

*Too big  
to succeed ?*

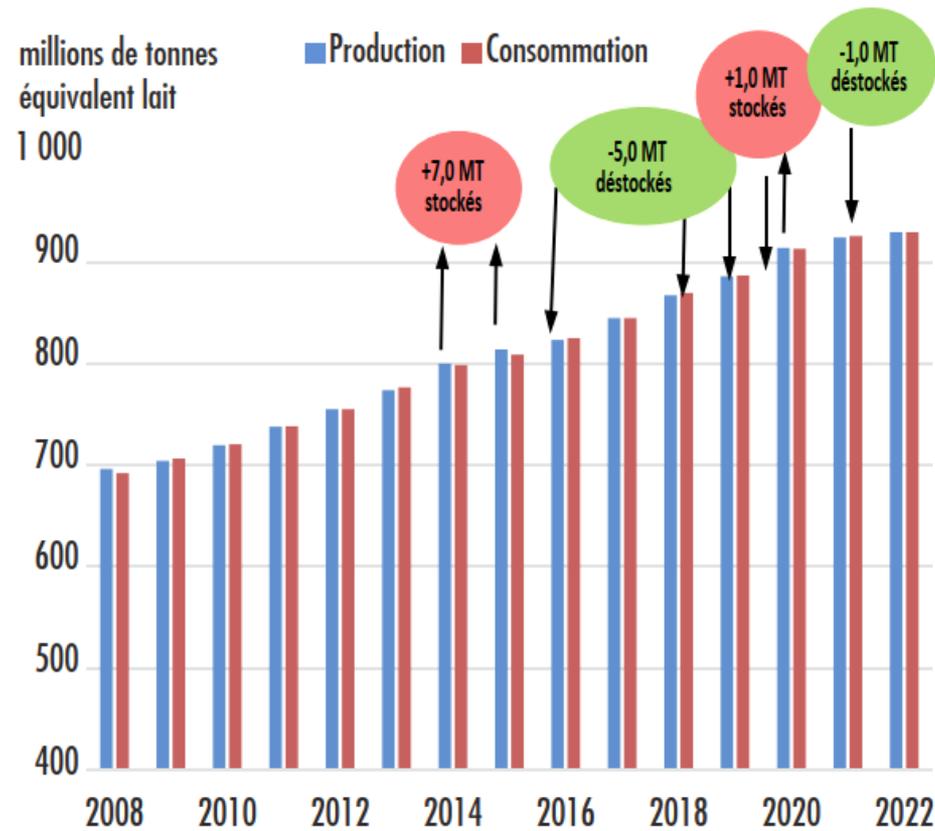
**Demande mondiale  
et méga fermes  
laitières au crible de  
la durabilité**

