

THE FRUITS AND VEGETABLES INDUSTRY SERIES

29 October 2024

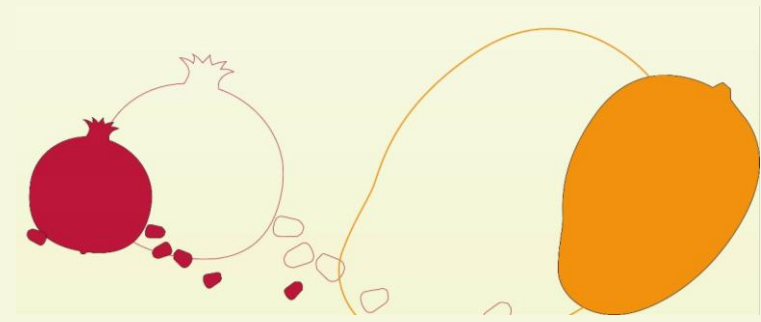


Session n°8

Market challenges and geopolitical issues affecting trade flows in Fruits and Vegetables (F&V)



FRUIT AND VEGETABLES SCHEME





Geopolitics of global food security

Laura DEMURTAS

Monitoring and External Relations Officer

OECD - COLEAD Fruit and Vegetable Industry Series

Paris - 29 X 2024

Confidential document for internal use



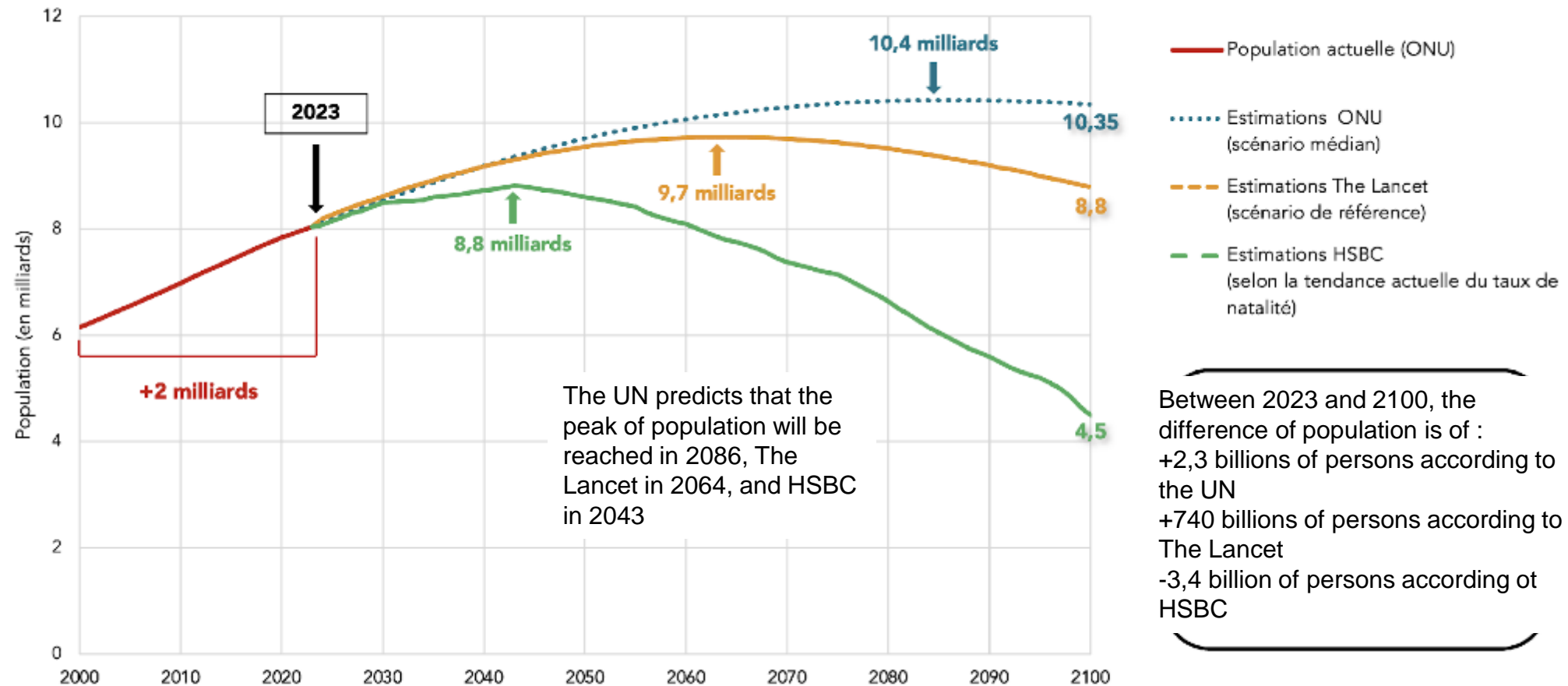
SAFETY

**Agriculture and
Food make world
peace**



+2 billion since 2000 - +2 billion by 2050
