

How will the Dairy World look like in the year 2030?

14 November 2018

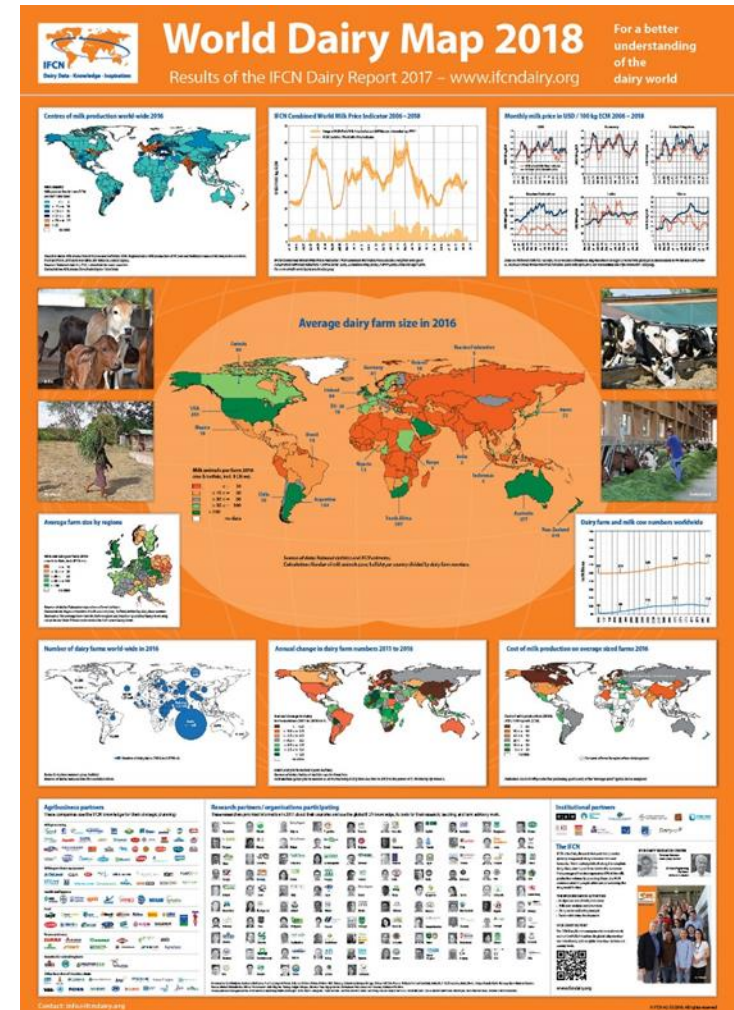
IFCN Dairy Research Network

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Agenda

1. The IFCN concept
2. The dairy world today
3. The dairy world 2030
4. Summary



The IFCN Network



Mission:

Create a better understanding of the dairy world by providing comparable data, knowledge and inspiration.




The IFCN Network Approach – 3 knowledge pillars

- Network of Researchers
- Network of Supporters (companies and organizations of the dairy industry)
- IFCN Research Center in Kiel (with >20 employees)




IFCN Material & Publications in 2018



IFCN
Dairy Data · Knowledge · Inspiration

Dairy Report 2018

For a better understanding of the dairy world

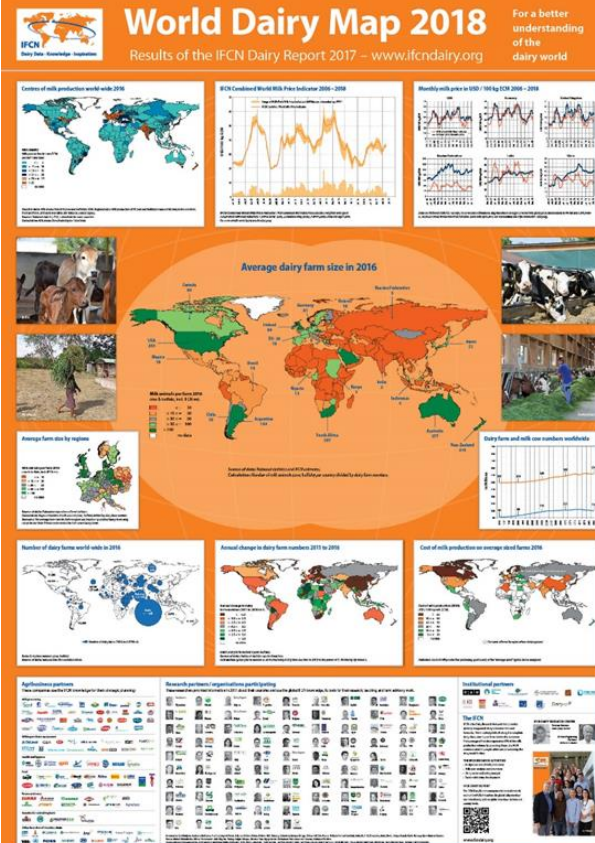



IFCN
The Dairy Research Network

World Dairy Map 2018


Results of the IFCN Dairy Report 2017 – www.ifcndairy.org

For a better understanding of the dairy world









IFCN Dairy Outlook 2030

CURIOUS? YOU SHOULD BE!



