



Benefits of Dairying

**Beitrag der globalen Milchwirtschaft
zu einer nachhaltigen Weltentwicklung**

**Contribution of the global dairy industry
to a sustainable world development**

**Dr. Nico van Belzen
Director General
International Dairy Federation**

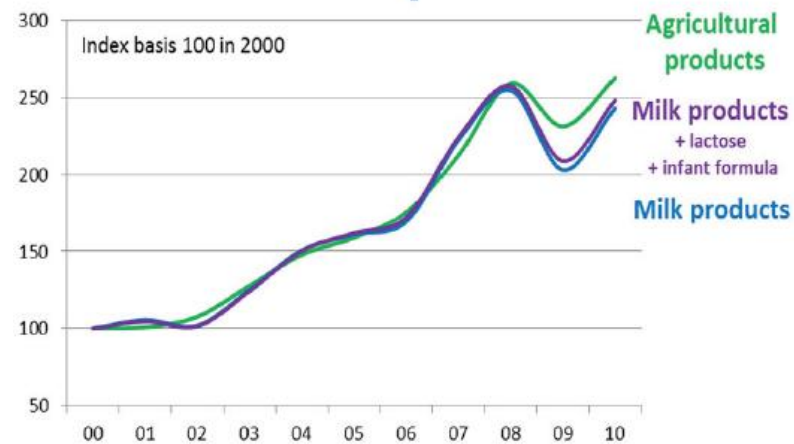
Berlin, 13 March 2013

BENEFITS OF DAIRYING



Nutritional
Environmental
Economical

Fig. 3: Evolution of trade value of agricultural and dairy products



Source FAO



EMERGING LACTASE PERSISTENCE ILLUSTRATES THE BENEFITS OF DAIRY

M. Leonardi et al. / International Dairy Journal 22 (2012) 88–97

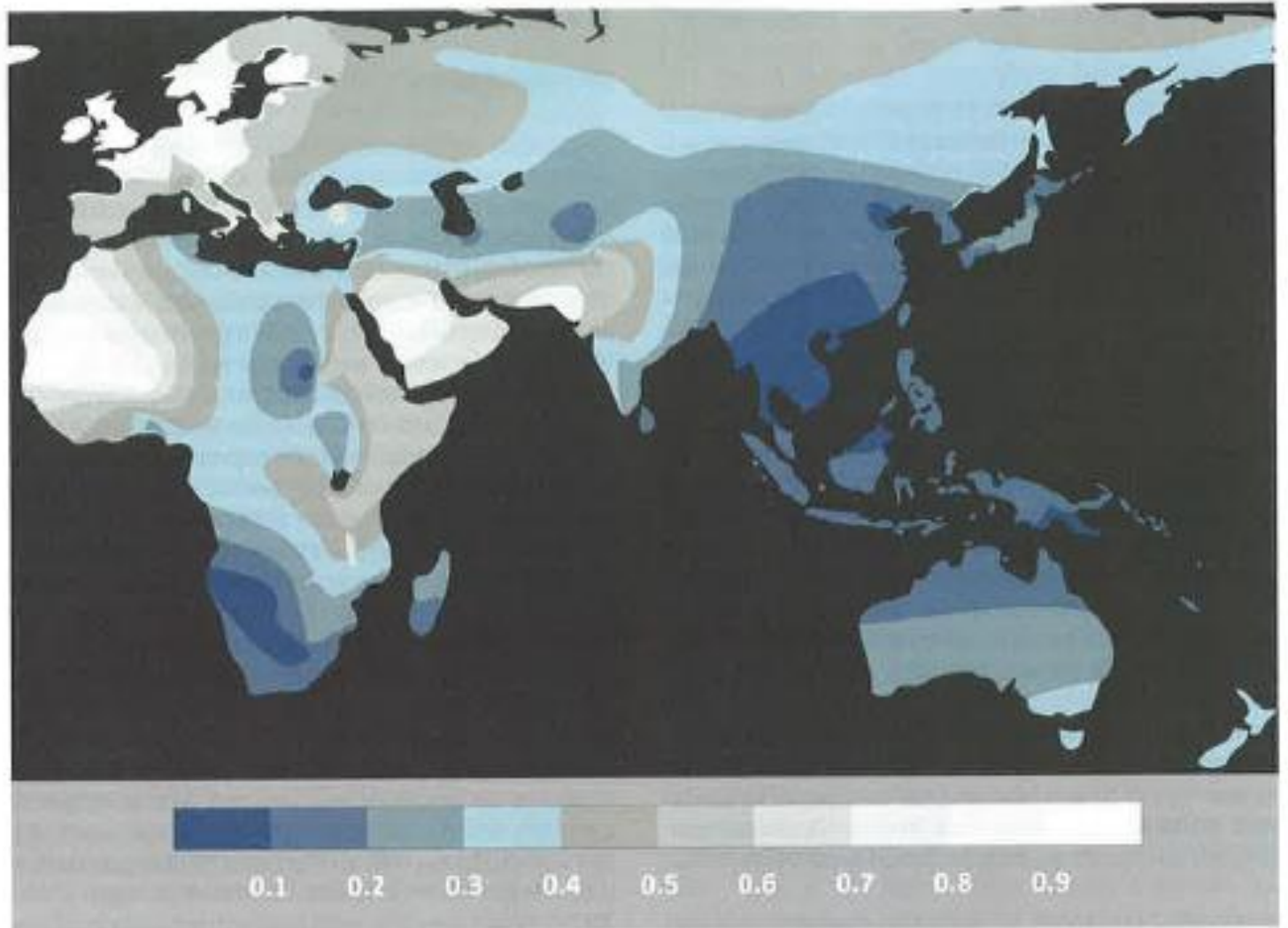


Fig. 2. Worldwide frequencies of lactase persistence phenotype (after Itan et al., 2010).



NUTRITIONAL BENEFITS

- From an physiological perspective humans are omnivores, and dairy is an animal-friendly food source
- Dairy provides high quality protein
 - IDF work e.g. 1999 mtg San Francisco
 - DIAAS, FAO report 92, 2013
- Dairy provides many micronutrients, e.g. calcium, potassium, magnesium, iodine, phosphorus, zinc, vitamin A, vitamin B12, riboflavin, folate

<http://www.idfdairynutrition.org/>

DIETARY RECOMMENDATIONS

Australian Government
National Health and Medical Research Council
Department of Health and Ageing

www.eatforhealth.gov.au

Australian Guide to Healthy Eating

Enjoy a wide variety of nutritious foods from these five food groups every day.
Drink plenty of water.

Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties

Vegetables and legumes/beans

Fruit

Milk, yoghurt, cheese and/or alternatives, mostly reduced fat

Lean meats and poultry, fish, eggs, tofu, nuts and seeds and legumes/beans

Use small amounts

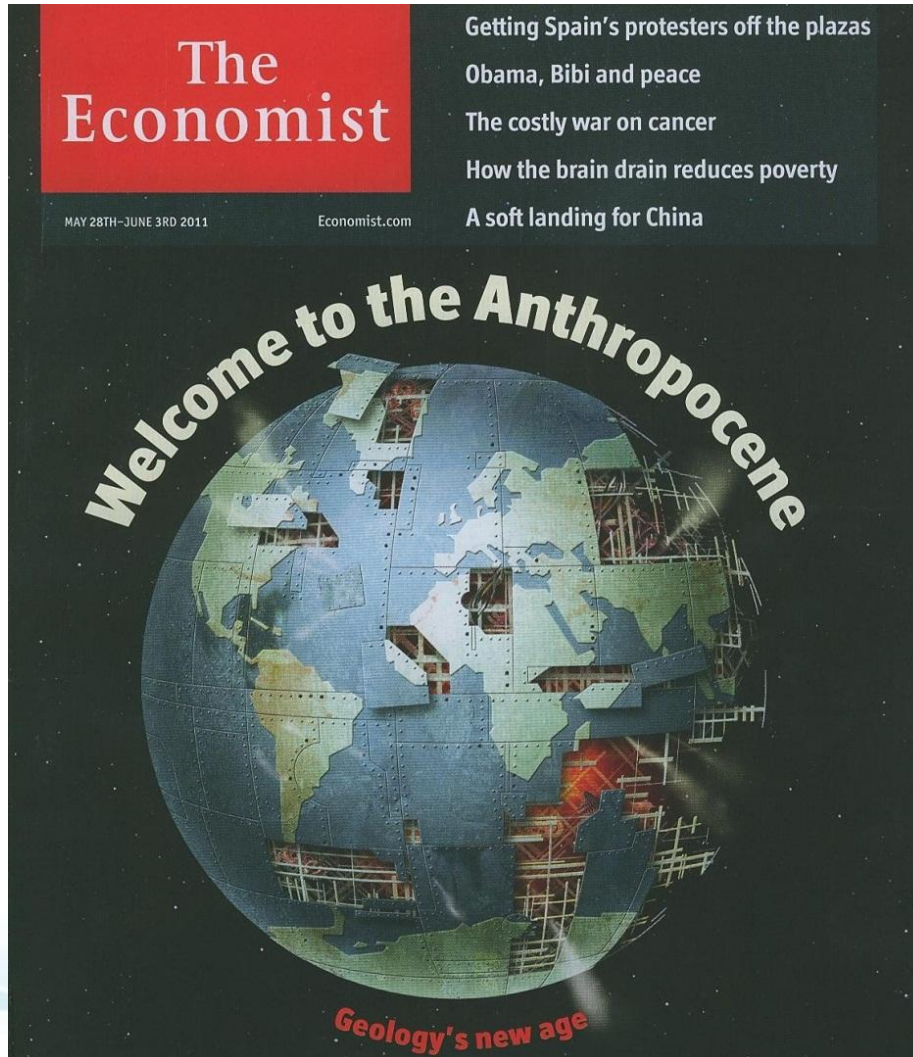
Only sometimes and in small amounts

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STEPS TO A HEALTHIER YOU