Two-thirds of this growth in Africa

Demographic projections for the 21st centuries

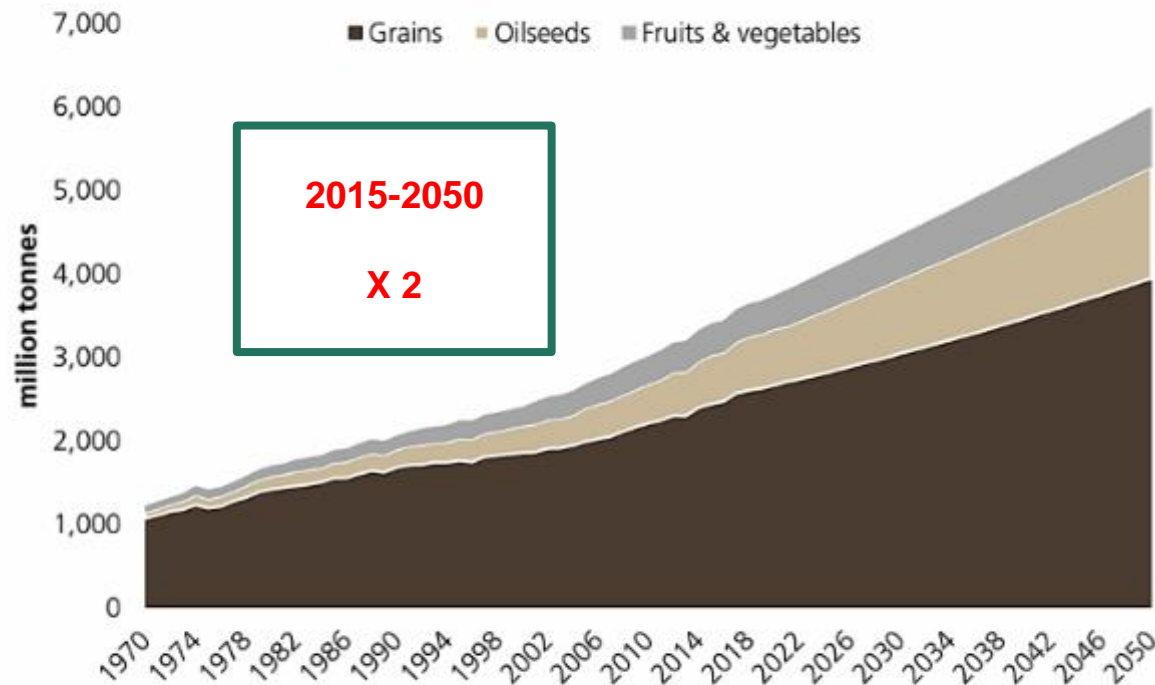




Rising demand for food + Protecting nature + Geopolitical realities + Innovation

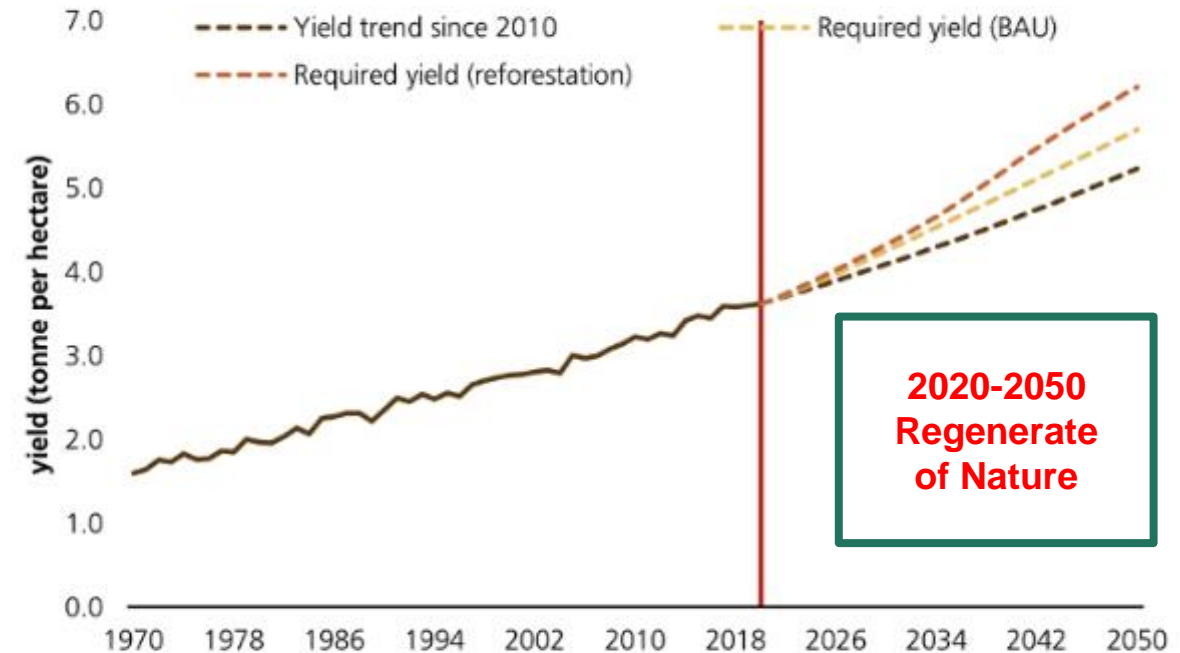
The inevitable verticalisation of agriculture

