



The future of dairy: a view from IDF

A personal view

Nico van Belzen, PhD

Director General, International Dairy Federation

14th Panamerican Dairy Congress
25th April 2016, Puerto Varas, Chile

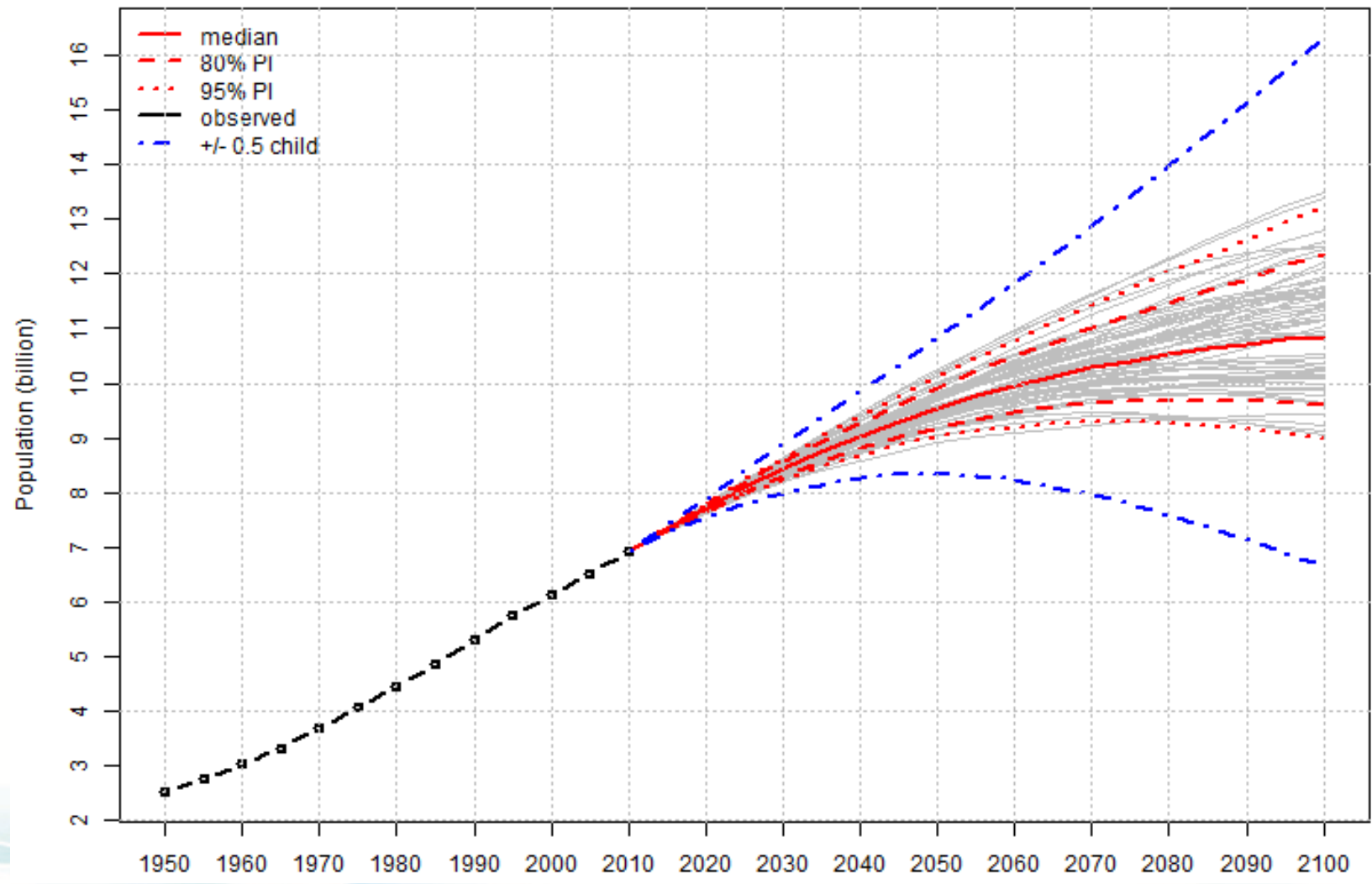


OVERVIEW

- The major global challenge
- Key elements of a dairy sector strategy
- The future of dairy



WORLD: Total Population





THE NUTRITIONAL GAP (FOR DAIRY)

Average intake in South America (2012)

Recommended intake in some countries

World population estimate	9.000.000.000		people in 2050
Assumed daily intake	0,48	0,75	liter milk / person / day
Assumed yearly intake	175	274	liter milk / person / year
Global demand	1.576.800.000	2.463.750.000	tonnes milk per year
Production in 2012 (FAOSTAT)	753.924.957		tonnes milk per year
Increase in demand	2,1	3,3	fold



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CONGRÈS INTERNATIONAL
DE
LAITERIE

