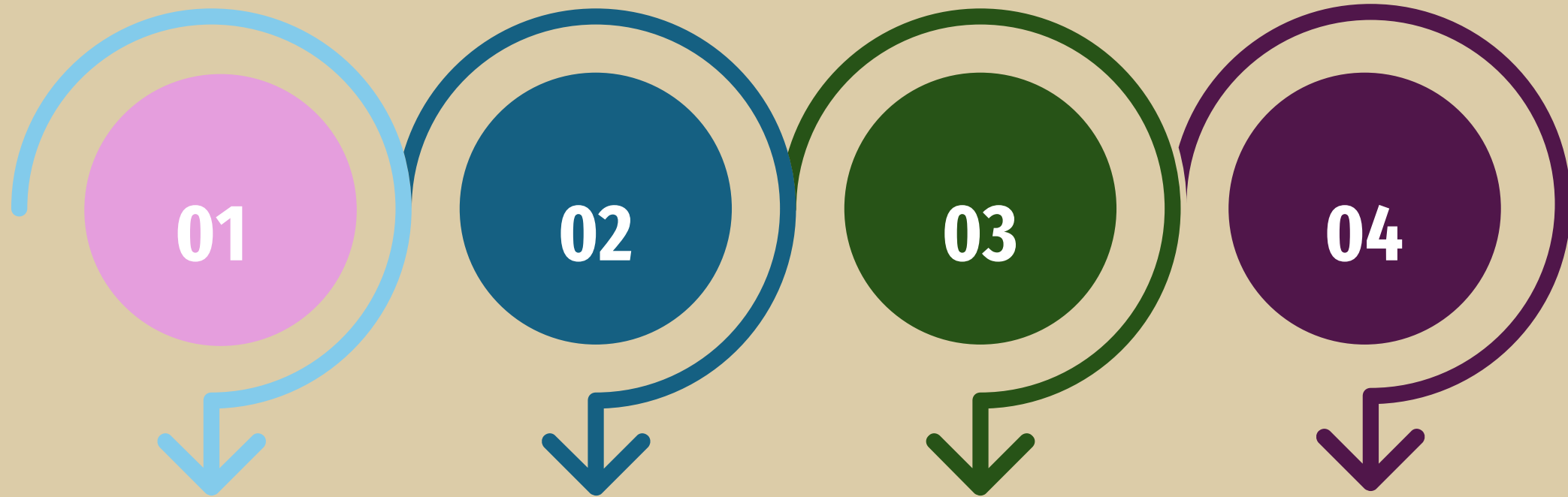
# CODEx PROCEDURAL MANUAL

---

**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**

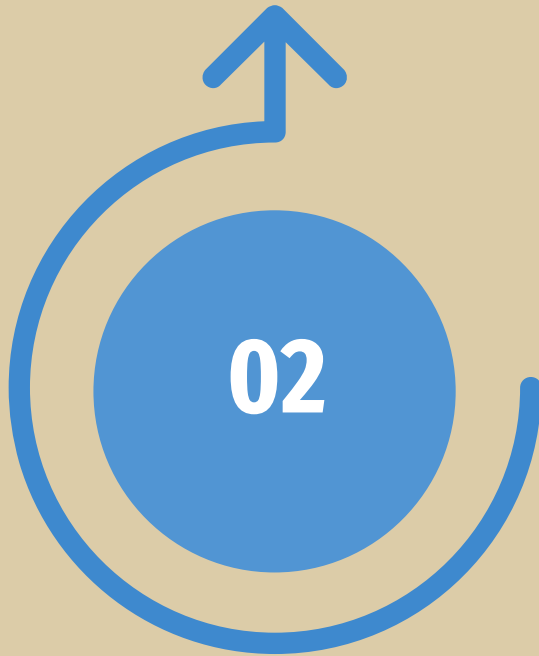
**4. Codex Step  
Process**



# 1. Criteria for the Establishment of Work Priorities



## 2. Project Document Must Include



1

The Purpose and Scope of the Standard



2

Its relevance and timeliness



3

The main aspects to be covered



4