trends in world demand for agricultural products

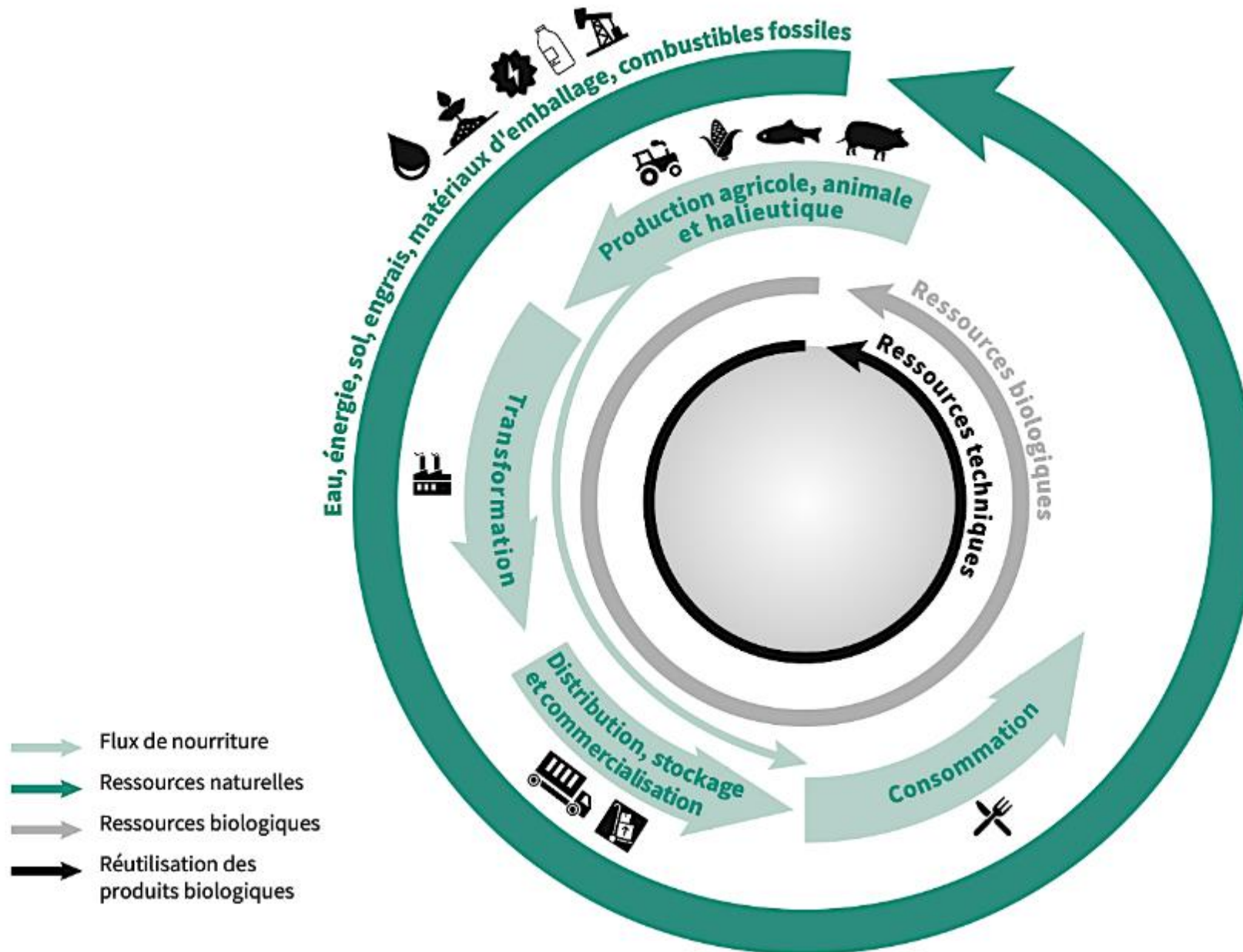


Source: USDA, UBS estimates

trends in agricultural yields



Source: USDA, FAO, UBS estimates



**Methanisation
as an example
controversial solution**

**Co-products
Green and local energy
Territorial jobs**

**Societal acceptability
Use of productions
for non-food purposes**



Overall...

- **Worldwide, 1 billion people are now over 60.**
- **This will rise to 2.2 billion by 2074! (20 to 25% of the total).**
- **2024: 22% of Europeans are over 65**
- **2074: this figure could rise to 30-35%.**
- **Within the Silver Economy, the question of food is fundamental.**
- **Offer a diet that meets their needs in terms of quantity and quality**
- **Diversity, customisation, innovation**
- ***"Ageing well = healthy longevity"***



- **Preparing for an ageing society**
- **Seniors and rural areas, both agricultural and non-agricultural**
- **Senior food market**