Anne Mottet, IFAD

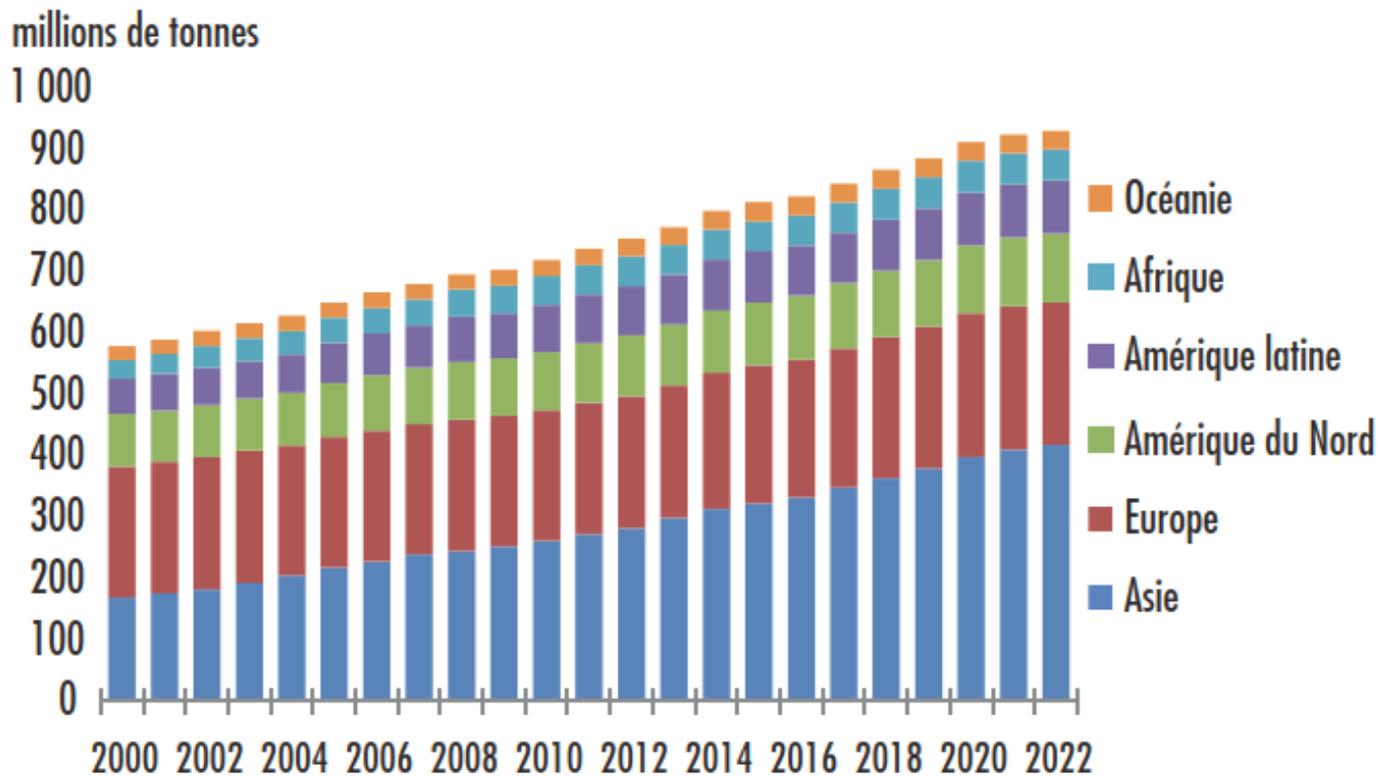


Le Terminal, un modèle chinois pour 15,000 vaches – Photo Snorri Sigurdsson