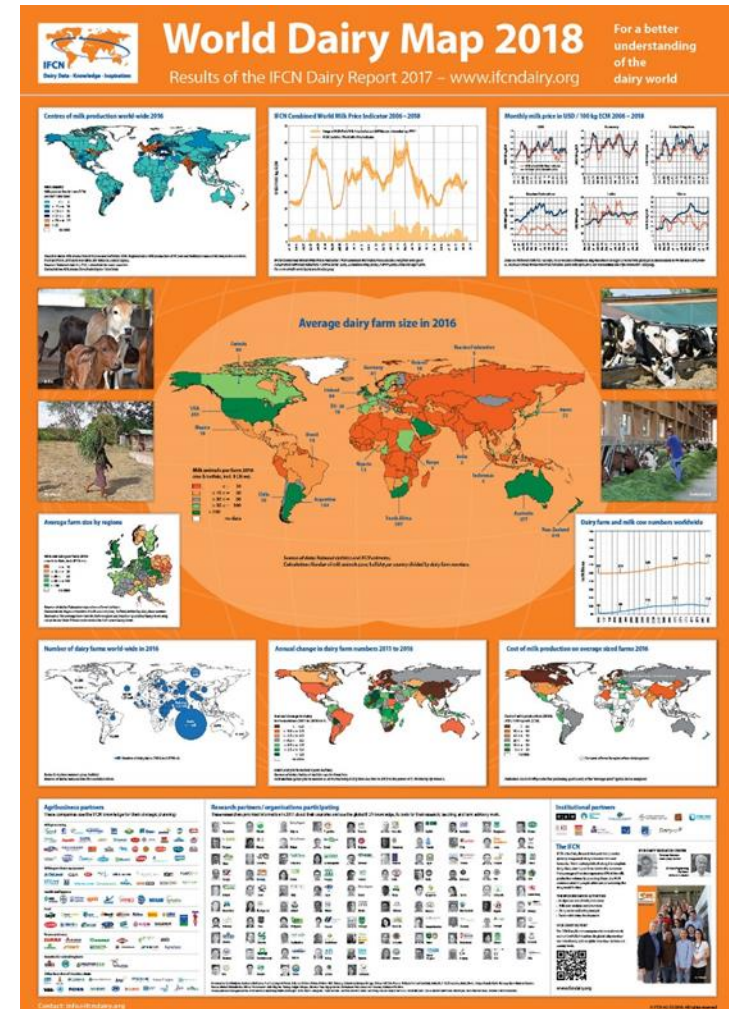
THE DAIRY WORLD 2017 vs. 2030

-  **Milk production:** + 304 mill t
Approx. 3 times of the current USA milk supply
-  **Milk production per farm:** + 54%
-  **Per capita milk consumption:** + 16%
-  **Average milk yield:** + 23%

 Until 2030, global population will increase by 16% to 8.7 billion people, so 1.2 billion more consumers will demand milk products.

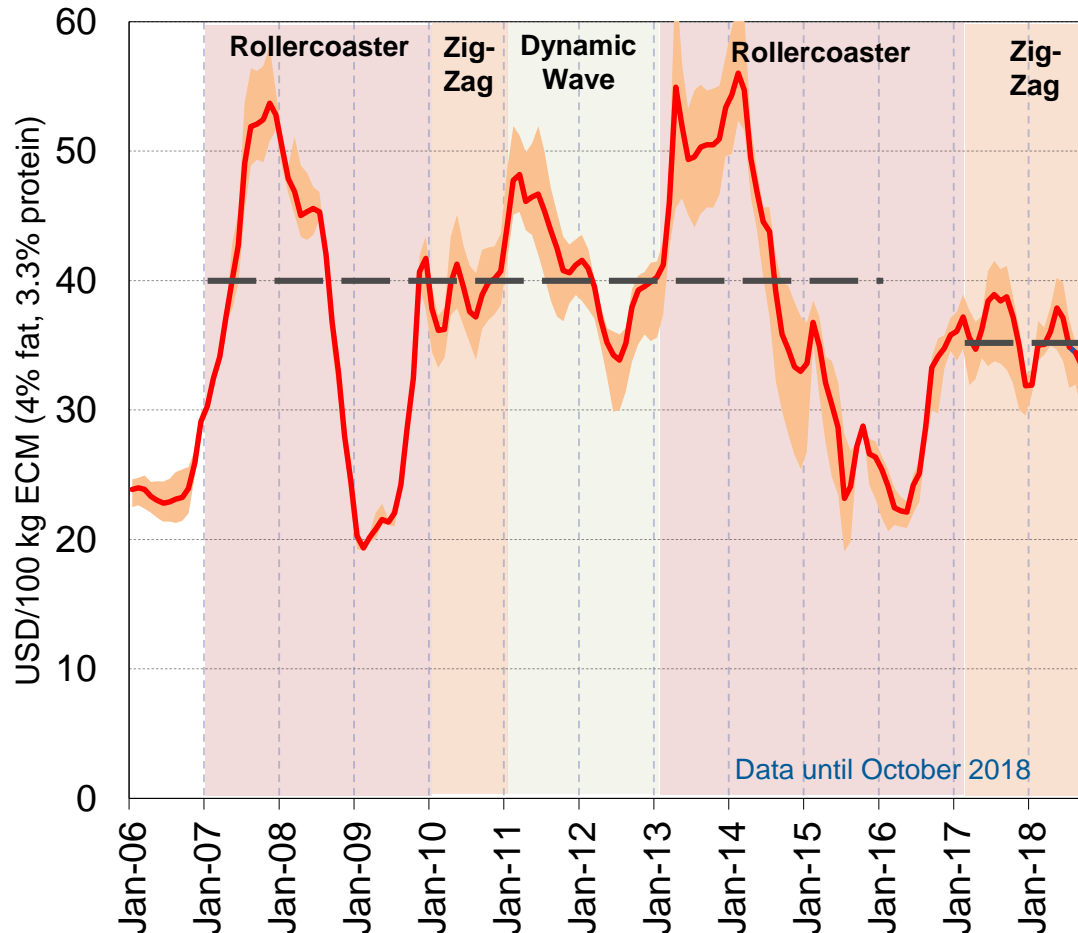
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World milk price 2006 - 2018

IFCN World Milk Price Indicator



Long-term Average



2007 – 2015 = 40\$

2016 – 2018 = 35\$

“new reality”

30€

Price Cycles (simplified)

1st Rollercoaster from 2007 to 2009 (imbalance)

Length: 3 years; Fluctuation: ±50%

1st Zig-Zag in 2010 (balance)

Length: 1 year; Fluctuation: ±10%

1st Dynamic Wave from 2011 to 2012 (balance)

Length: 2 years; Fluctuation: ±20%

2nd Rollercoaster from 2013 to 2016 (imbalance)

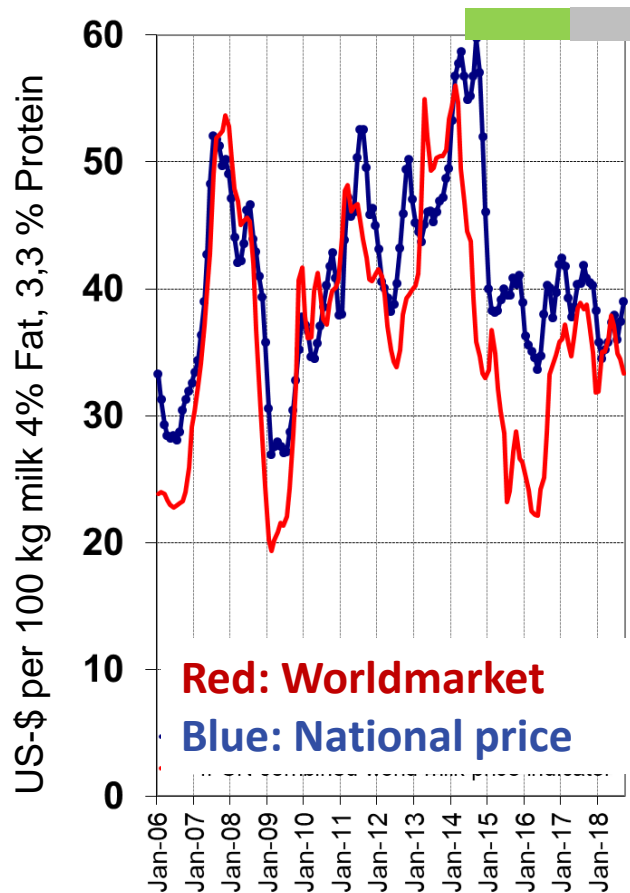
Length: ~4 years; Fluctuation: ±50%

2nd Zig-Zag from 2017 until now (balance)