Organisé par la Société Nationale de Laiterie de Belgique

SOUS LA PRÉSIDENTE D'HONNEUR DE

M. le Baron VAN DER BRUGGEN

Ministre de l'Agriculture et des Beaux-Arts

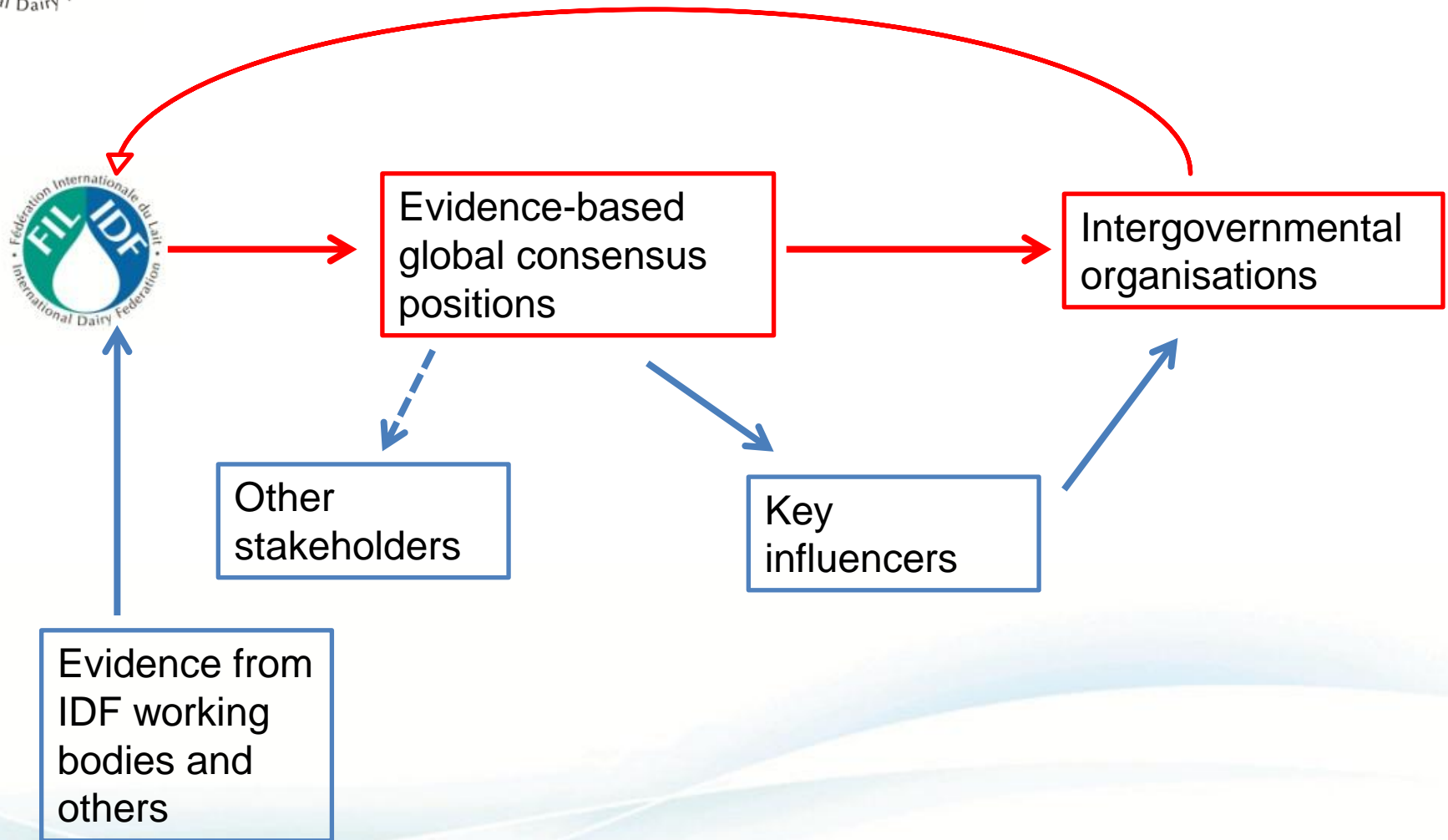
ET LA PRÉSIDENTE DE

M. le Baron LÉON PEERS

Président de la Société Nationale de Laiterie

Bruxelles – 8, 9, 10 et 11 Septembre 1903

Adequate representation is key





**Vision:
Nourish the world with
safe and sustainable dairy**

SUSTAINABILITY

NUTRITION

**FOOD SAFETY
& QUALITY**

STANDARDS



**Nourish
the world with
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SUSTAINABILITY

NUTRITION

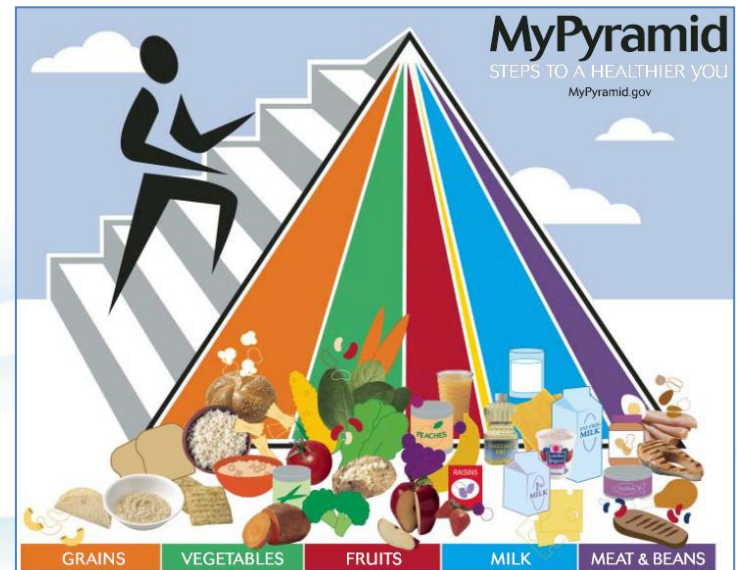
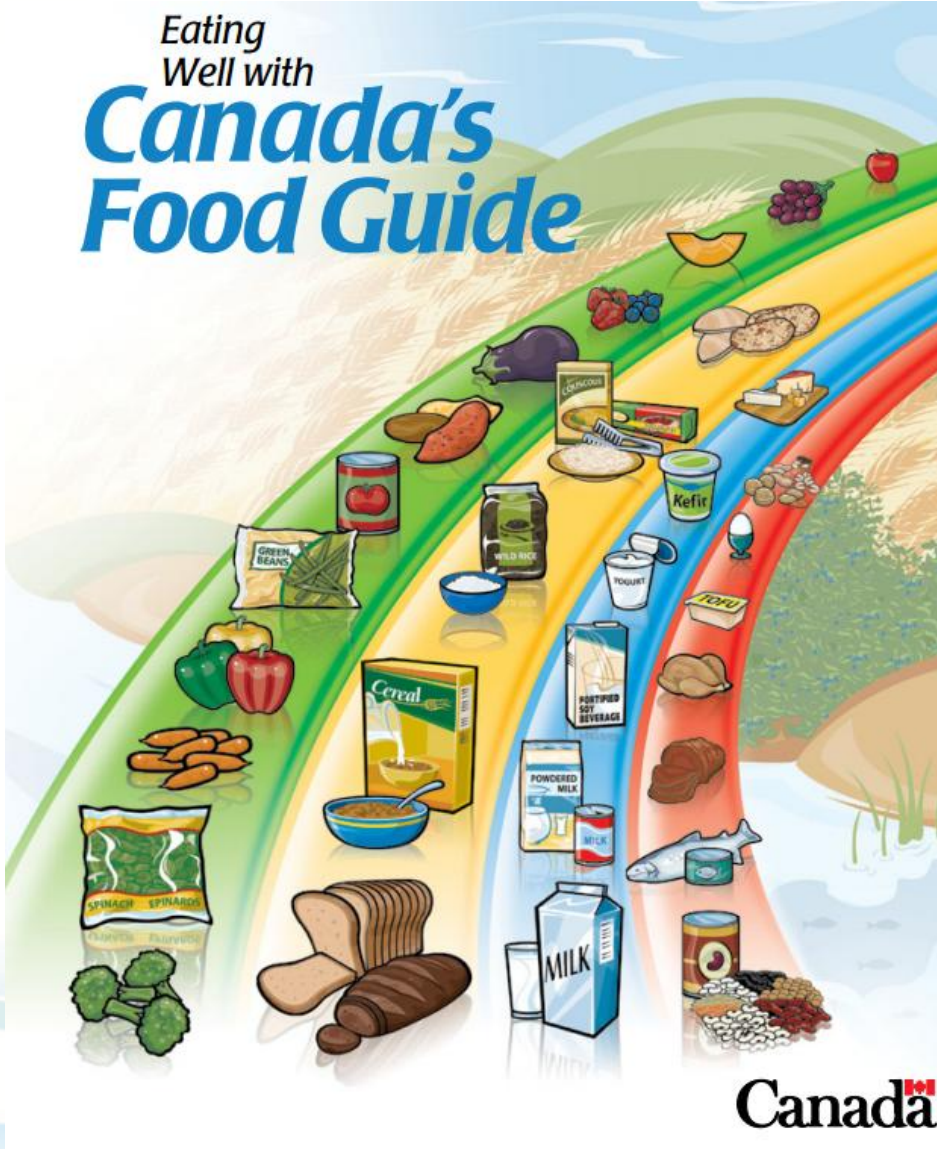
**FOOD SAFETY
& QUALITY**

STANDARDS



DIETARY RECOMMENDATIONS

Eating Well with
Canada's Food Guide





DIETARY RECOMMENDATIONS

- Traditionally based on recommended amounts of nutrients and/or health outcomes, with careful consideration of requirements at different life stages
- Some countries are experimenting
 - Degree of food processing
 - Environmental considerations
- It is important to consider effects on health, esp. for vulnerable groups