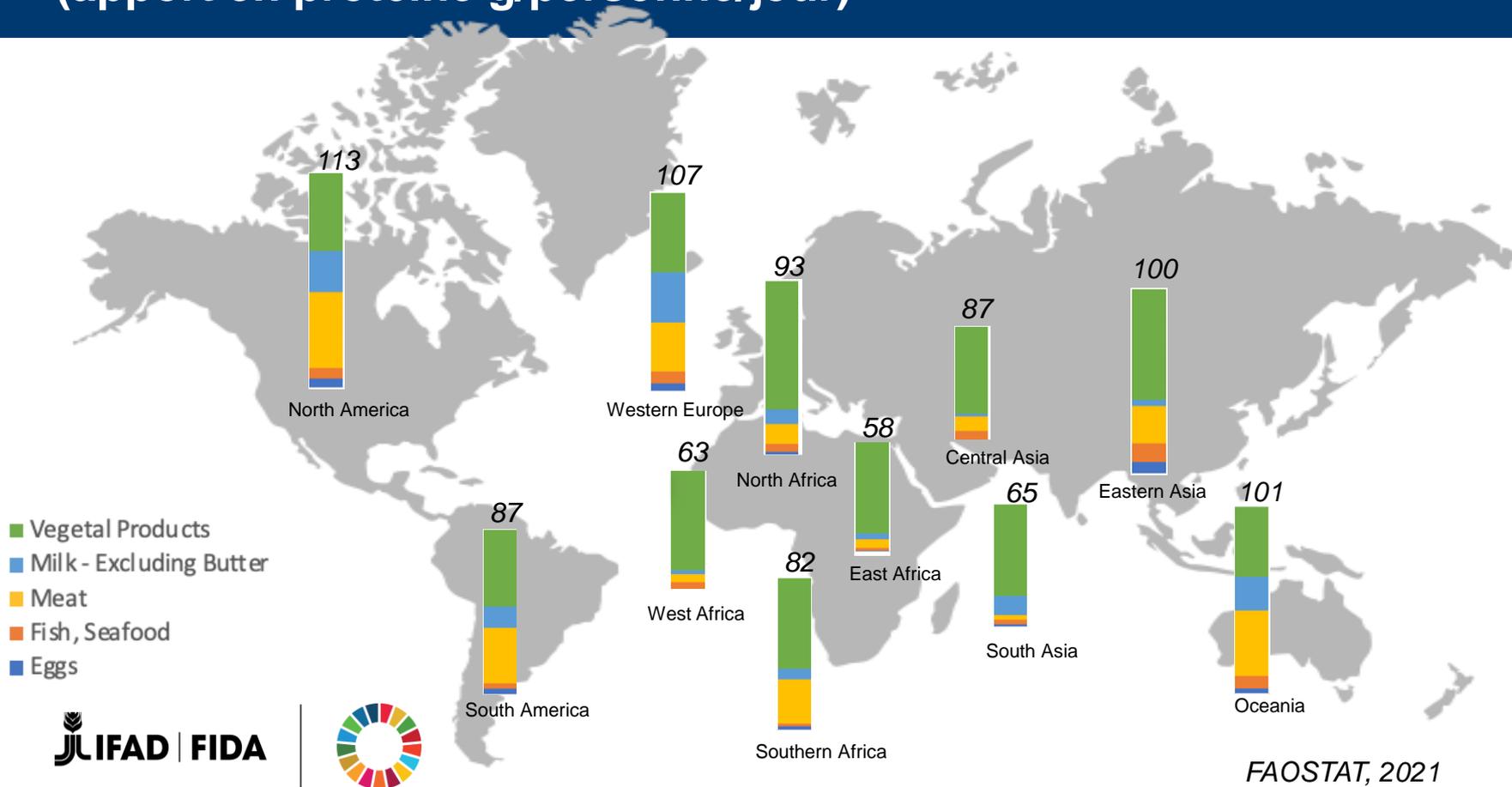
# La demande Mondiale en produits laitiers continue de progresser mais reste contrainte par l'offre