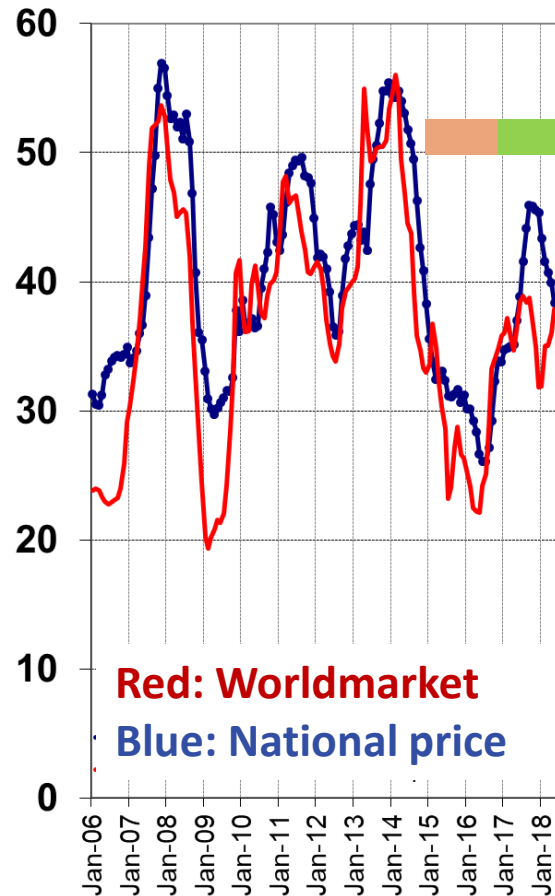
Length: so far 20 months; Fluctuation: ±10%

Relation of world to national milk price

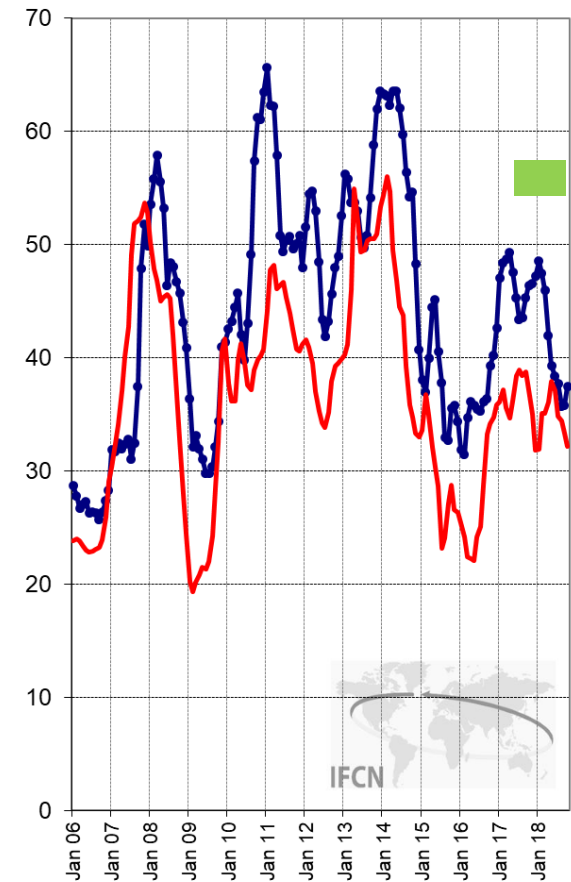
United States



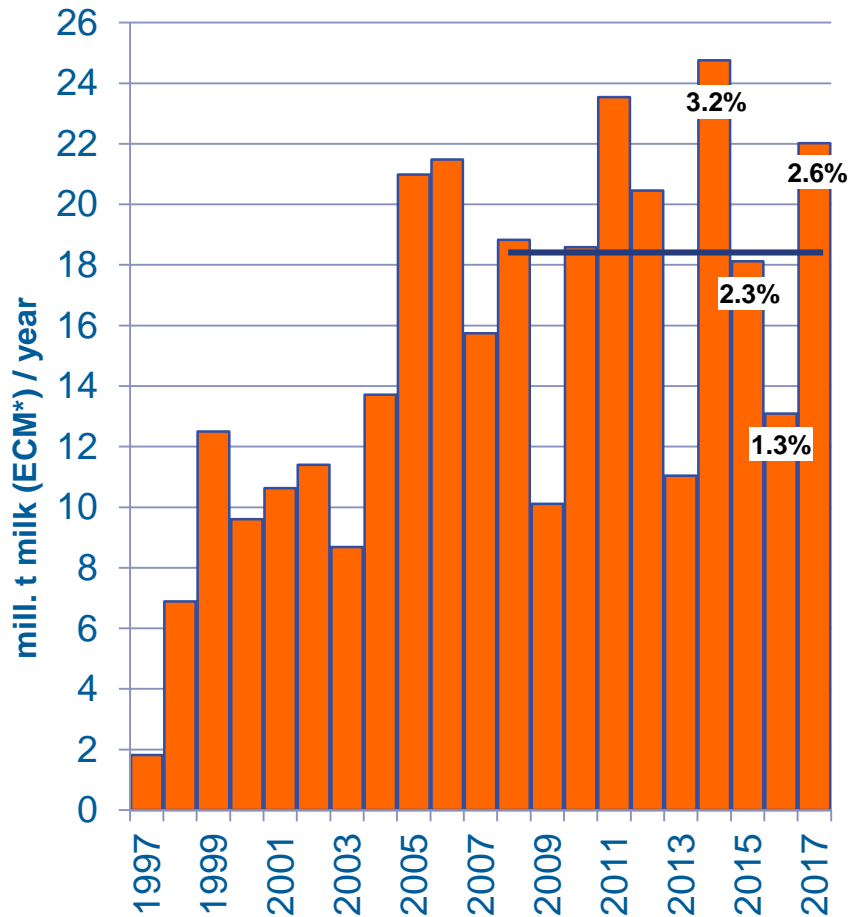
Germany



Russia



Change in world milk production 1997 – 2017



*Energy Corrected Milk (4% fat and 3.3% protein)