EXAMPLES OF IDF INPUT TO WHO (WORLD HEALTH ORGANIZATION)

- Guidelines on saturated and trans fat consumption
- Guidelines on sugar intake: no evidence of adverse effect of sugars naturally present in milk
- Development of a global monitoring system for the prevention and control of non-communicable diseases
- Input into 2nd Int'l Conference on Nutrition (ICN2)
 - Declaration of Rome; Framework for Action
 - ICN2 side events



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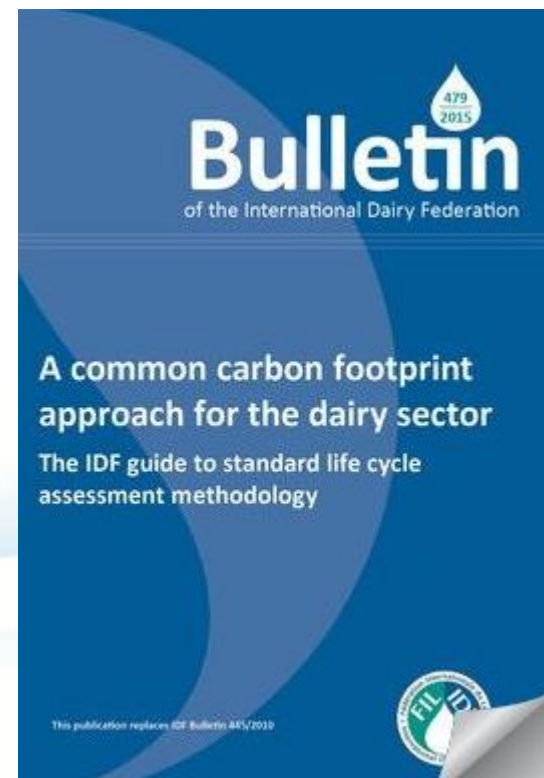
**FOOD SAFETY
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STANDARDS

CLIMATE:

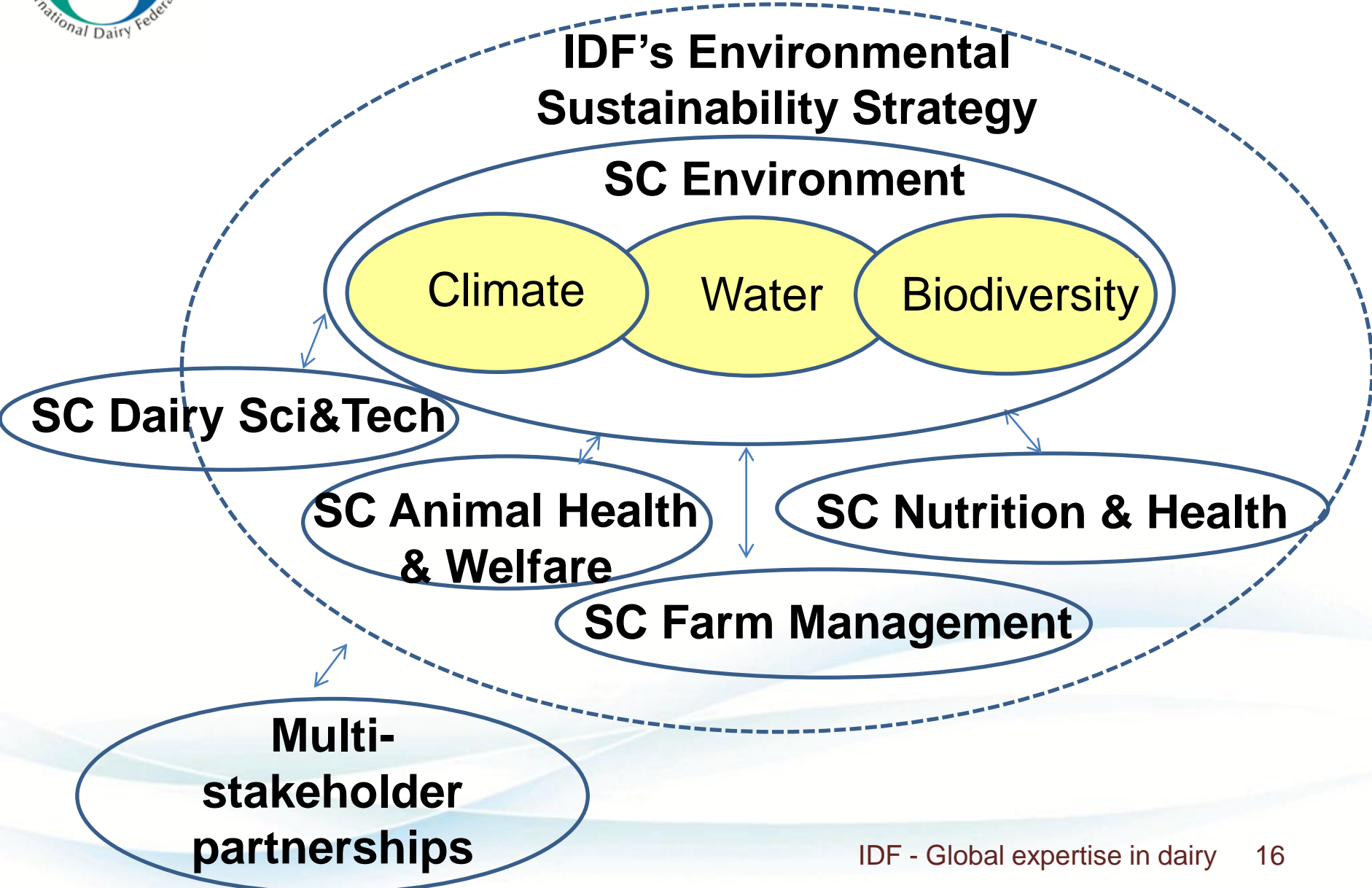
IDF CARBON FOOTPRINT GUIDE

- 2010 version represented a starting point for comparative analysis and benchmarking
 - Life cycle assessment methodology
 - Feed production to factory gate out
 - International standards as a basis:
 - ISO 14040, 14044, 14067; PAS 2050; WBCSD/WRI GHG Protocol
- 2015 revision based on:
 - Feedback from users
 - Latest scientific evidence
 - Participation in, and coordination with, FAO-LEAP's Large Ruminants TAG