An assessment against the Criteria for the Establishment of Work Priorities



5

Information on relation between the proposal and other Codex documents



6

An assessment The identification of requirement for expert scientific advice



7

The identification of need for technical Input from external bodies



8

Its relevance to the Codex Strategic Objectives

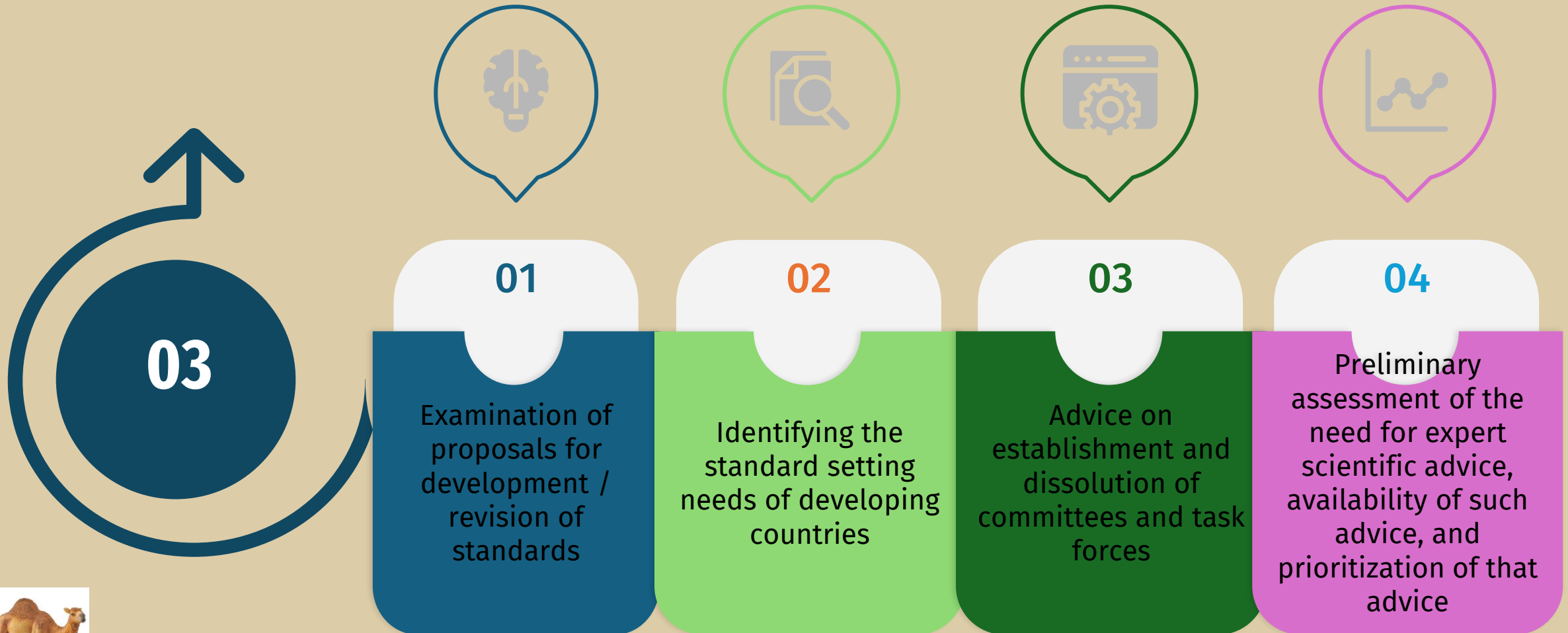


9

The proposed time-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)