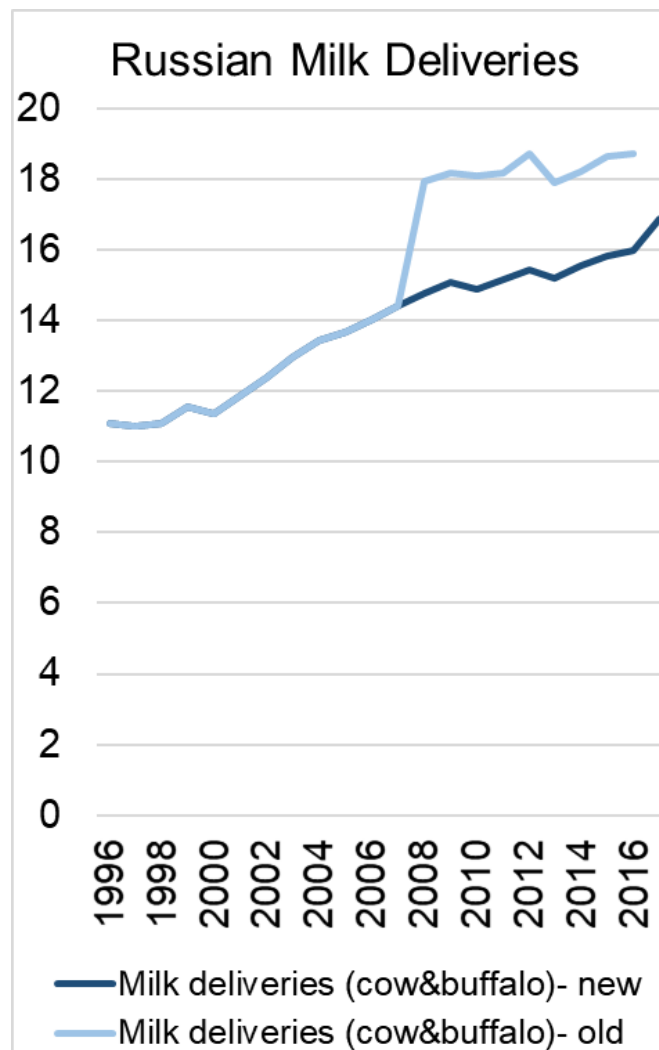
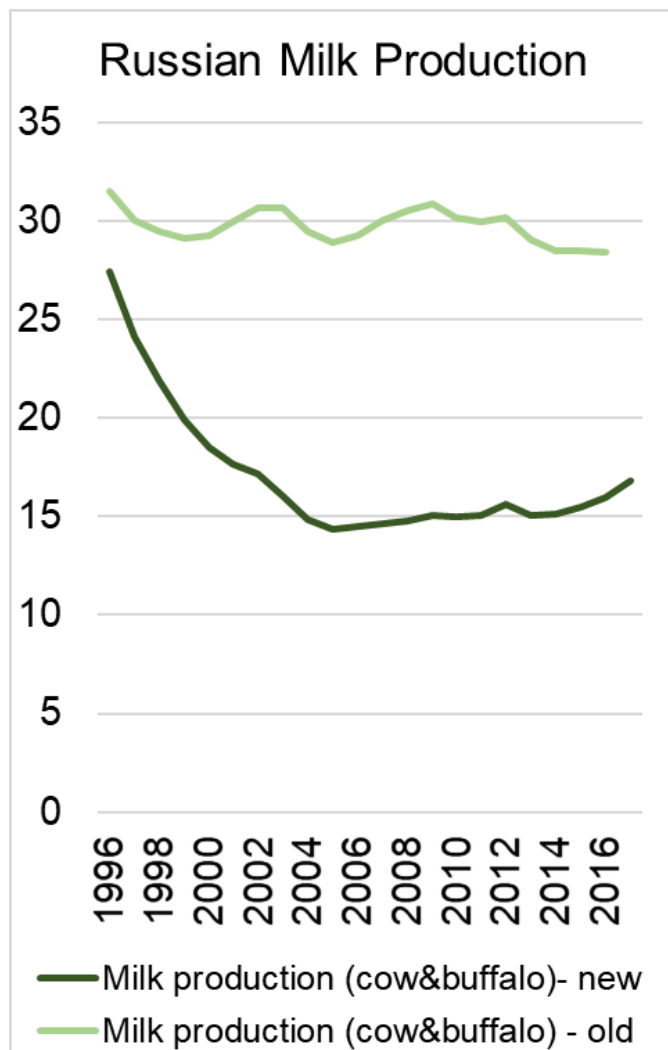
2007 – 2017:

Ø +2.4% or 18.2 mill t ECM

Record years: 2011, 2014, 2017

Crisis times: 2009, 2013, 2016

Russia milk production data - ????



2018: Shift from official statistics to partner data

In some countries official statistics lacking in quality

New methodology still under revision

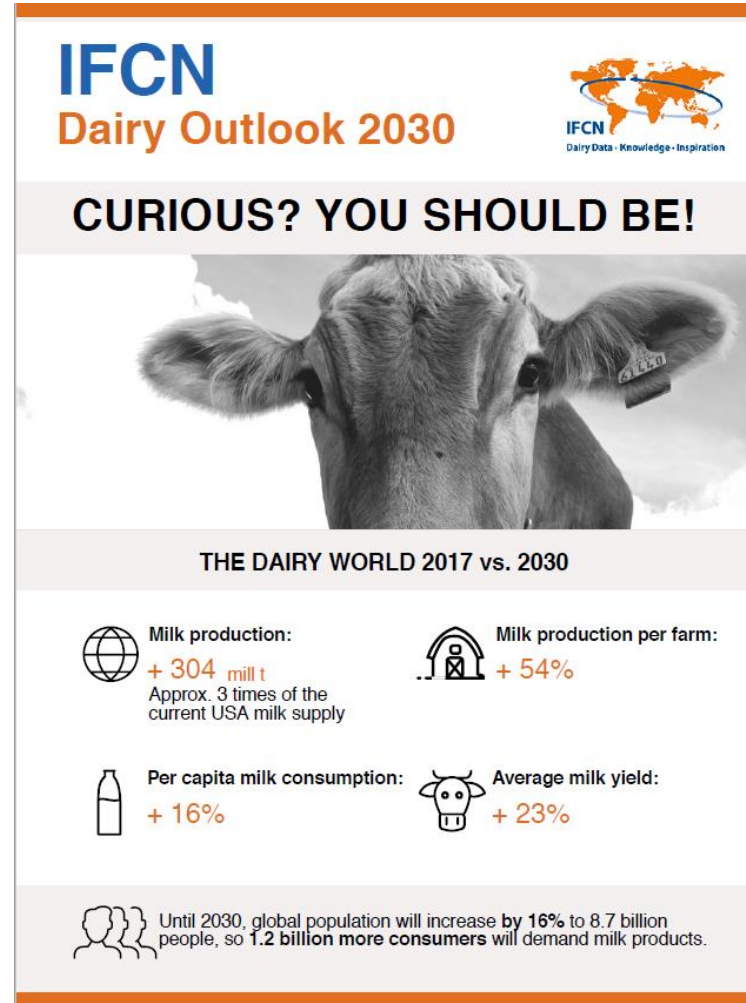


Michael Mishchenko




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Dairy Outlook 2030



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THE DAIRY WORLD 2017 vs. 2030

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 Until 2030, global population will increase by **16%** to 8.7 billion people, so **1.2 billion more consumers** will demand milk products.