ENVIRONMENTAL SUSTAINABILITY





Multi-stakeholder partnerships in sustainability



**GLOBAL AGENDA FOR
SUSTAINABLE LIVESTOCK**



dairysustainabilityframework.org

livestockdialogue.org

www.fao.org/partnerships/leap/en/

dairyasia.org



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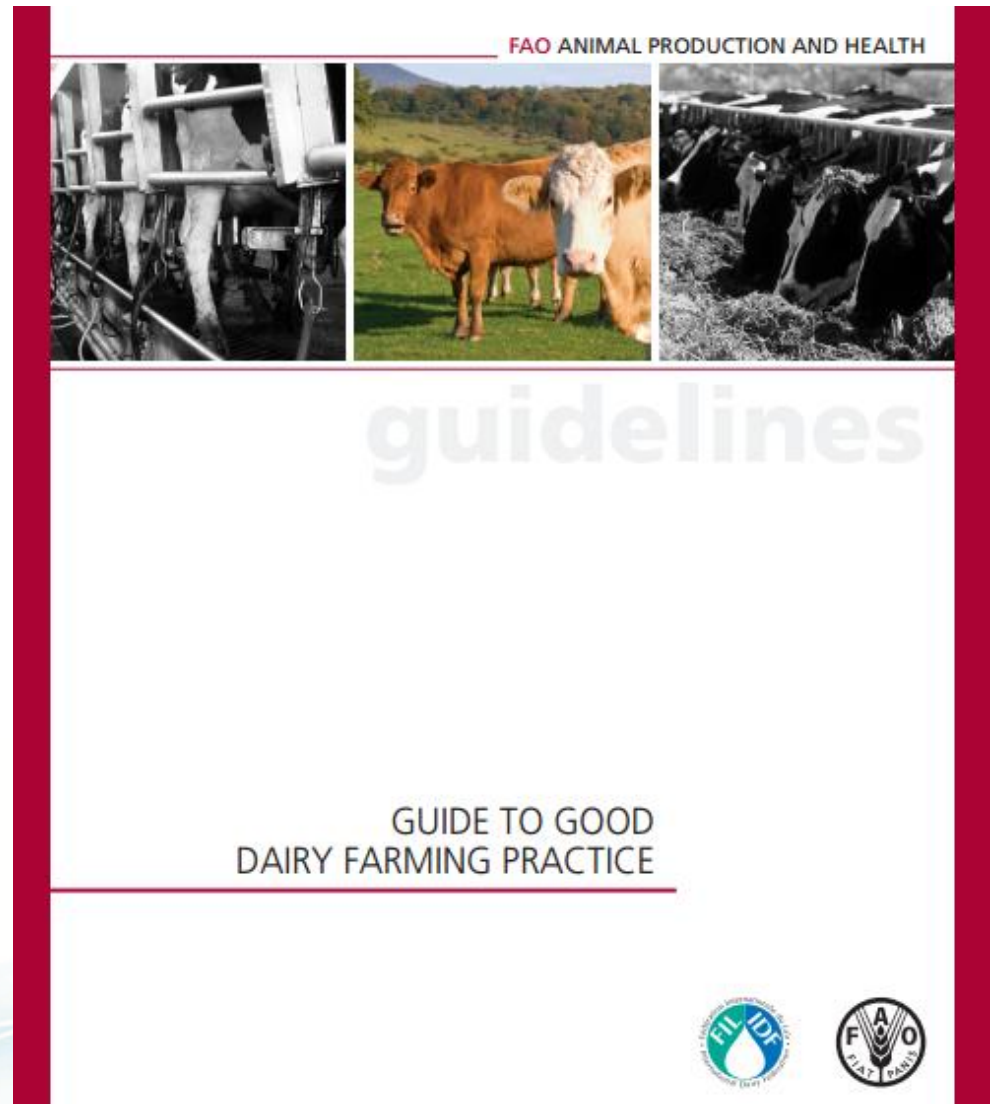


COLLABORATION WITH FAO

Free download at

<http://www.fil-idf.org/Public/Publication.php?ID=38836&ajax=true>

In Arabic, Chinese,
English, French,
Portuguese, Russian,
Spanish





Guide de la FIL pour l'utilisation prudente des agents antimicrobiens dans les fermes laitières

2013

Guía para el Uso Prudente de los Agentes Antimicrobianos en la Producción Lechera

2013

Guide to Prudent Use of Antimicrobial Agents in Dairy Production

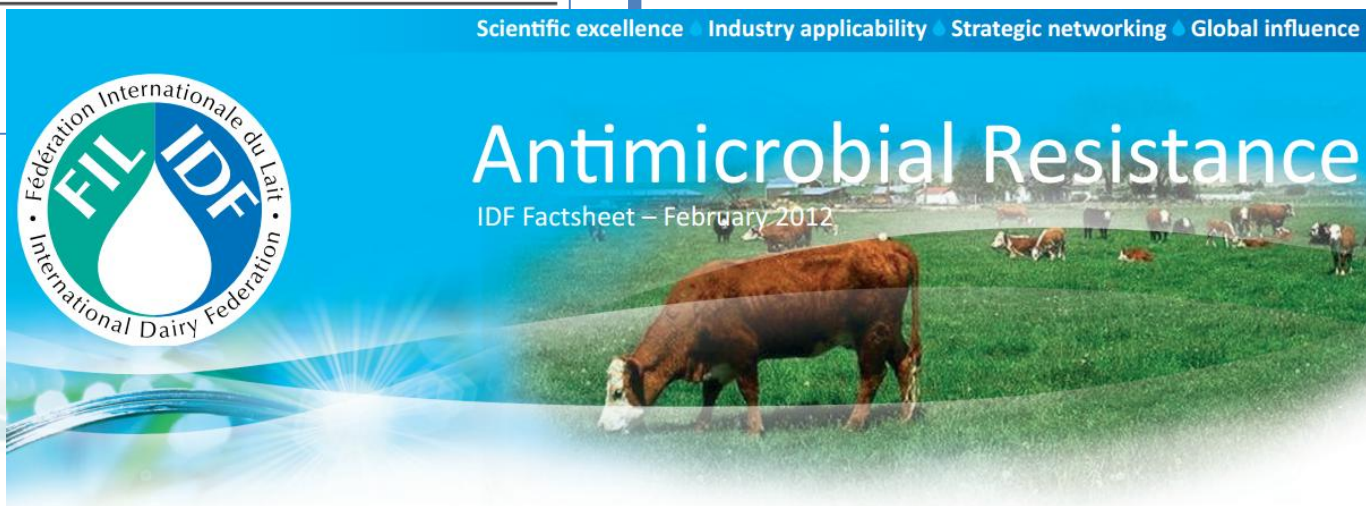
2013

Scientific excellence • Industry applicability • Strategic networking • Global influence



Antimicrobial Resistance

IDF Factsheet – February 2012





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TRADE AND HARMONIZATION NEEDED

World: self-sufficiency rate (per region)

Region	2005	2014
Asia	92%	90%
Europe	106%	109%
<i>EU</i>	<i>109%</i>	<i>111%</i>
<i>Non-EU</i>	<i>101%</i>	<i>105%</i>
North America	102%	109%
South America	102%	102%
Africa	84%	84%
Central America	75%	81%
Oceania	245%	345%

Source: IDF
World Dairy
Situation
Report 2015

WHY PARTICIPATE IN STANDARD DEVELOPMENT?

When it comes to developing standards, you're either at the table...



or you're on the menu.