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GRAINS **VEGETABLES** **FRUITS** **MILK** **MEAT & BEANS**

THE IMPORTANCE OF SUSTAINABILITY



**“Anthropocene”
coined by Eugene Stoermer,
Paul Crutzen**

**“Human development has
reached a scale where it affects
vital planetary processes”
(Rockström and Karlberg 2010)**

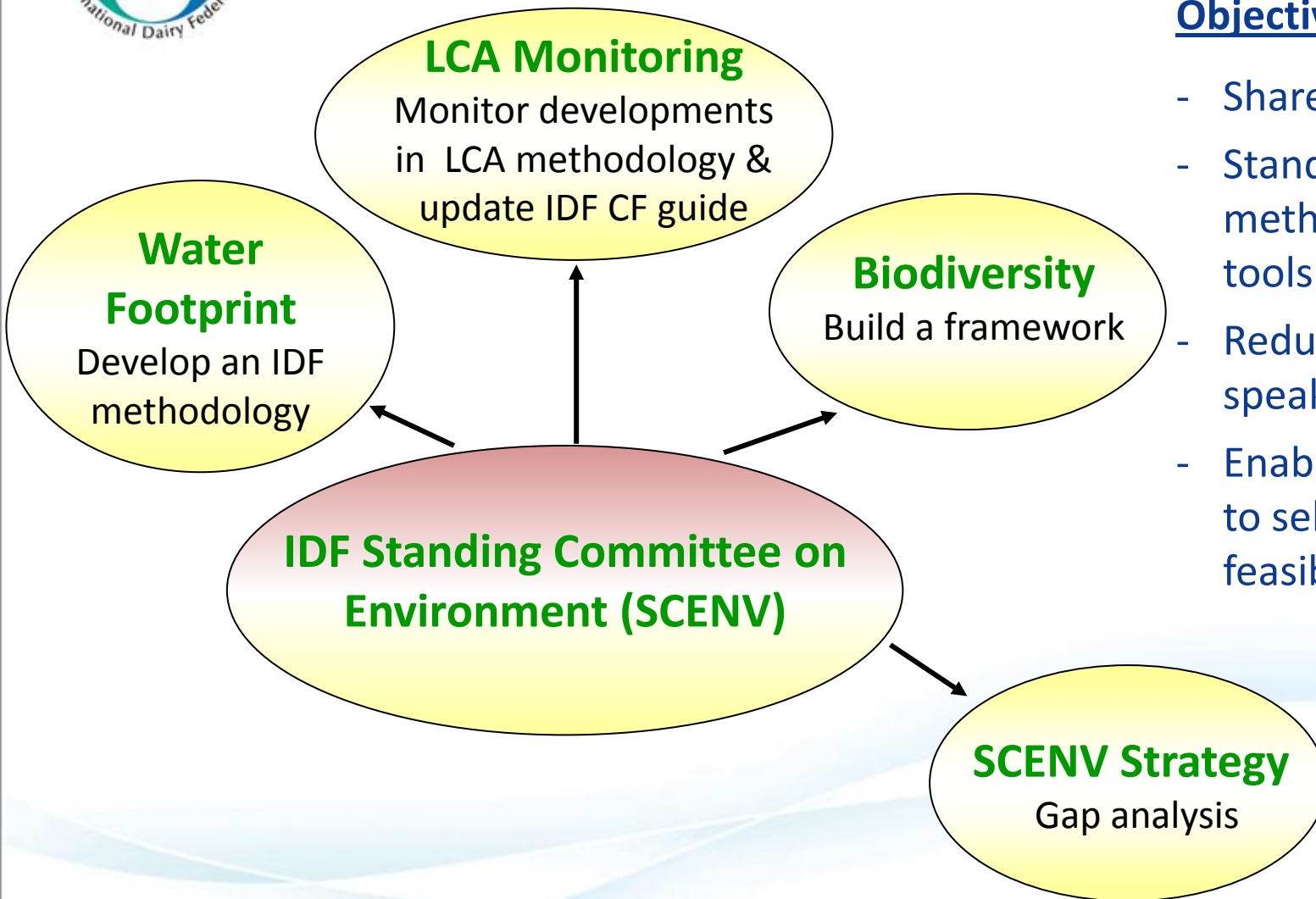
**E.g. carbon cycle, nitrogen
cycle, water cycle**