WORLD TRADE SINCE THE BEGINNING OF THE CENTURY WORLD

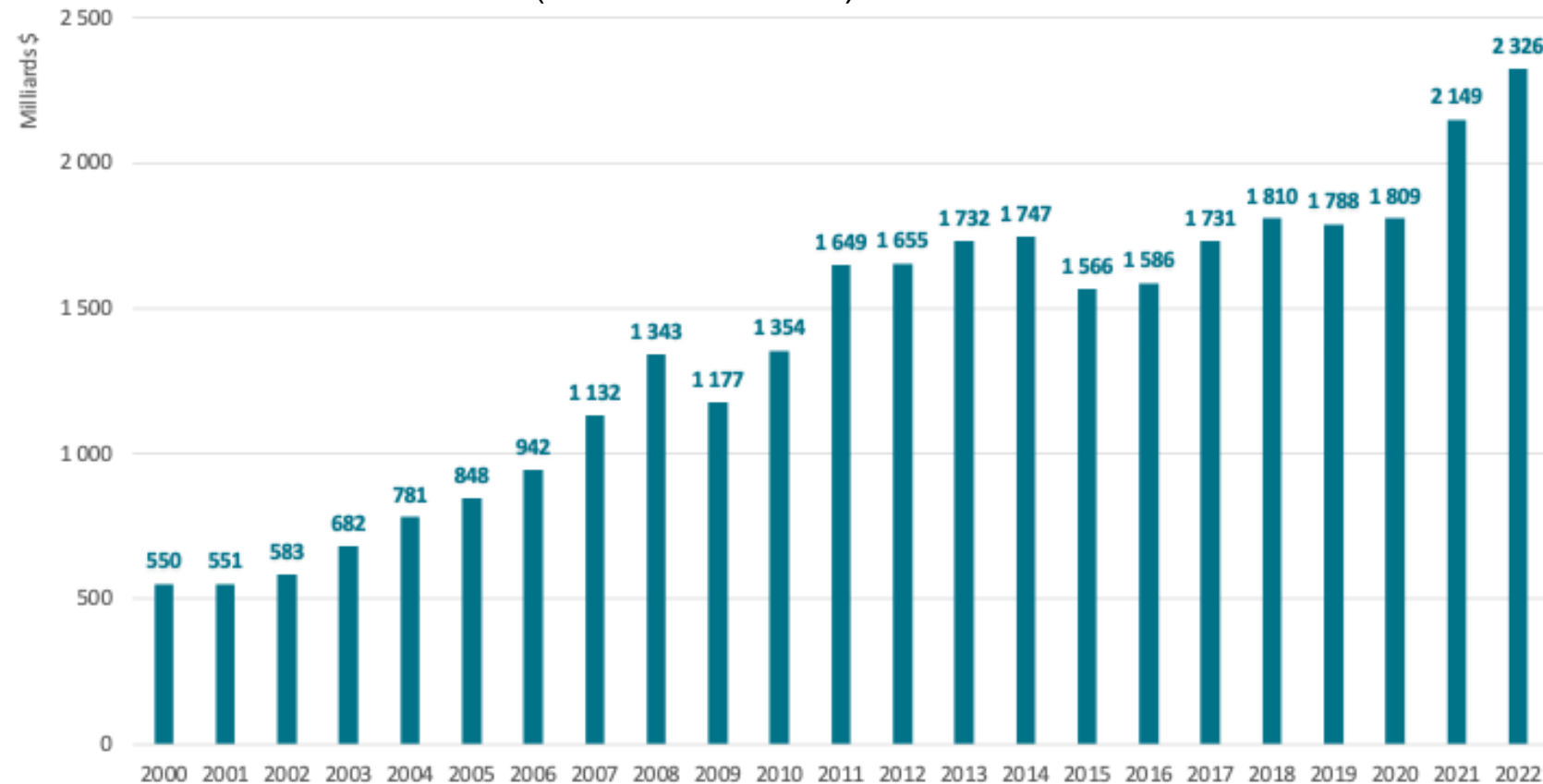
World trade in goods, all products combined, has almost **quadrupled**, rising from \$6,450 billion in 2000 to **\$23,800 billion in 2023**.

Trade in agricultural products will reach **\$2,320 billion** in 2022 (+8% on 2021), representing **9%** of global merchandise trade.

The **sea** is the preferred route for world trade, accounting for over **80% of the volume traded** worldwide (11 billion tonnes by 2022).