# La production continue de progresser, en particulier en Asie



# De grandes inégalités dans l'accès aux produits laitiers (apport en protéine g/personne/jour)

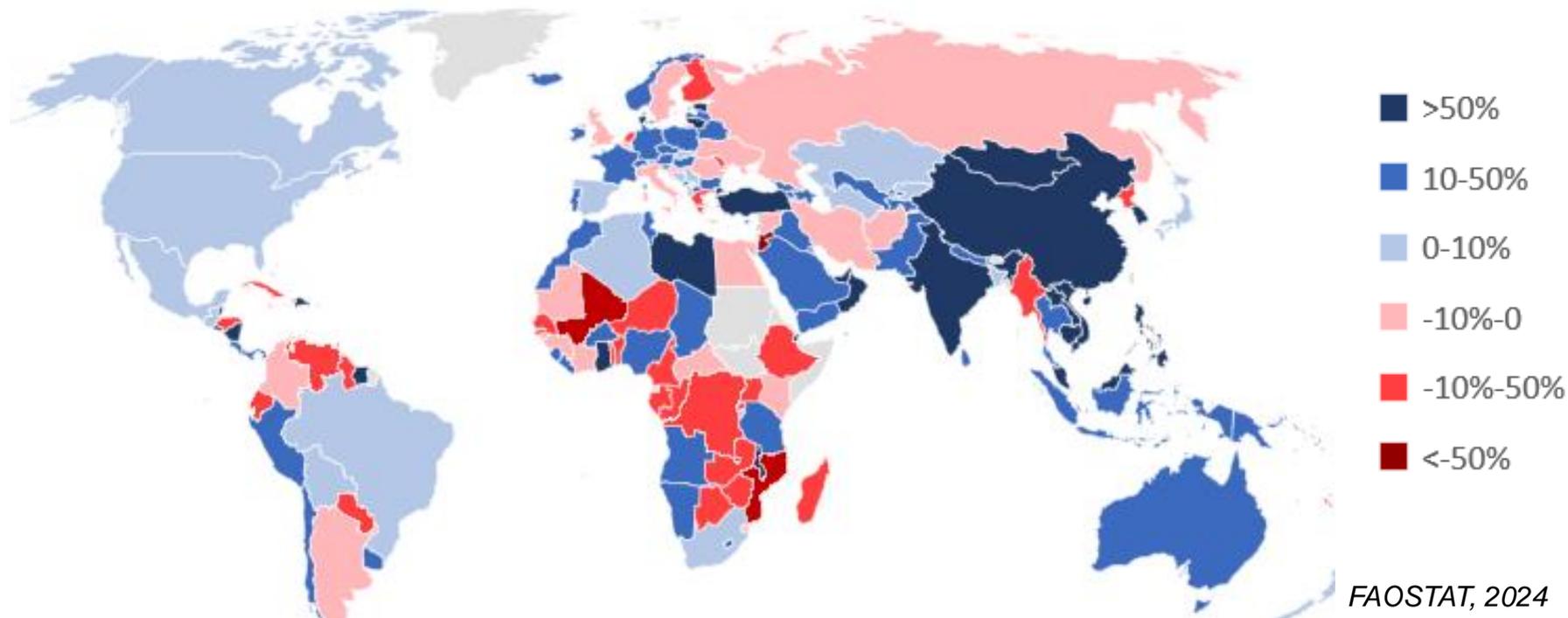


# Évolution de la consommation par habitant (produits laitiers à l'exclusion du beurre 2010- 2021)

Moyenne mondiale +17% (87.6kg)

Low income food deficit countries +10% (43.6 kg)

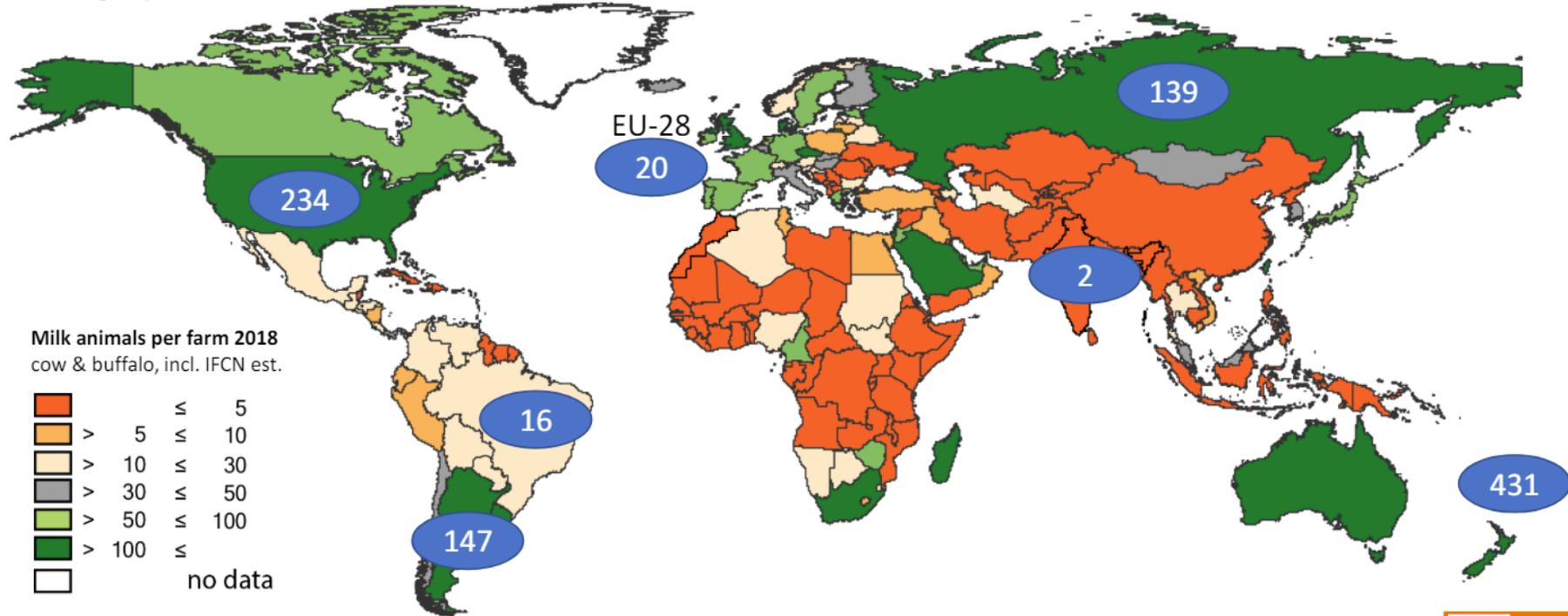
UE27 +12% (217.6 kg)