IFCN Long-term Dairy Outlook – concept

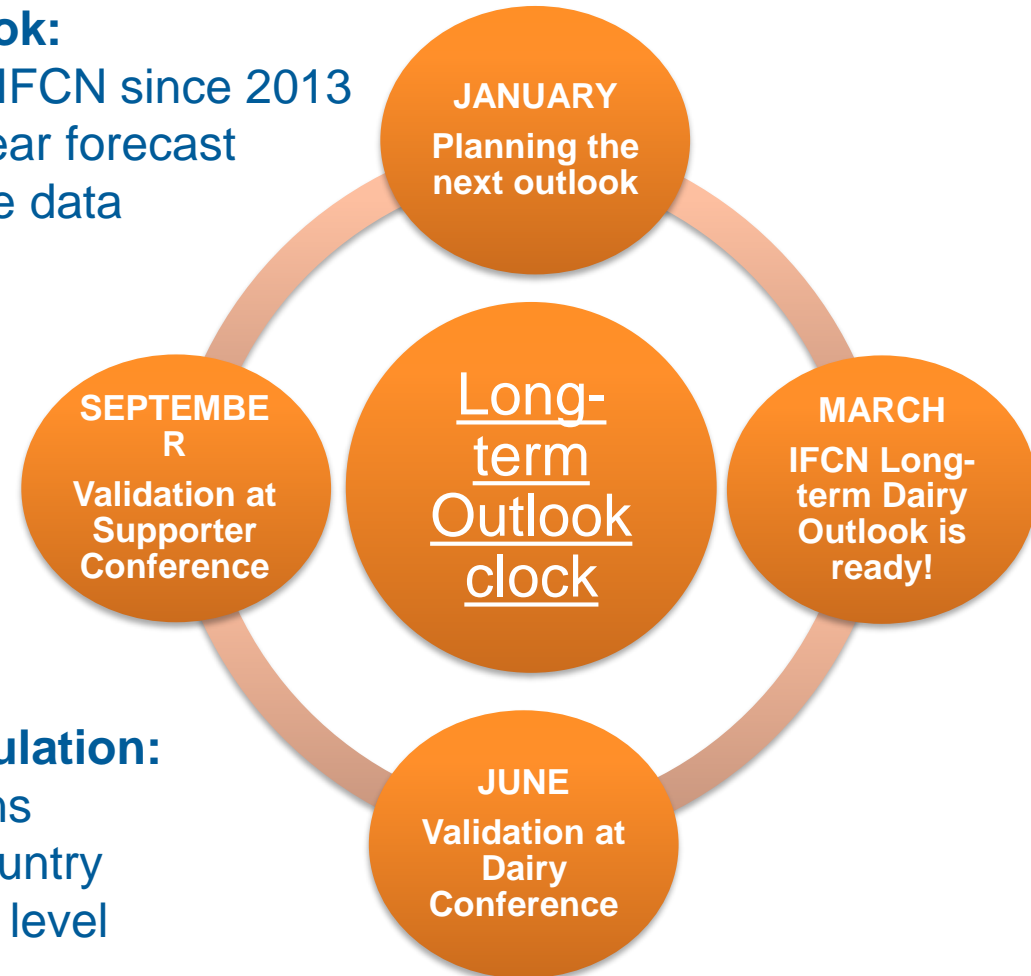
What is the IFCN Long-term Dairy Outlook:

It has been an ongoing research project in IFCN since 2013
It is a database ex post 1996–2017 & 13 year forecast
It covers 200 countries and has comparable data