ISO/IDF standards

- Internationally harmonized standards for methods of analysis and sampling for the dairy sector
- Currently over 170 joint standards, e.g.
 - raw milk quality testing
 - herd improvement
 - process control and optimization
 - compliance with food standard specifications
 - truth of labeling
 - food safety
- Many are referenced in national and regional regulations
- Over 60 have been recommended by Codex Alimentarius

INTERNATIONAL STANDARD	ISO 13366-2
	IDF 148-2



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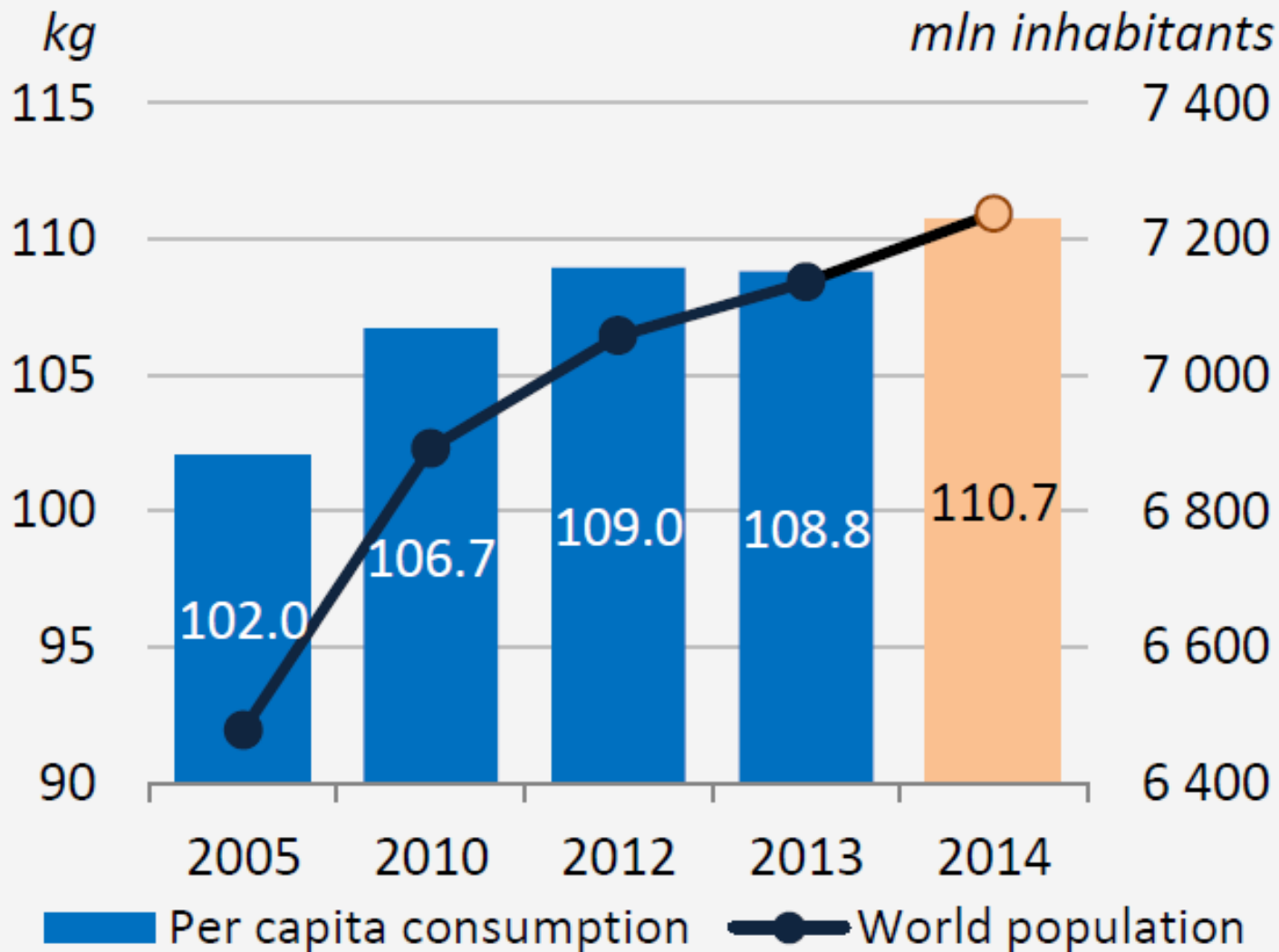
OVERVIEW

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GLOBAL MILK CONSUMPTION IS GROWING

World: per capita consumption and population



Source: IDF World Dairy Situation Report 2015



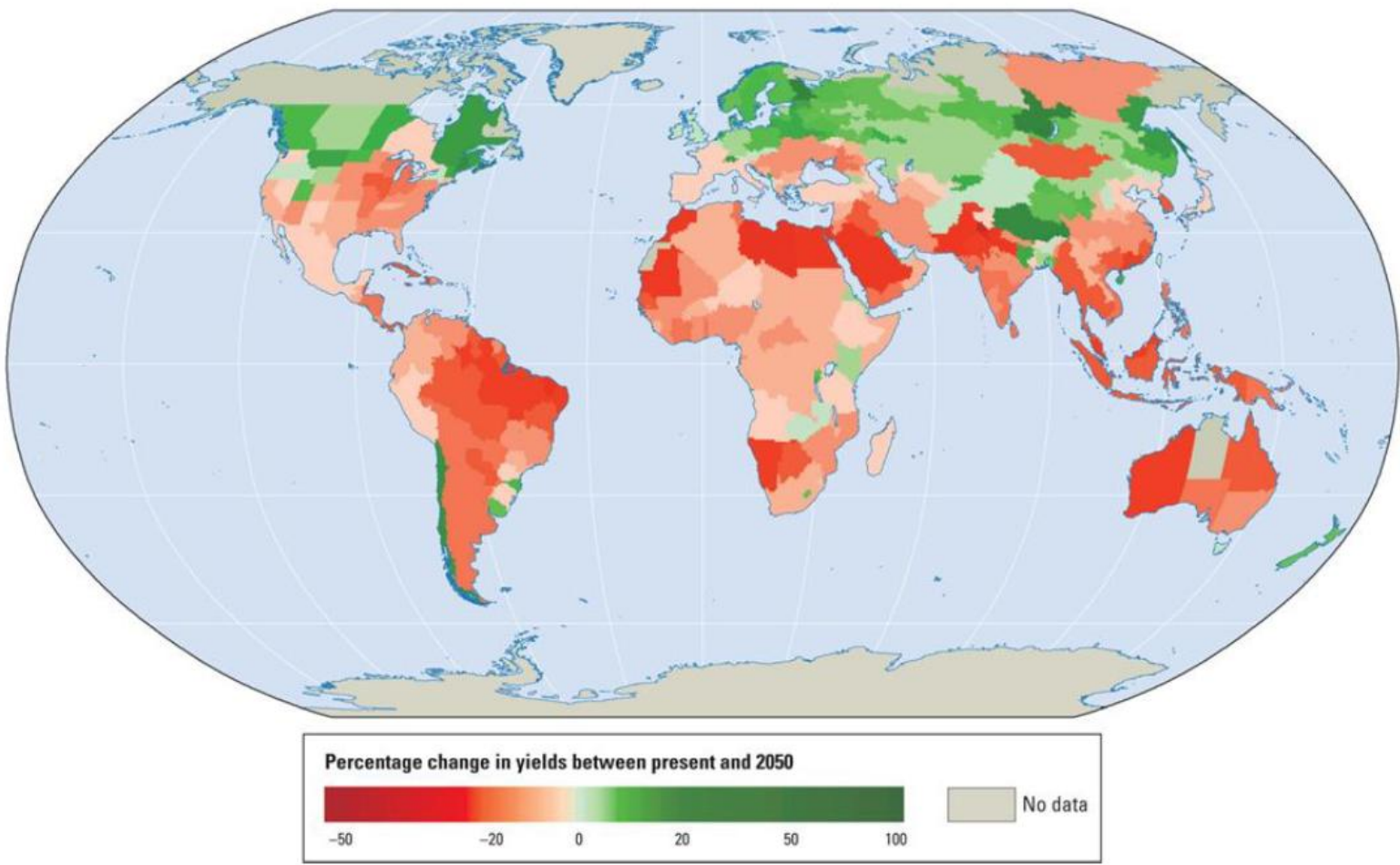
OECD/FAO PROJECTION

- Global milk production increase by 175 Mt (23%) by 2024 cf. 2012-2014
 - 75% from developing countries, esp. Asia
 - Average growth 1.8%/year
 - Water and land shortages, slow modernization
- Real prices remaining well above pre-2007 level
- Consumption increases from 0.2% - 2.0% / person
- Trade expansion, export US, EU, NZ, AU, AR