Future fossil cities, fossil tools

IDF STANDING C'TEE ON ENVIRONMENT

Objectives:

- Share information
- Standardize methodologies and tools when possible
- Reduce confusion, speak with one voice
- Enable stakeholders to select and apply feasible solutions





LIAISON WITH FAO ON SUSTAINABILITY

FAO Global Agenda of Action in Support of Sustainable Livestock Sector Development

- Focus on: **1) Closing the efficiency gap**; 2) Reducing discharge; 3) Restoring value to grasslands
- IDF participates in FA1 and overall Guidance Group

FAO Partnership on Environmental Benchmarking of Livestock Supply Chains

- Build framework to guide and evaluate progress on environmental performance
- Current focus: produce methodologies and sector-specific guidelines for the LCA assessment of GHG emissions
- Technical Action Groups
 - Feed; Small Ruminants; Poultry (*Beef in next phase*)



LIAISON WITH FAO AND ISO

FAO Report on Greenhouse Gas Emissions from Cattle and Small Ruminants Supply Chains: A Global Life Cycle Assessment

IDF expert review and comments on draft document

ISO TC 207 SC5/WG8 on Water Footprint

IDF expert participation in development of ISO guidance

ISO TC 207 SC7 on Greenhouse Gas Management

IDF monitoring activities related to dairy sector guidance



GDAA AND DAIRY SUSTAINABILITY WEBSITE

www.dairy-sustainability-initiative.org

Welcome to the Dairy Sustainability Website

The Global Dairy Agenda for Action is the industry's commitment to making a positive contribution to the global action in addressing climate change. The Agenda for Action brings together the global dairy industry and its partners, who are committed to working together to improve the environmental performance of the dairy sector for a more sustainable future.



[Visit the website](#)

Dairy Agenda for Action

The dairy industry's commitment to address climate change.

[read more](#)

GREEN PAPER

Collection of initiatives to create a sustainable dairy industry.

[read more](#)

FIL-IDF LCA Guide

IDF Guide to Standard Lifecycle Assessment Methodology for the Dairy Sector.

[visit](#)





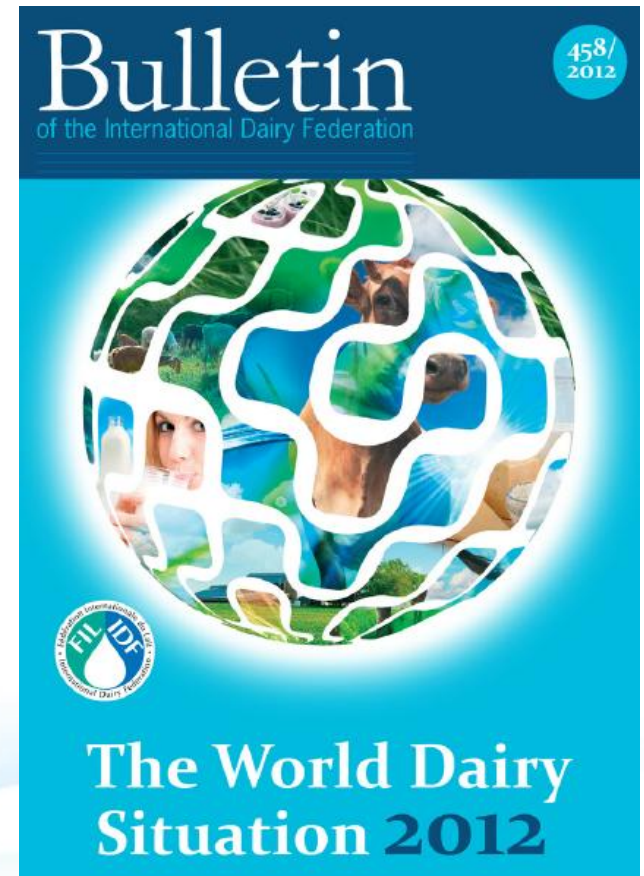
**Environmental improvements
with an
economic benefit
are more likely to be successful**