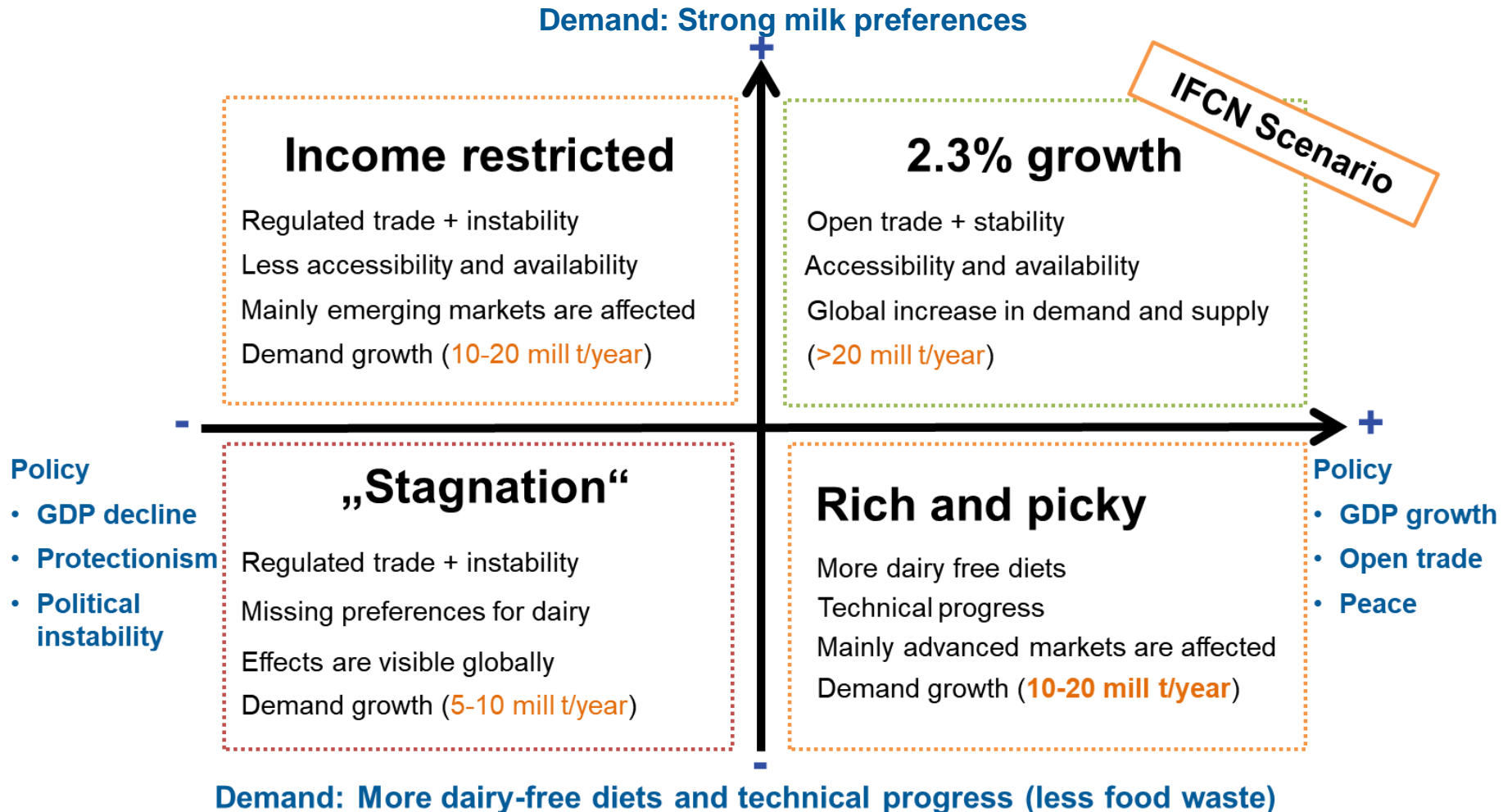


Method – Iterative supply & demand simulation:

1. Define a scenario + technical assumptions
2. Simulate milk supply and demand per country
3. Search for the balancing world milk price level



IFCN Long-term Dairy Outlook scenarios



The Dairy World 2030 vs. 2017



Milk production:

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Per capita milk consumption:

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Dairy World in 2007 / 2017 / 2030 Scenario 2,3%

Results based on 3/2018 data



World	Unit	Annual values			Change 2030 vs. 2017		
		2007	2017*	2030	Absolute	%	CAGR %/year
Milk supply and demand							
Milk production ≈ milk demand**	mill t ECM	696	864	1168	304	35%	2.3%
World trade							
Excl. EU-28 intra trade***	mill t ECM	36	55	95	40	73%	4.3%
Supply drivers							
Number of milk animals	mill head	332	372	417	45	12%	0.9%
Average milk yield	t / milk animal / year	2.0	2.2	2.7	0.5	23%	1.6%
Farm number	mill	119	118	104	-14.0	-12%	-1.0%
Average farm size	head / farm	2.8	3.1	4.0	0.9	29%	2.0%
Demand drivers							
Population	billion	6.5	7.5	8.7	1.2	16%	1.1%
Dairy consumption per capita	kg ME/ capita/ year	104	116	135	19	16%	1.2%

Explanations:

Results based on Scenario 1 (High milk demand due to consumer preferences and beneficial political and economic situation)

* Preliminary data of the year 2016, partly estimated

** Small deviations of total supply and demand due to changes in stocks

*** Representing volume traded from surplus countries; imports from net exporters not included

ECM= Energy corrected milk (standardized to 4% fat and 3.3 % protein)

ME= Milk equivalents, method: "fat and protein only"

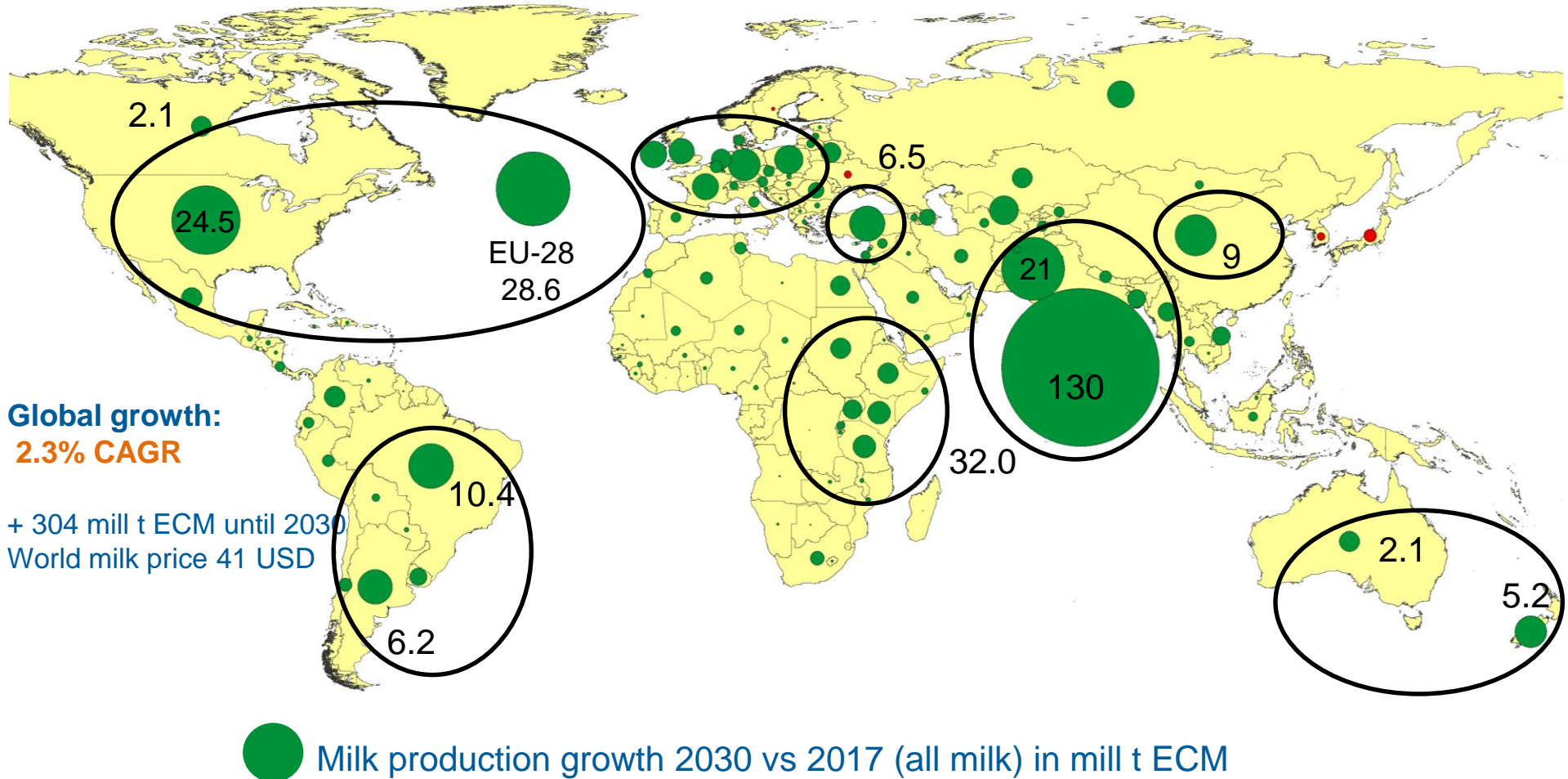
CAGR= Compound Annual Growth Rate

Status of data : 03/2018

Where will the
milk of the future
be produced?