Source: OECD-FAO Agricultural outlook 2015-2024

CONSTRAINTS ON PRODUCTION CAPACITY

Projected percentage in agricultural yields by 2050
given current agricultural practices and crop varieties



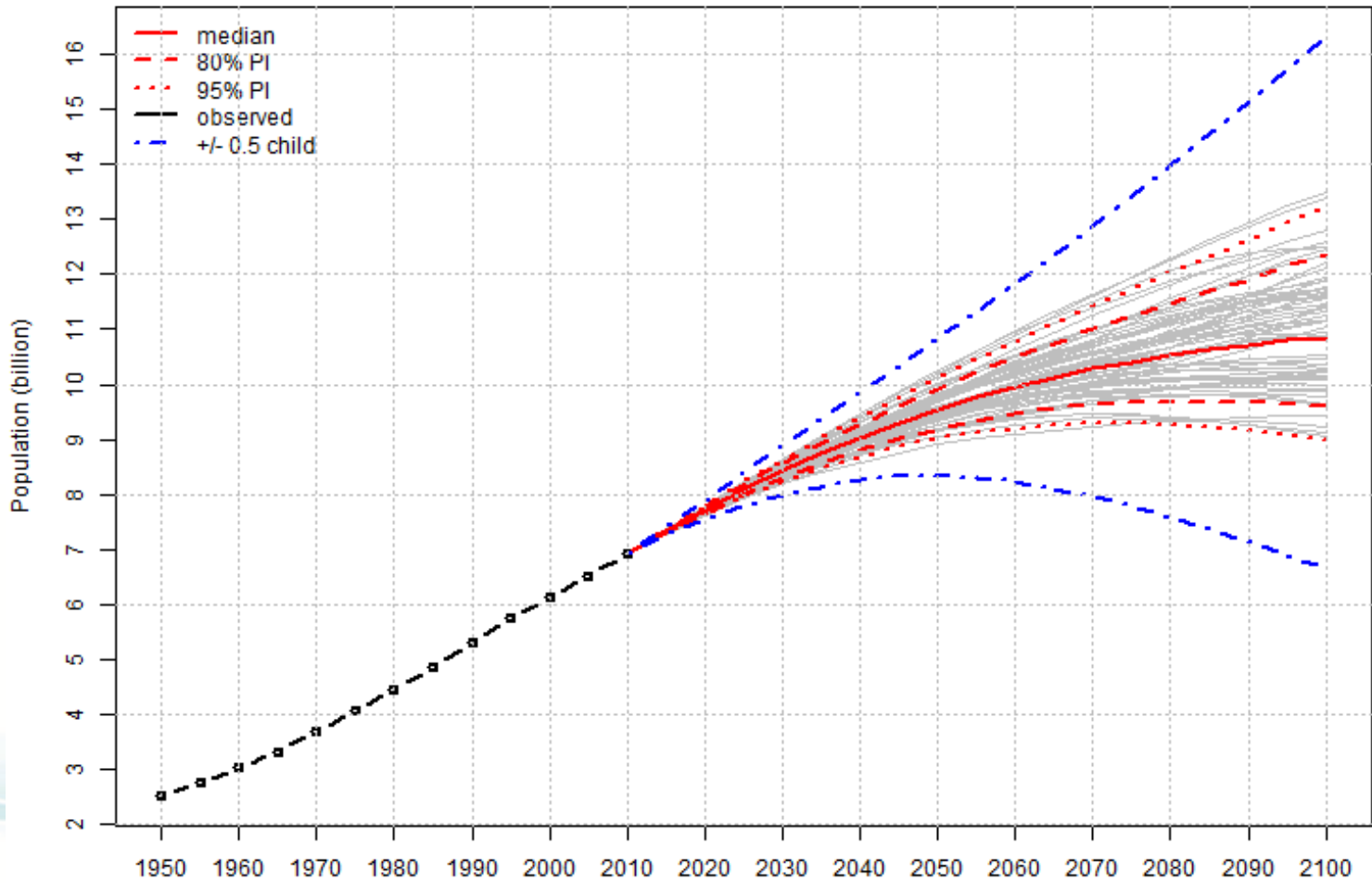
Source: World Bank (World Development Report 2010).



INCREASED DEMAND, PRICES

Probabilistic Population Projections based on the *World Population Prospects: The 2012 Revision*

WORLD: Total Population



Source: United Nations

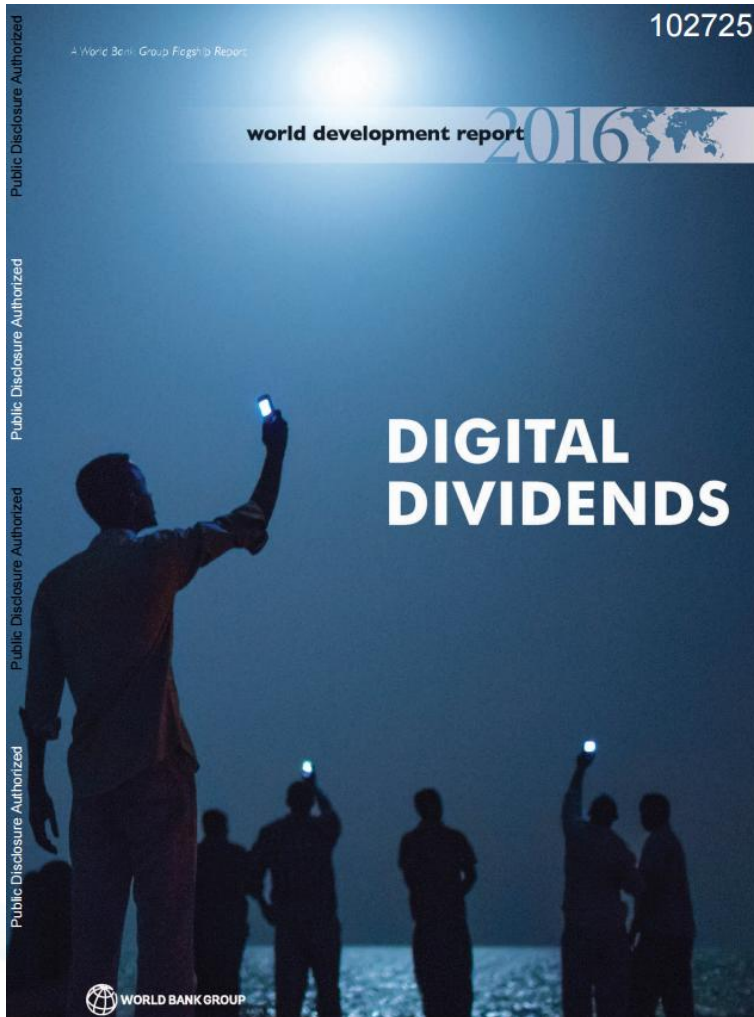
DIGITALIZATION

Improvements in monitoring

Cow health, e.g. mastitis,
energy metabolism

Production processes, e.g.
food safety, traceability

After initial investments, will
likely lead to lower costs of
production and processing