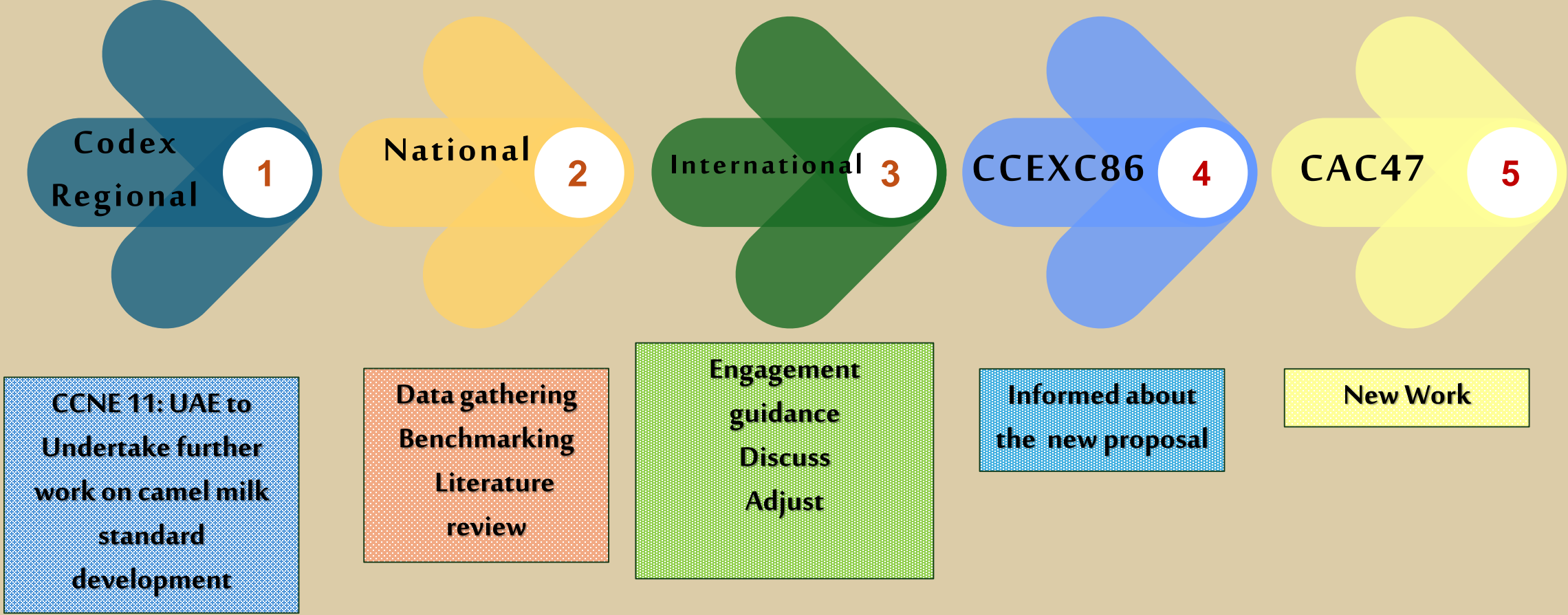


# PART III

## Camel Milk Standard Advancement



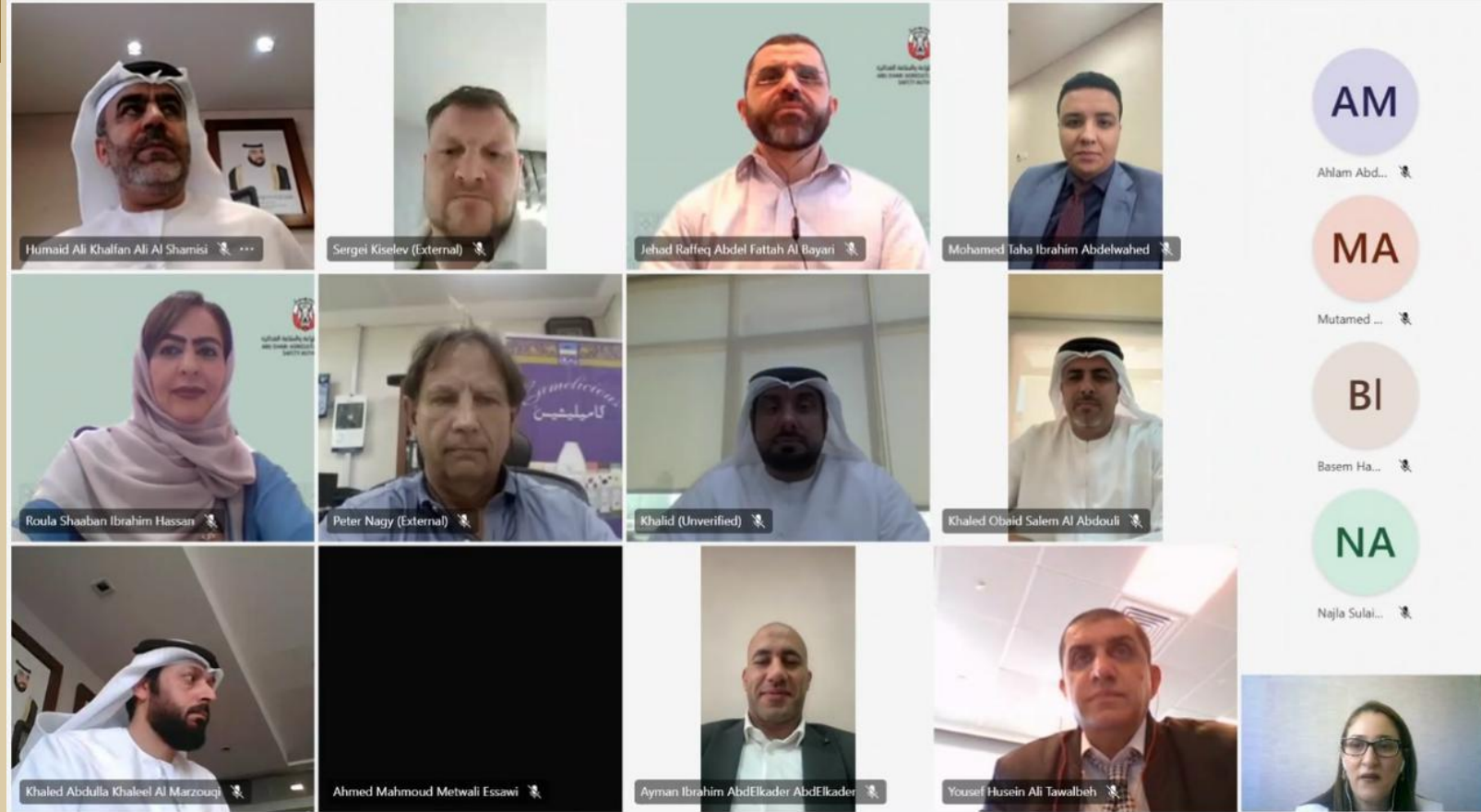
# Pathway Towards a Standard Development