# Scénarios sur la demande mondiale

Scenarios 2012-2050	BAU	Towards Sustainability	Stratified Societies
Cereals	+54%	+39%	+56%
Meat	+52%	+29%	+55%
Dairy	+40%	+35%	+45%
Eggs	+39%	+25%	+40%
Fish	+35%	+37%	+35%
Oilseeds	+50%	+40%	+51%
Fruits and vegetables	+49%	+48%	+54%
Cash crops	+44%	+39%	+53%

# Average Dairy Farm Size 2018



**Source of data:** Estimations based on national statistics

**Calculation:** Number of milk animals (cows, buffaloes) divided by dairy farm numbers

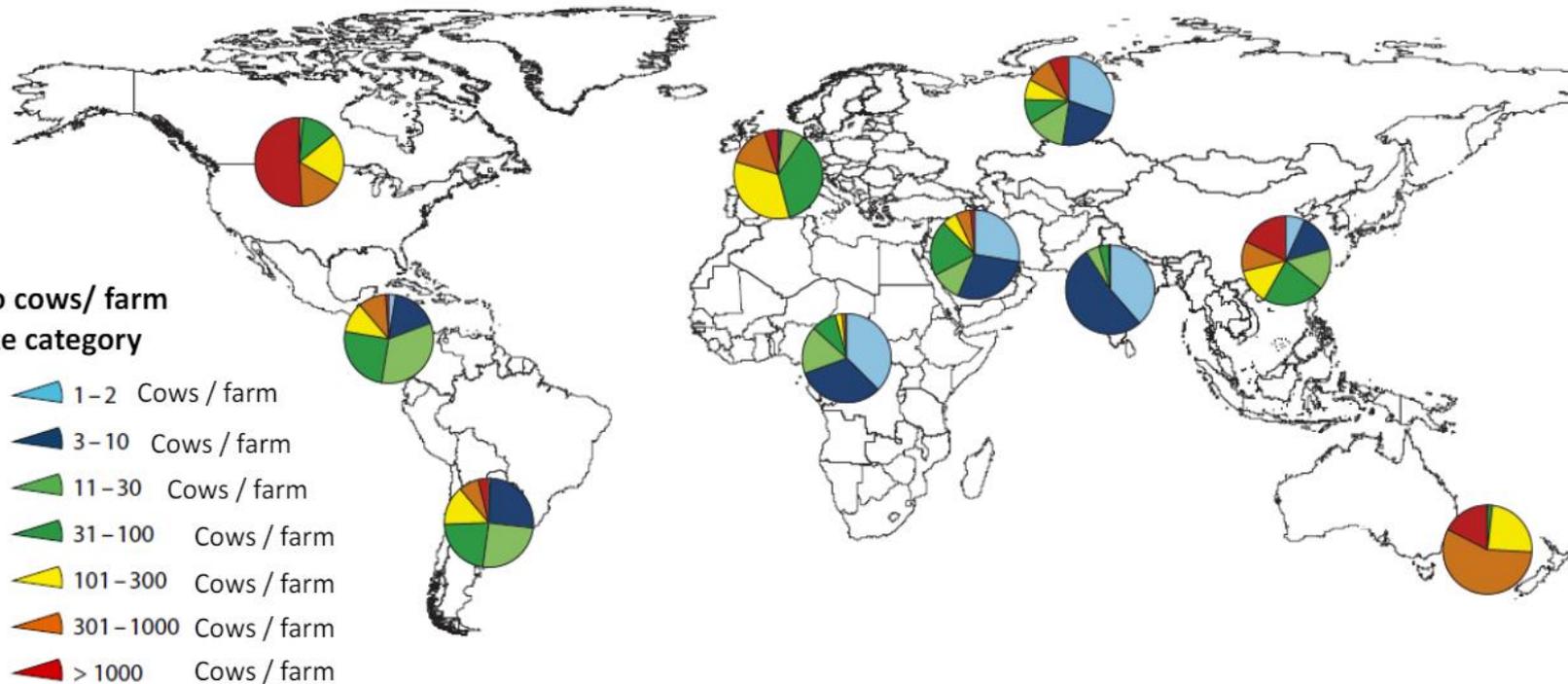
**Comment:** Data for Russia represents only farms that deliver milk. Else average farm size would be 2 cows / farm.