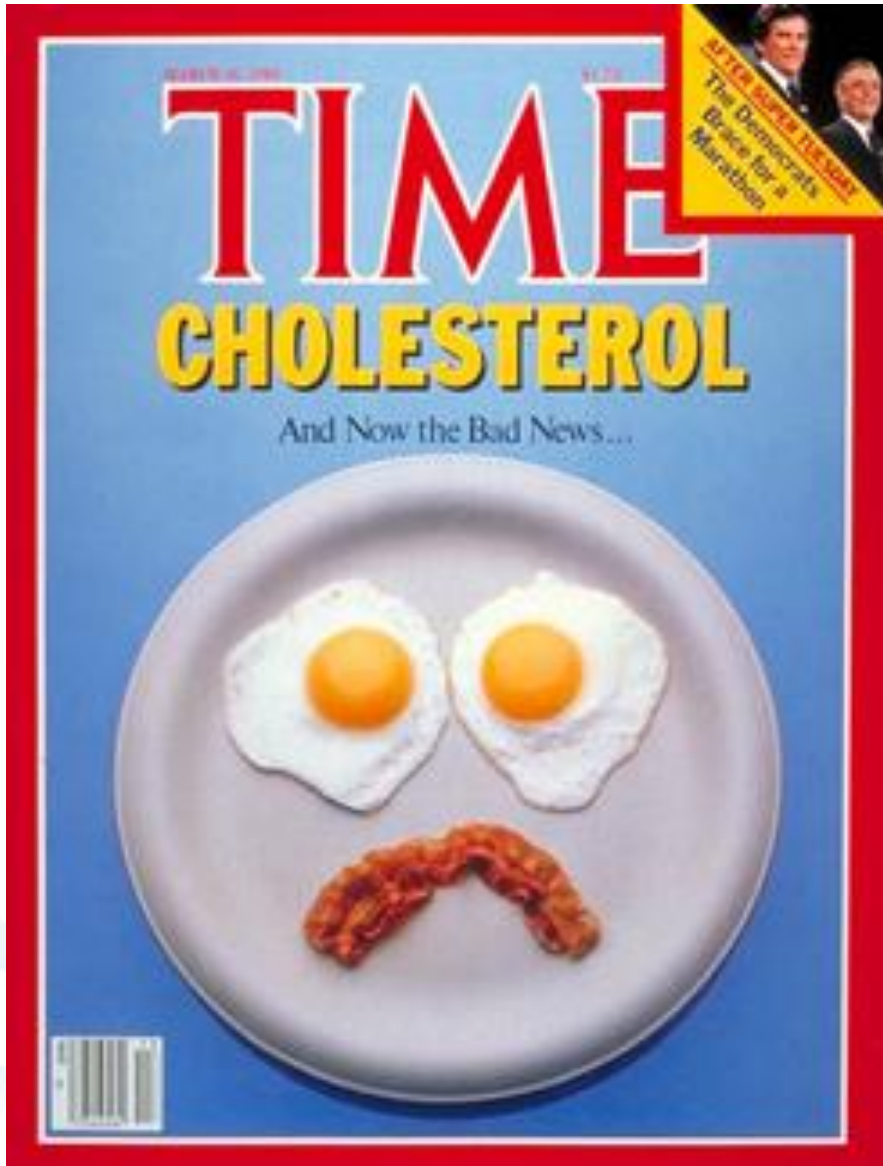




MEDIA AND CONSUMER ATTITUDE

1984

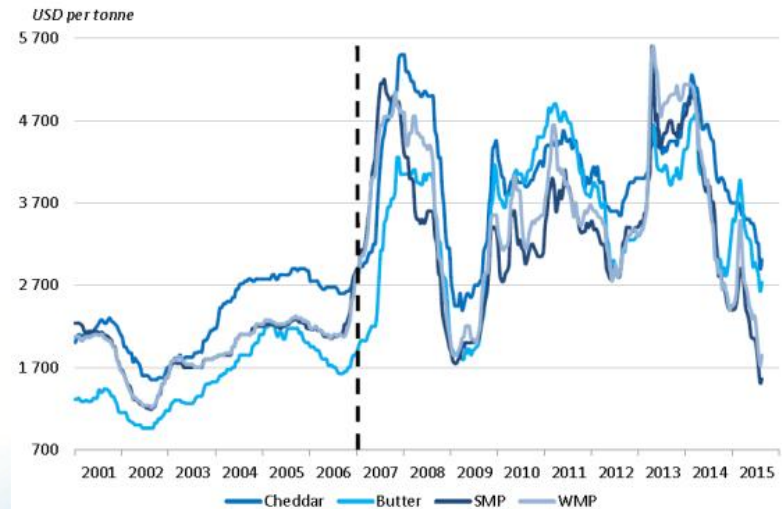
2014





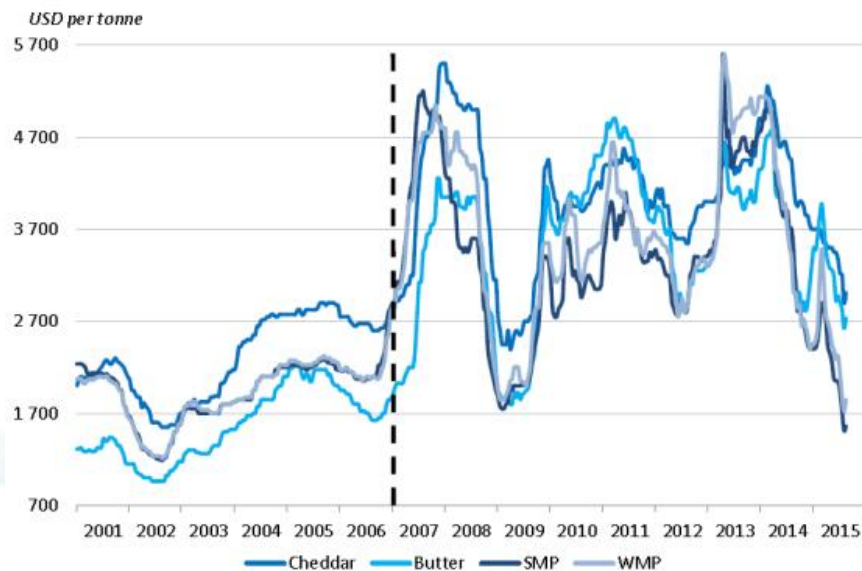
MANY ISSUES AND UNCERTAINTIES

- Development of Chinese self-sufficiency
- Potential future role of India as exporter
- End of EU quota system in 2015
- 2014 US Farm Act
- Climate change
- Price volatility
- New trade agreements
- Consumer attitude towards dairy
- Environmental legislation (GHG, manure, water)