# 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

مزارع العين  
Al Ain Farms

كاميليشيس  
Camelicious



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

# International Consultations



Initial Engagement for Camel Milk Standard Development with Experts from International Dairy Federation (I...

Abu Dhabi Agriculture & Food Safety Authority

01:14:47

Chat

16 People

Raise

React

View

Notes

Rooms

Apps

More

Camera

Mic

Share

Leave

Sonia Alkafy Baldi

Michael Hickey IDF (Unverified)

Jehad Raffeq Abdel Fattah Al Bayari

Khaled Abdulla Khaleel Al Marzouqi

Mohamed Taha Ibrahim Abdelwahed

AE

Ahmed Mahmoud Metwali Essawi

Anabel Mulet Cabero (External)

Sergei Kiselev (External)

NA

Najla Sulaiman Ali Alfazari

HT

Hajar Tiglifet - GFORSS (Unverified)

AM

Ahlam Abdulmuhsen Abdulla Al Mannaei (External)

Amine Kassouf (External)

Jordan - Dr. Ruba N. Goussous JFDA Technical Consul...

MA

Mutamed Ayyash (Unverified)

KM

Khalid Abdulla Mohd (External)

Khaled Obaid Salem Al Abdouli

Codex Secretariat

CCMMP

IDF

©Abu Dhabi Agriculture And Food Safety Authority

25



# Consultation Meetings with Codex Regional Committees



CCNE

CCAFRICA

CCASIA

CCLAC

CCEURO

4/8/2025

# 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:	Sultanete of Oman				
Organization:	Ministry of Agricultural Wealth, Fisheries and Water Resources				
Date	31/10/2024				
Data Source: Link or reference	<a href="mailto:ali.alghafri@mafwr.gov.om">ali.alghafri@mafwr.gov.om</a>				
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 diseases and corresponding vaccines	Prucellosis ( vaccine Rv1 ) , Trepanosomasis ( treatment ) , Jhons (paratuperclerosis 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
Export					
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



Food and Agriculture  
Organization of the  
United Nations




INTERNATIONAL YEAR OF  
CAMELIDS  
2024

English

AboutJoin usTake actionEventsCommunication toolkitStories

International Symposium: "Supporting the Development of the Camel Milk Sector"


Abu Dhabi (United Arab Emirates), 24/09/2024 - 25/09/2024












The Abu-Dhabi Agriculture and Food Safety Authority (ADAFSA), in partnership with the Global Food Regulatory Science Society (GFRSS), the disciplinary group of the International Union of Food Science and Technology (IUFoST), organized a 2- day symposium that aimed to showcase the attributes of camel milk production as one of the food commodities derived from camelids and was set to support on-going efforts to foster the development of an international standard on camel milk under the auspices of the Codex Alimentarius Commission, as proposed by the United Arab Emirates in Codex discussions.