IFCN

Dairy Data · Knowledge · Inspiration

# Dairy Farm Structure by world region

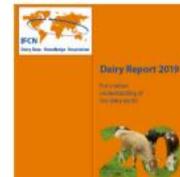


Data: Dairy cow numbers (cow, buffalo) in % per size class.

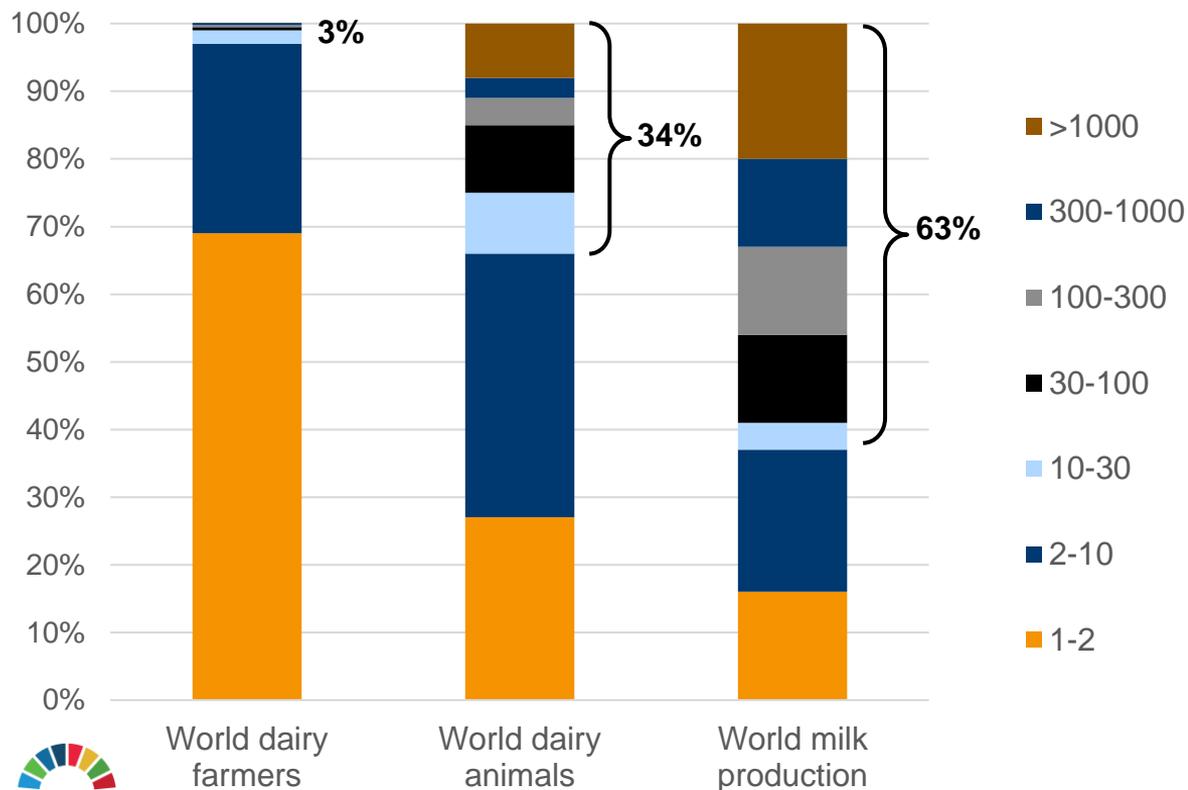
Source: IFCN Standard Class Data based on national statistics and estimations.