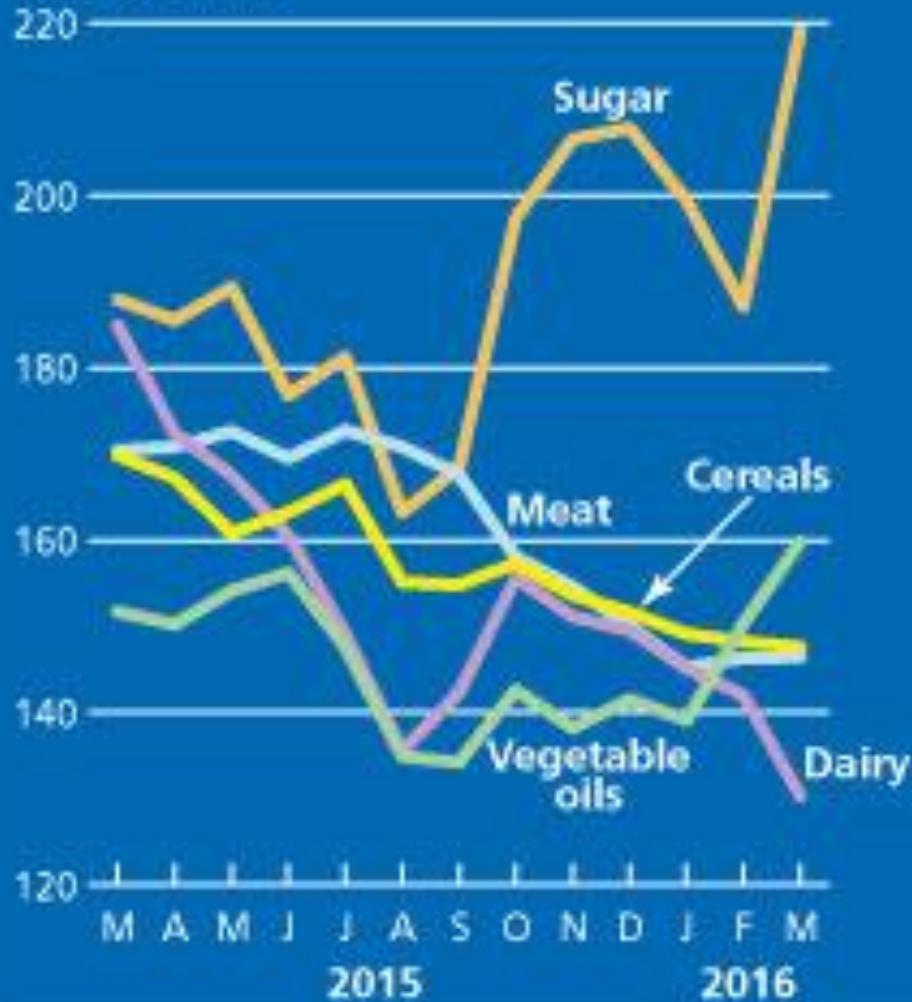


CURRENT PRICE LEVEL IS NOT SUSTAINABLE



FAO Food Commodity Price Indices

2002-2004=100



DISCLAIMER



If I would be really good in predicting the future,
IDF office could afford being in the Bay of Islands.

It is still in Brussels



WHAT COULD HAPPEN IN PRODUCTION

Increased polarization of dairy production

- Subsistence dairying by the poor, feeding their own family and neighbors
- Highly automated production in family and mega farms, supplying towns and mega cities
 - Management of environmental impact
 - Valorization of manure (P)
 - Breeding for climate resilience
 - Greater role (improved) forage



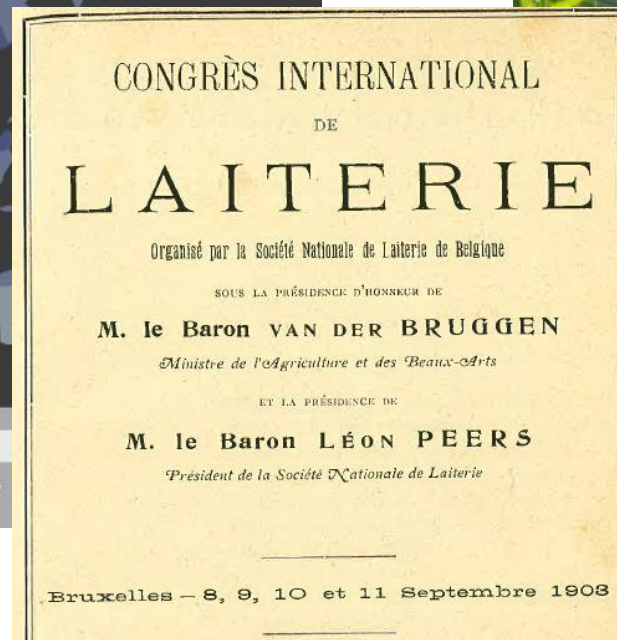
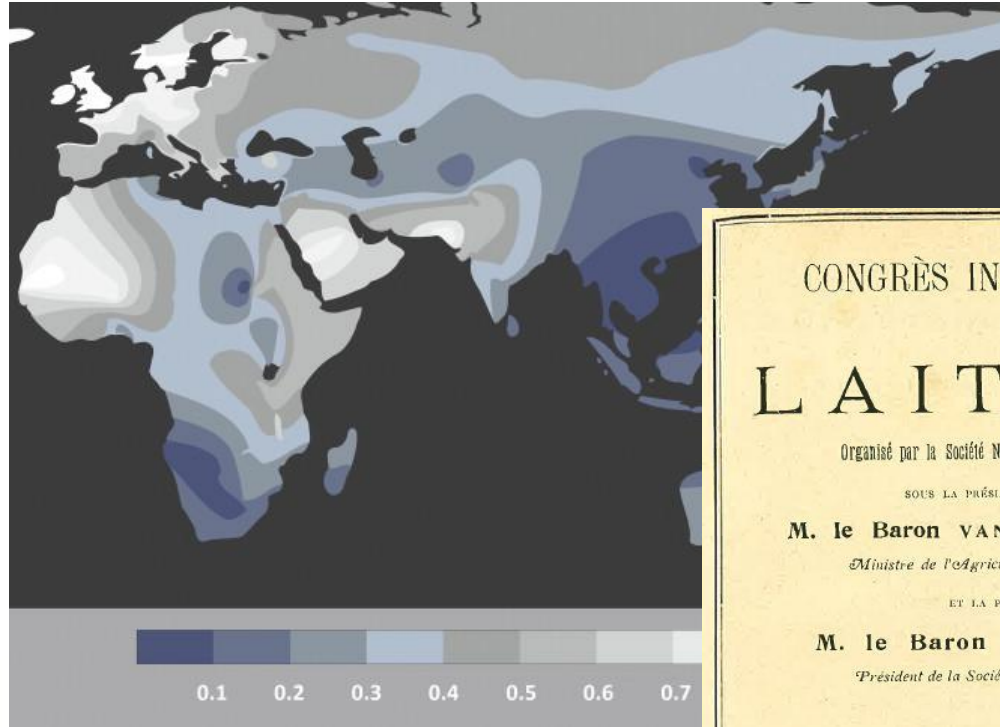
WHAT COULD HAPPEN IN CONSUMPTION

- Increased global trade
- More use of dairy as ingredients
 - Including 'high end' like bioactives
- 'Pure dairy' might become a luxury good
 - Cheaper to combine dairy with other sources
 - Special categories: premium animal care, water neutral, low or positive carbon, biodiversity-safe, halal, ...
- Competition with poultry and insect protein





FROM ANCIENT HISTORY TO BRIGHT FUTURE





SAVE THE DATE!

IDF WORLD DAIRY SUMMIT
16 - 19 OCTOBER 2016 ROTTERDAM
WWW.IDFWDS2016.COM