The first day of the symposium included scientific interventions provided by experts and academics in the field of camel milk addressing the compositional, nutritional and health properties of camel milk as well as the best practices for its production and its development opportunities. It also involved discussion panels regarding the latest research on the distinct characteristics of camel milk. The discussion panels were moderated by experts in food safety from both ADAFSA and GFRSS.

The second day was dedicated to the introductory notes provided by the coordinators of Codex Committees for the Near East and Africa, in addition to interventions delivered by representatives of government agencies and international organizations related to food standards. The last part of the second day's activities focused on discussing the camel milk standard drafted by the UAE aiming to ensure consistency among the stakeholders.



FOLLOW US ON



FAO Organizational Chart

Worldwide offices

© FAO 2024

العربية 中文 English Français Русский Español

CODEX ALIMENTARIUS

INTERNATIONAL FOOD STANDARDS



Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization

support  
World Food Safety Day

0000

About CodexCodex TextsThemesCommitteesMeetingsResourcesPublicationsNews and EventsLogin

codexalimentarius > News and Events > News details



Abu Dhabi symposium held on "Supporting the development and trade of the Camel Milk sector"

21/10/2024

The Abu Dhabi Agriculture and Food Safety Authority (ADAFSA), in collaboration with the Global Society for Food Regulatory Science (GFRSS), organized an international symposium titled "Supporting the Development of the Camel Milk Sector" 24-25 September 2024 in the Emirate of Abu Dhabi. The event featured representatives from international organizations, government agencies, and the private sector, coinciding with the United Nation's declaration of 2024 as the International Year of Camelids.

The symposium emphasized the importance of camel milk production and included presentations by the Codex Regional Coordinator of the Near East, Mr Khalid Al Zahrani, and the Regional Coordinator of Africa, Mr Hakim Mufumbiro, who discussed the economic significance of camel milk for the Near East and Africa regions and the importance of following Codex procedures while undertaking new proposals for standard development.

The technical sessions covered the distinctive compositional characteristics and nutritional benefits of camel milk as well production practices of camel milk in different regions. The symposium witnessed notable contributions from Dr Gaukhar Konuspayeva, Dr Mutamed Ayyash and Dr Bernard Faye, and also Prof. Samuel Godefroy, the President of the International Union of Food Science and Technologies (IUFoST). The symposium offered the opportunity to discuss a proposal for new work related to camel milk, drafted by the United Arab Emirates (UAE), according to insights given by the experts and UAE camel milk producers.

Read more

News from the CCNE region

Photo © ADAFSA

Categories

- (11)
- (19)
- (15)
- (3)
- Animal Feed (8)
- Antimicrobial Resistance (43)
- Antimicrobial Resistance (84)
- Codex Texts (18)
- Codex Trust Fund (1)
- Contaminants (13)
- Contaminants (10)
- COVID-19 (64)
- Electrons (6)
- Food Safety (131)
- Labelling (12)
- Monitoring (9)
- Nutrition and Labelling (6)
- Nutrition and Labelling (7)
- Observers (26)
- Pesticides (9)
- Standards (82)
- World Food Safety Day (162)



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

DISCUSSION PAPER – New Work on a Camel Milk Commodity Standard – CCMP

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<sup>1</sup> (IUFOST)

## 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 11<sup>th</sup> 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

<sup>1</sup> Through the contribution of IUFOST, a disciplinary group on food regulatory science: the [Global Food Regulatory Science Society \(GFRSS\)](#).

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)



# Steps Forward: CAC47 RECOMMENDATIONS



1

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

2

UAE, New Zealand and IDF will conduct a **GAP ANALYSIS**

3

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

4

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

A photograph of several camels in a dry, grassy field. One camel is in the foreground on the left, looking towards the camera. Another camel is in the background on the right, and a third is partially visible behind it. The camels are light brown and appear to be standing in a natural, open environment.

**Thank you**

**شكرا جزيلا**

**Eng.Sonia Baldi**

**[Sonia.garbi@adafsa.gov.ae](mailto:Sonia.garbi@adafsa.gov.ae)**

**0507230253**

# Thank You!