Method: Analysis based on 86 countries. 7 IFCN Standard Classes, defined equal for all countries. Data from the national statistics were allocated to the individual standard classes

Source:  
IFCN Dairy  
Report 2019

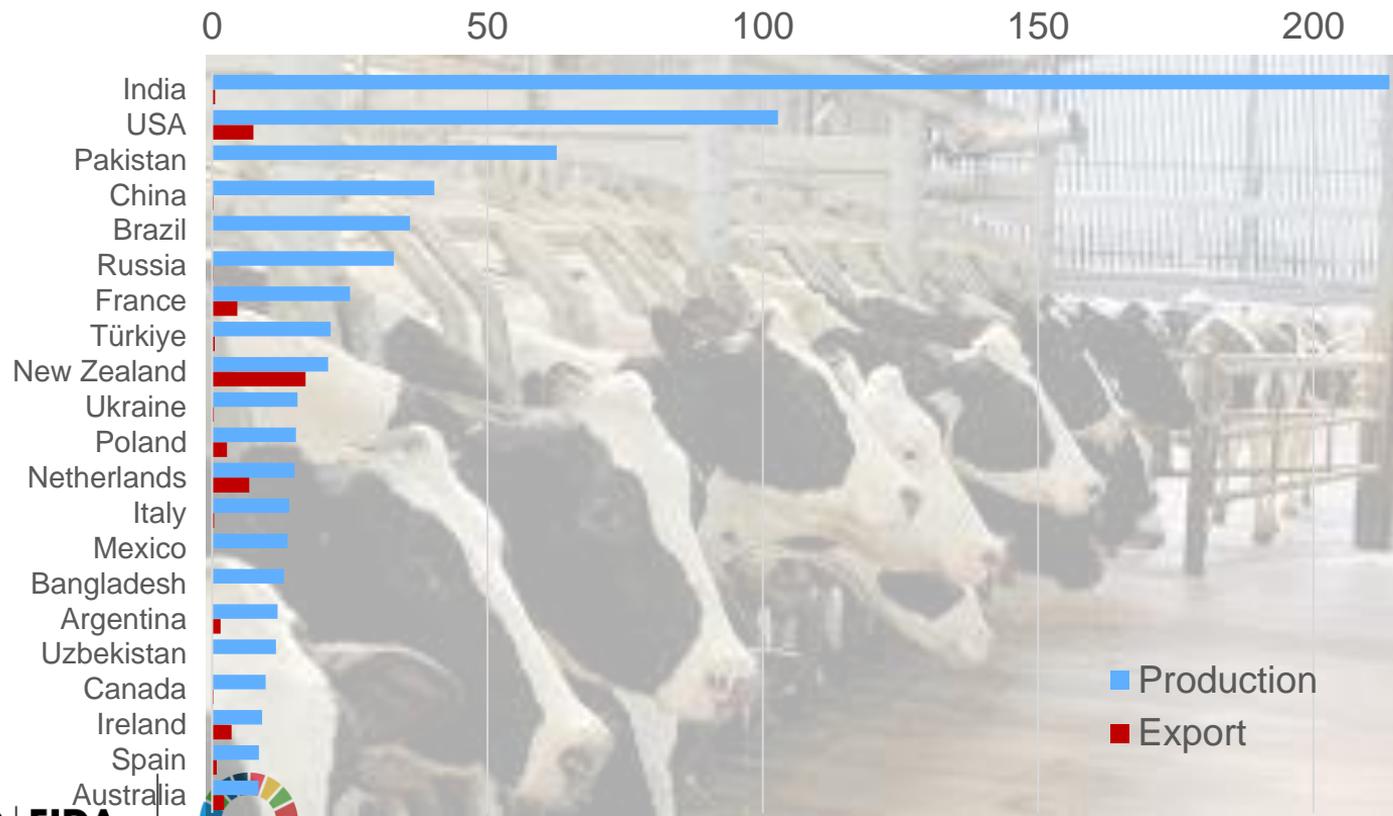


# Structures des fermes laitières (d'après IFCN 2022)





# Les 20 plus gros producteurs de lait et la part de l'export (Mt)



# Les méga fermes laitières au crible de la durabilité

<p>Livelihoods and economic growth</p> 	<p>Food security and nutrition</p> 	<p>Health and animal welfare</p> 	<p>Climate and natural resource use</p> 
<ul style="list-style-type: none"> <li>• Coût de production, rentabilité et économies d'échelle</li> <li>• Plus forte exposition à la volatilité des marchés</li> <li>• Accès aux marchés quasi garanti via integration</li> <li>• Manque de main d'oeuvre et conditions de travail</li> </ul>	<ul style="list-style-type: none"> <li>• Autosuffisance vs marché de l'export</li> <li>• ASF critical to close nutritional gap in vulnerable populations (rural poor)</li> <li>• Lower productivity and availability of products</li> <li>• Lower food loss and wastes in supply chain?</li> </ul>	<ul style="list-style-type: none"> <li>• Concentration élevée des animaux et risqué d'émergence (ou ré-émergence) de maladies infectieuse</li> <li>• Perte de diversité génétique et donc de résilience</li> <li>• Moins d'exposition aux aléas climatiques</li> <li>• Accès important aux services vétérinaires</li> </ul>	<ul style="list-style-type: none"> <li>• Faibles émissions/L de lait</li> <li>• Fortes émissions/ha</li> <li>• Moins d'exposition aux aléas climatiques</li> <li>• Pollutions des eaux de surfaces et de l'air dues à la concentration des animaux</li> <li>• Risques de déforestation importées via les aliments</li> <li>• Opportunité pour la production de biogaz</li> </ul>