**Agricultural products account for 9% of international trade by value.
Trade has grown steadily over the last two decades, more significantly than world trade as a whole.**

Trends in world agricultural trade
(in billions of USD)



Trade (in value)

Since the turn of the century :

- x 4.2 for agricultural trade
- x 3.9 for global trade

In terms of volume, world agricultural trade tripled between 2000 and 2022.

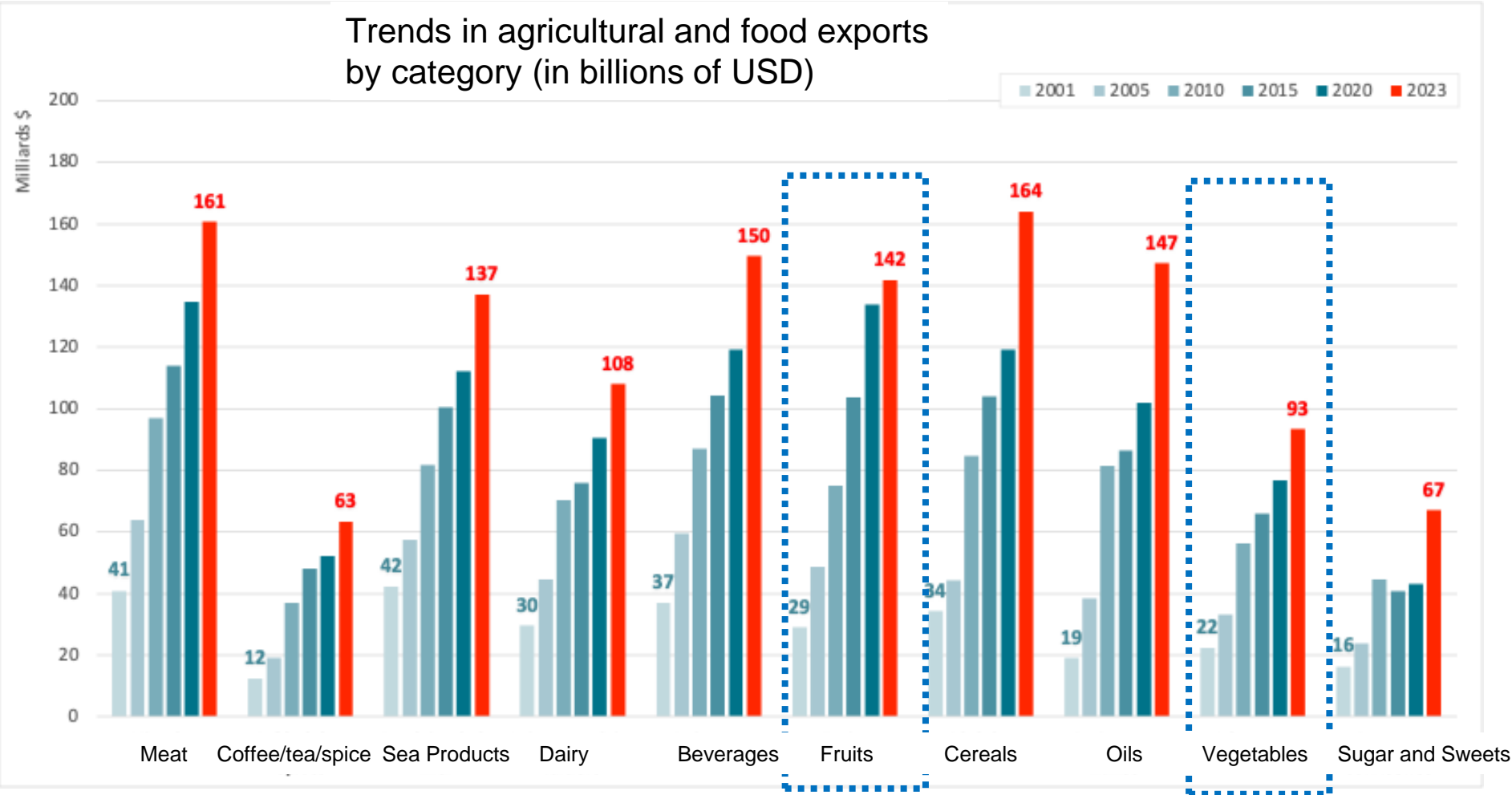
Global trade (in value)