ECONOMIC BENEFITS OF DAIRYING

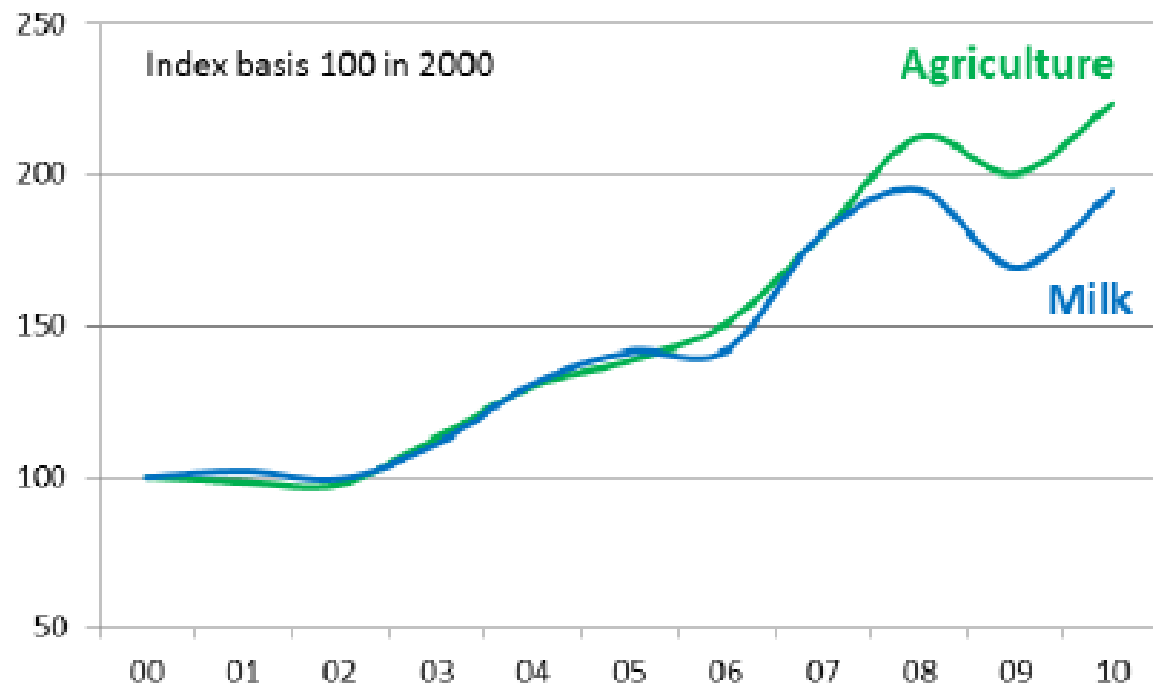
Global milk production had a value of 292 billion US\$ in 2010, representing 8.9% of agricultural production

Global per capita consumption of milk 107 kg (2011)