# Exemple: l'(in)efficience alimentaire des systèmes industriels

			FCR1	FCR2	FCR3	Protein FCR3
			Kg DM feed/ kg protein product <sup>1</sup>	Kg DM human edible <sup>2</sup> feed/ kg protein product <sup>1</sup>	Kg DM human-edible + soybean cakes <sup>4</sup> /kg protein product <sup>1</sup>	Kg protein from human-edible +soybean cakes <sup>4</sup> /kg protein product <sup>1</sup>
Non OCDE	Bovins	Au pâturage	195	1.6	1.9	<b>0.3</b>
		Mixtes	171	4.8	5.6	1
		Feedlots	99	37.1	39.6	<b>4.8</b>
OCDE	Bovins	Au pâturage	67	6.7	5.5	0.9
		Mixtes	53	6.4	7.6	1.2
		Feedlots	62	44.3	45.4	4.7
OCDE	Volaille	Industrielle	26	18.8	24.0	5.0
OCDE	Porcs	Industriels	27	19.1	23.9	4.6

Source: Mottet et al. (2017) Global Food Security

# La tendance touche aussi les camélidés au Moyen Orient

THE CONVERSATION

Academics: rigour, journalistic flair

Search analysis, research, academics...



## Turning camels into cows: megafarms are being set up to produce camel milk on industrial scales

Published: April 5, 2024 5:38pm BST

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The camel may be the next cow.

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An animal that once grazed and browsed over huge distances is increasingly being enclosed in vast Middle Eastern dairy farms, where thousands of camels are milked by machine. This is the model of sedentary farming that produced modern cows, sheep and pigs. Camels have so far resisted it – yet in certain ways, they are ideal livestock for the next climate reality.

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# Thank You

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