- China will be the world's leading exporter with \$3,544 billion in 2022 (up 1,322% on 2000!), ahead of the United States (\$2,019 billion) and Germany (\$1,688 billion).
- The main products traded are machinery and electrical equipment (\$3,353 billion in 2022), ahead of mineral fuels and oils (\$3,152 billion).

THE 10 MOST HEAVILY TRADED CATEGORIES OF AGRICULTURAL AND FOOD PRODUCTS



Cereals, meat and beverages dominate the debate, followed by oils and seafood.
Brazil and the United States, export heavyweights.

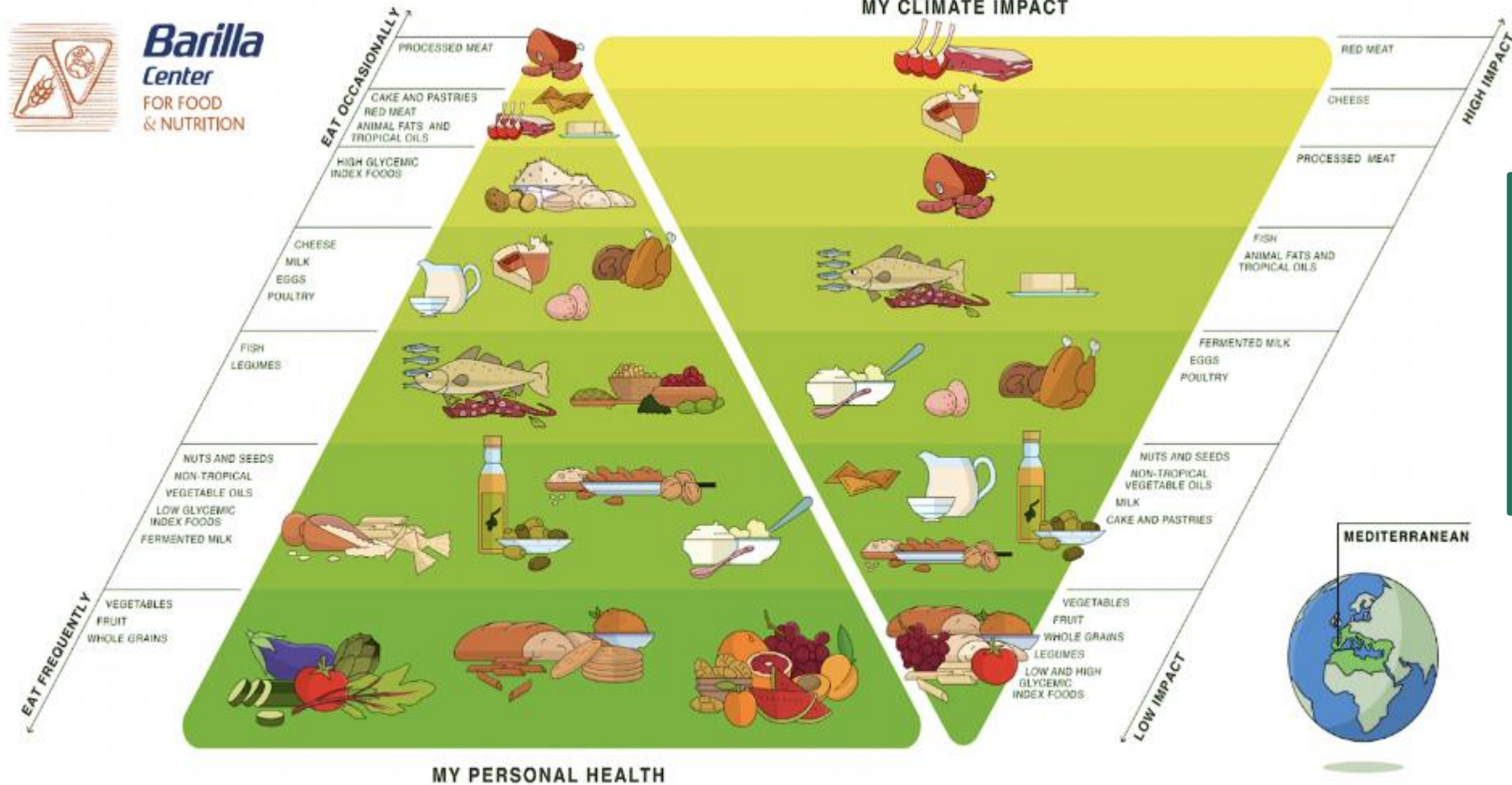


Explosion of trade (by value)
Since 2001

- Meat: x4
- Coffee, tea and spices: x5
- Seafood products: x3
- Milk and dairy products: x4