ECONOMIC BENEFITS OF DAIRYING

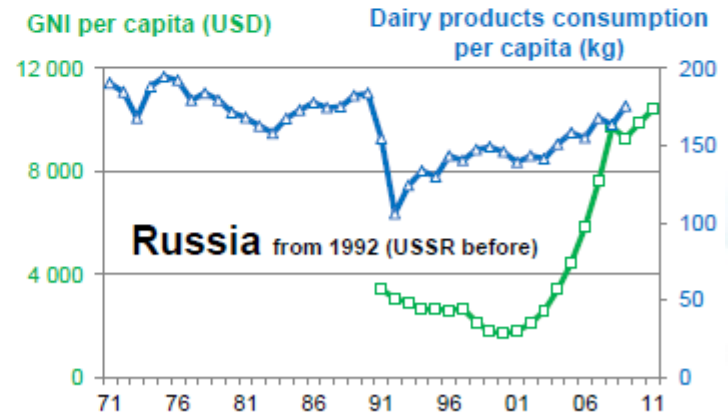
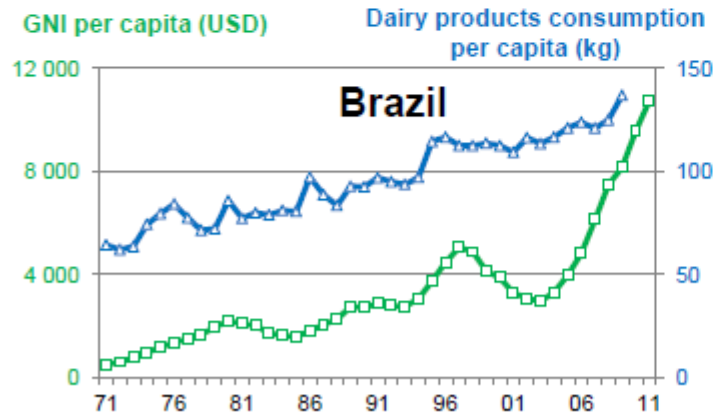
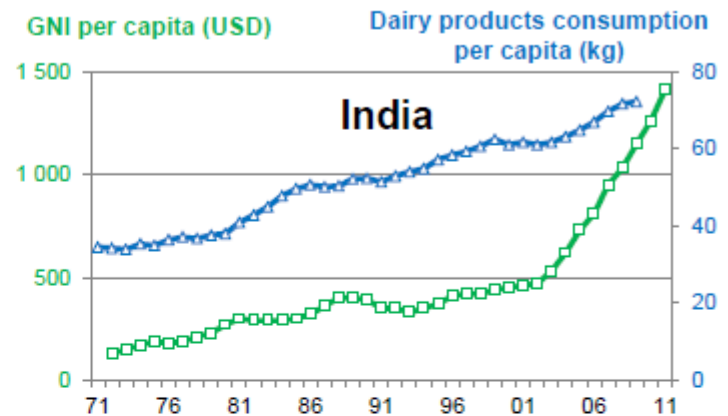
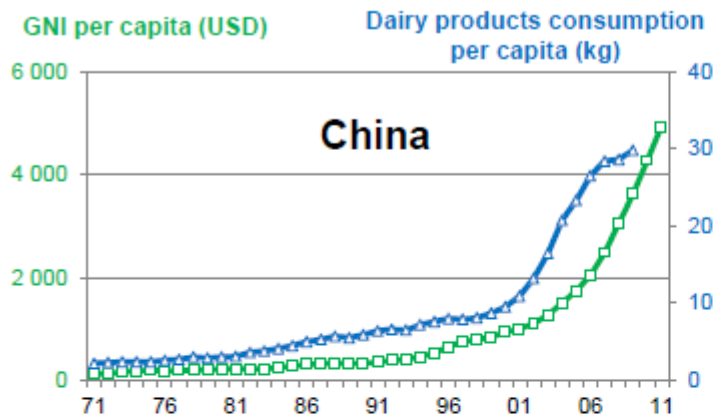
Fig. 1: Evolution of the value of milk and agricultural products