World milk production growth until 2030



For whom will future milk be produced?

Local for local

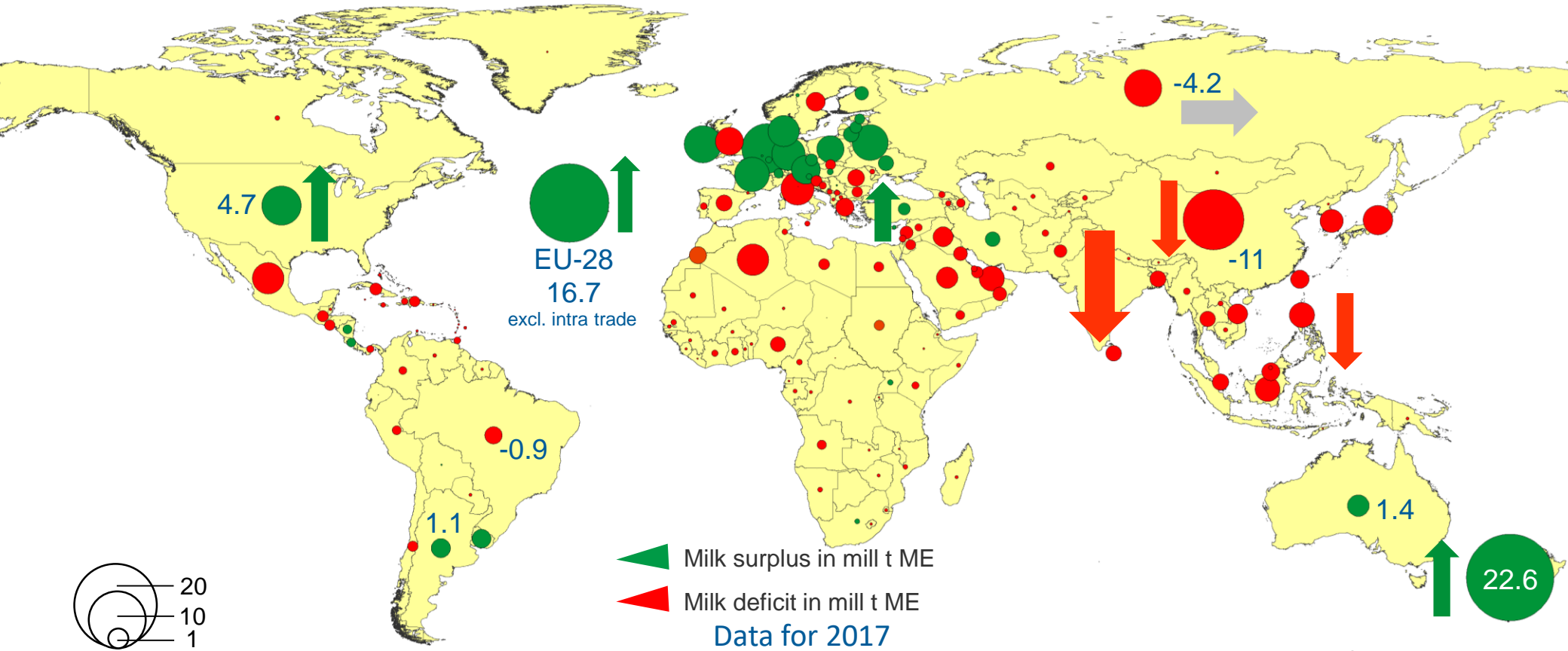
or

Local for global?



IFCN Outlook: Dairy Trade + 74% more in 2030

Milk surplus and deficit per country 2017



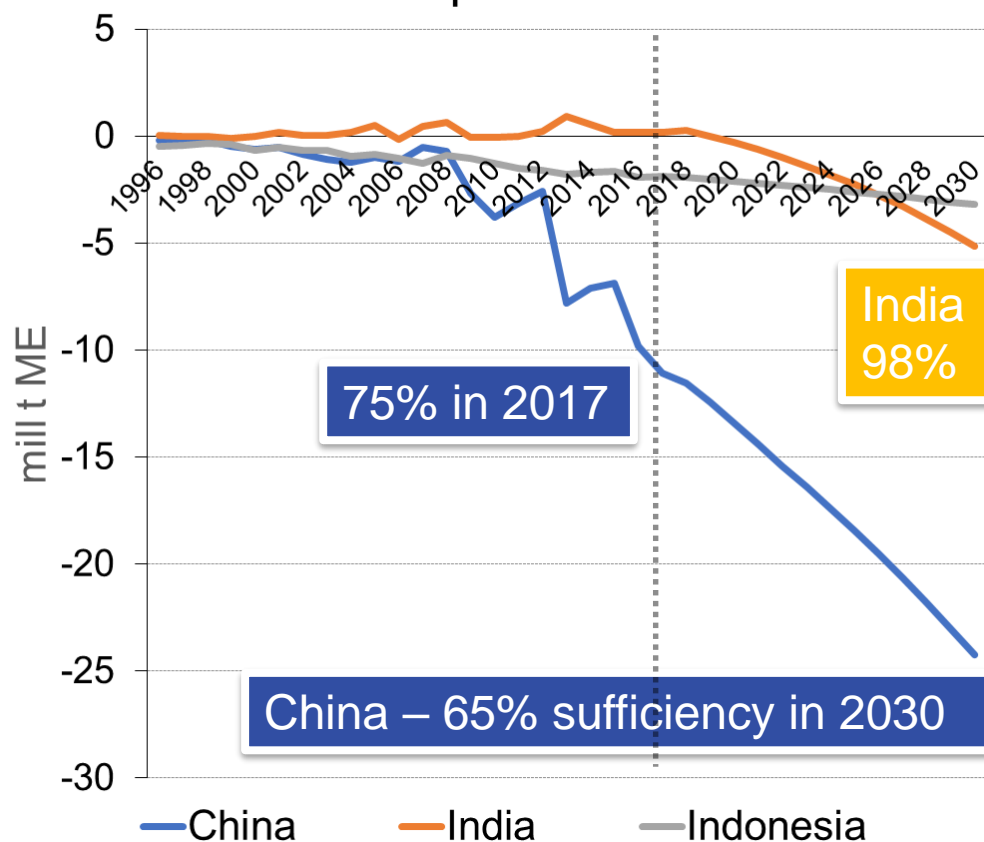
New Zealand and the EU-28 provide ~70% exports

New net exporters: India, Iran, Turkey, Uganda, South Africa, Costa Rica, Nicaragua

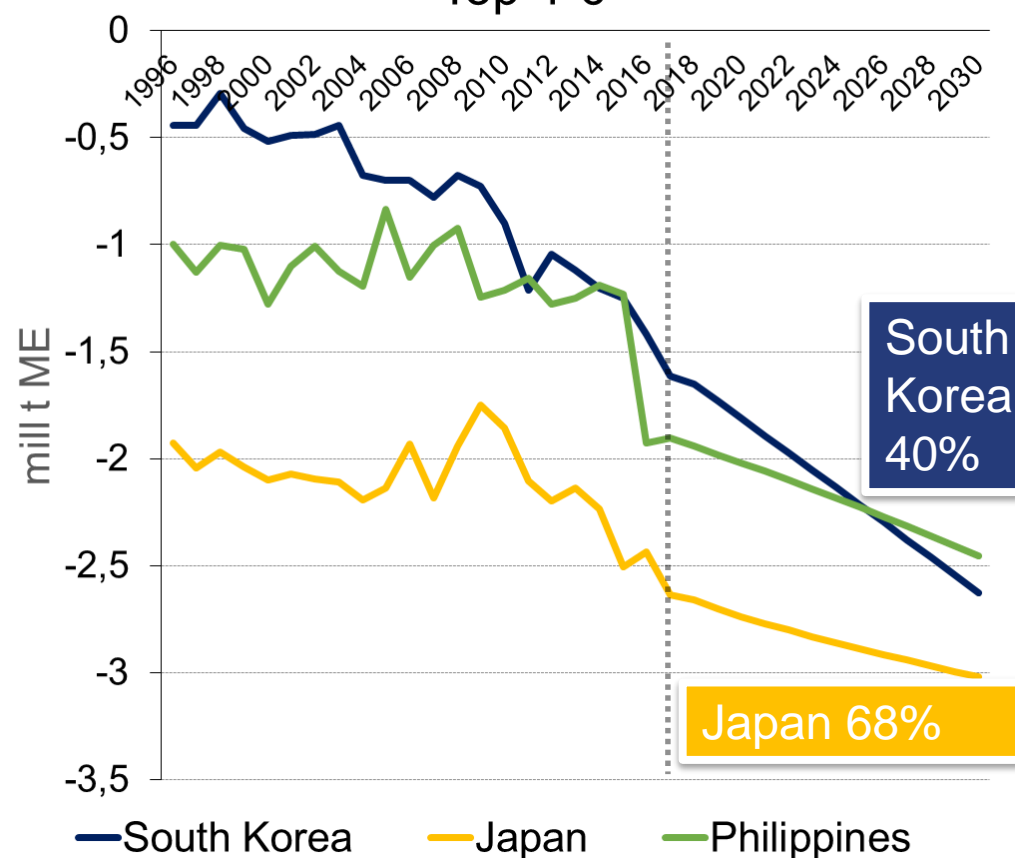
Growing needs and possibilities

Surplus & deficit: Top 6 Asian countries

Top 3 markets

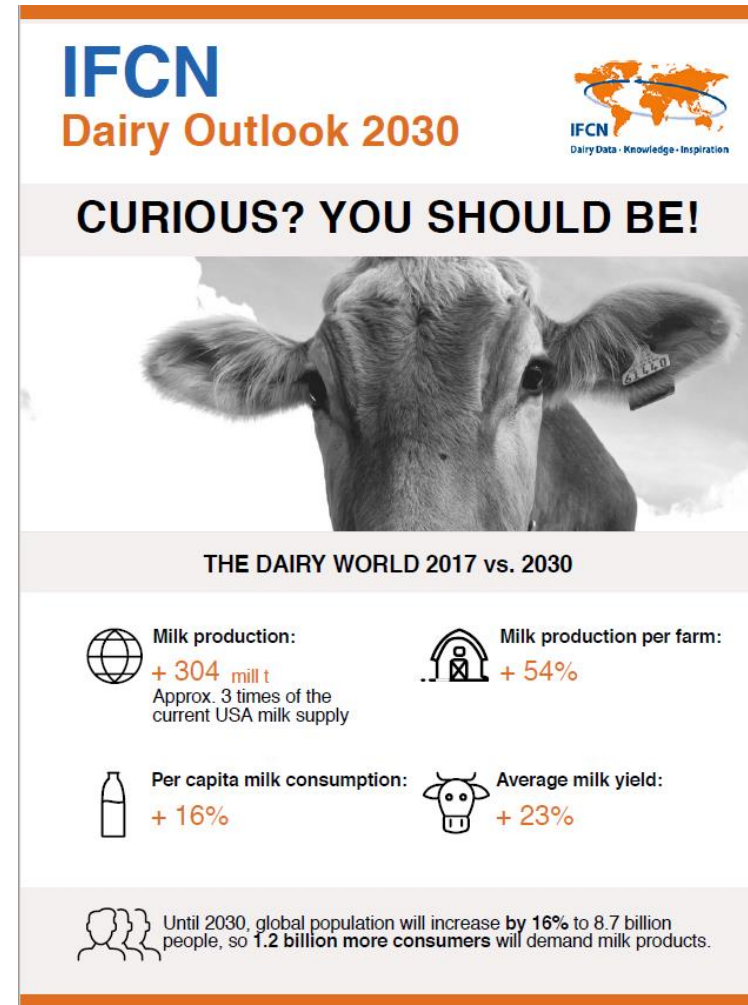


Top 4-6



Dairy World in 2030

1. **Consumer trust in dairy and “policy” are key uncertainties.**
2. **We need a lot more milk 2030 scenario + 2,3% growth**
3. **How to prepare 2030**
 - assume change + that it will be much faster than in the past.
 - Use strategic / operational navigation systems like IFCN
 - think positive



Thank you for your attention



Network of IFCN Researchers



Network of IFCN Supporters



IFCN Dairy Research Center

A great number of people have collaborated since the year 2000 to make this presentation possible.