Source FAO

DEMAND FOR DAIRY INCREASES

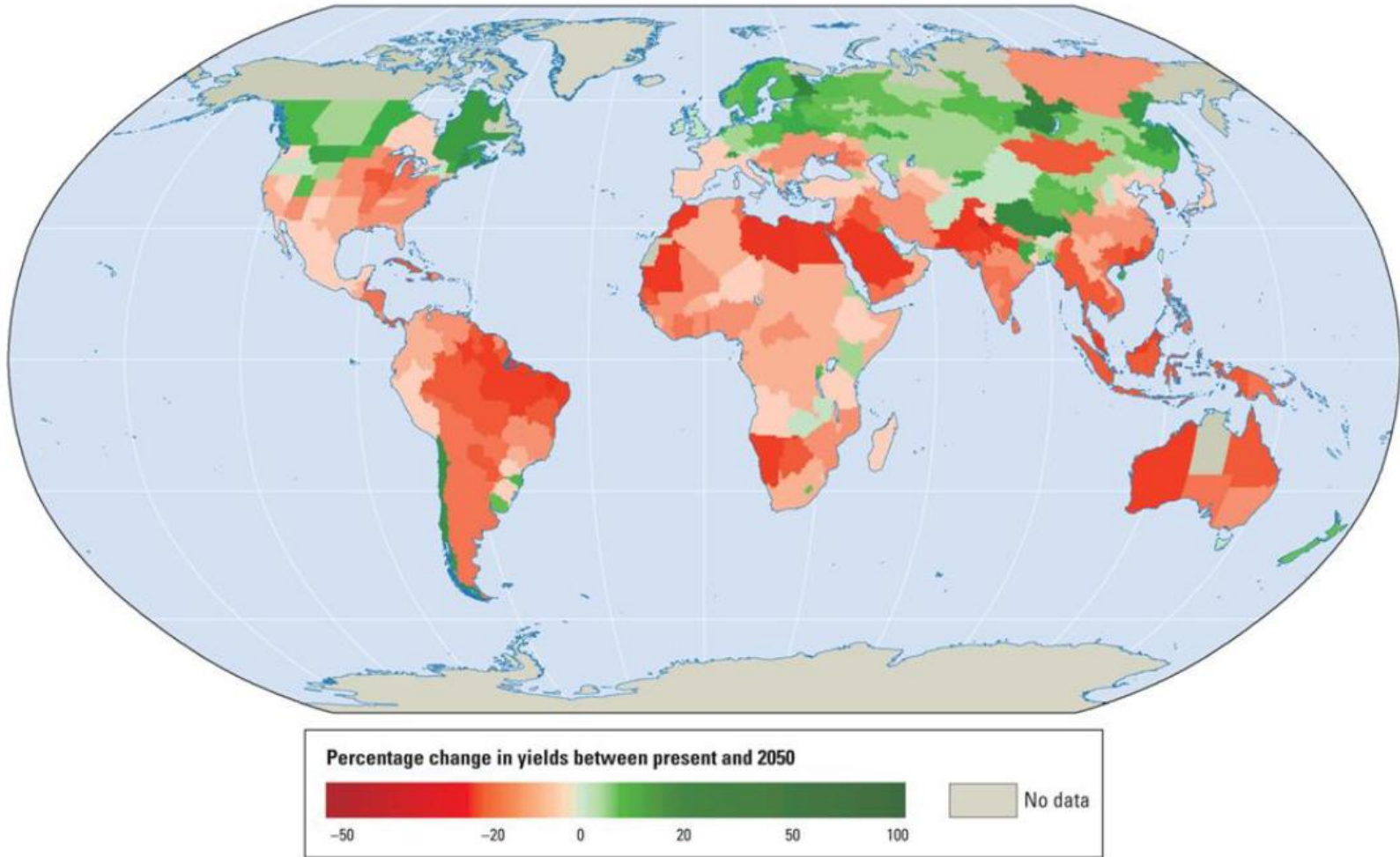
Development of GNI and dairy products consumption in BRIC



Source: CNIEL, World Bank, FAO.

WILL SUPPLY KEEP UP WITH DEMAND?

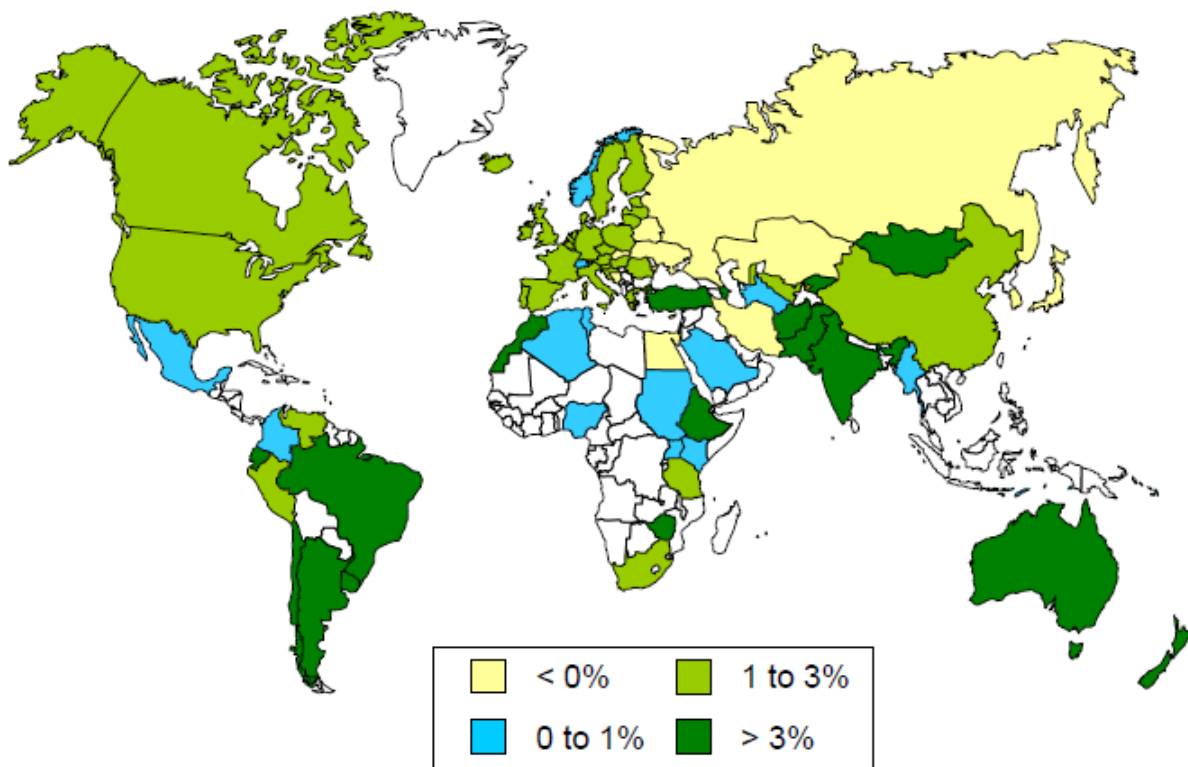
Projected percentage in agricultural yields by 2050
given current agricultural practices and crop varieties



Source: World Bank (World Development Report 2010).

SHORT-TERM PRODUCTION INCREASES

Cow milk production annual growth in 2011



Ranking of the main producers

mln tonnes	2011	Annual growth 10/11 (%)
EU 27	151.8	1.8
United States	89.0	1.8
India (A)	57.7	5.1
China	36.6	2.2
Brazil (A)	32.9	4.0
Russia	31.6	-0.6
New Zealand	19.0	10.5
Turkey	13.8	11.1
Pakistan	13.4	3.8
Argentina	11.9	12.5
Mexico	11.1	0.6
Ukraine	10.8	-1.5

(A) Estimates.

Source: CNIEL, PZ, FAO, IDF National Committees.



Projections of milk production by 2021

Country	Milk production	
	2021	'11-'21 (%)
World	880 350	24
Developed countries	411 426	13
United States	103 383	18
EU 27	157 612	6
Russia	35 969	13
Developing countries	468 925	34
Brazil	38 440	23
China	60 432	41
India	165 632	42

Source: FAO, OECD.



ECONOMIC BENEFITS OF DAIRYING

Increased demand and supply are expected

Increased job creation; e.g. in East Africa and Near East, per 100 liter of milk up to 5 jobs in related industries (FAO)

Uncertainties related to e.g. climate change, feed costs, biofuels

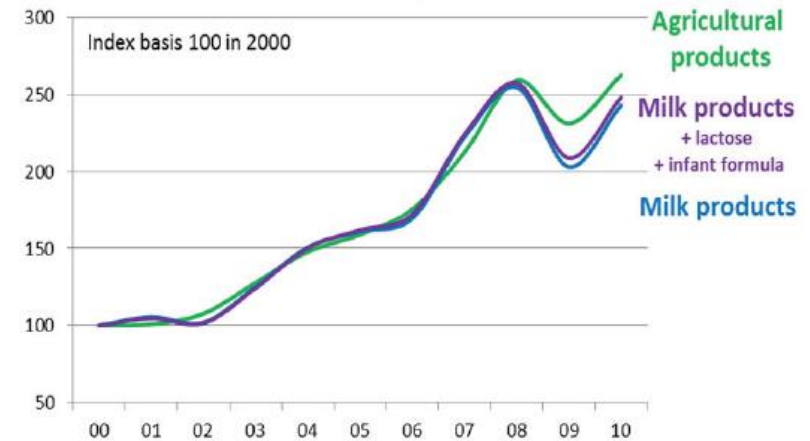
Dairy plays an important role in defining the rural landscape and livelihoods

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