- Drinks: x4
- **Fruit: x5**
- Cereals: x5
- Fats and oils: x8
- **Vegetables: x4**
- Sugar and confectionery: x4

F&L
USD +235 MILLION
No. 1 in the world

A dual dimension: my health and that of the planet



**Sustainable food systems
are not uniform**

**Socio-cultural approach
and geographical**

Long live diversity

What role can fruit and vegetables play in the food transition?



**Transition
food**

(Re)greening the diet
(fruit and vegetables in particular)

Protein consumption
Reduce - Rebalance
(animal, vegetable)

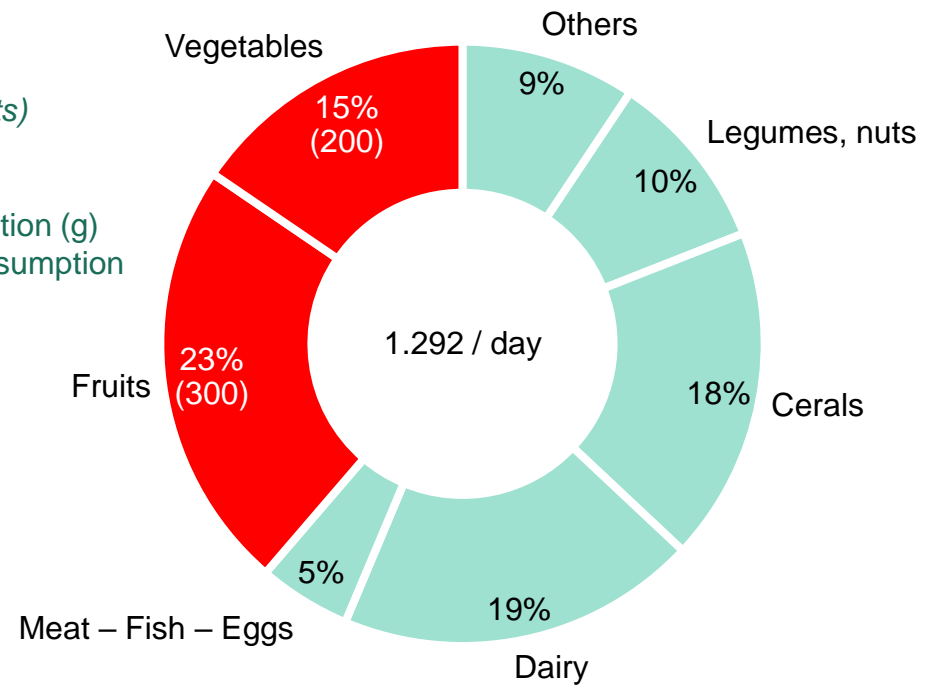
Reduce your consumption of
sugar - salt - alcohol

Increase consumption of fresh vs.
processed products
(more seasonal)

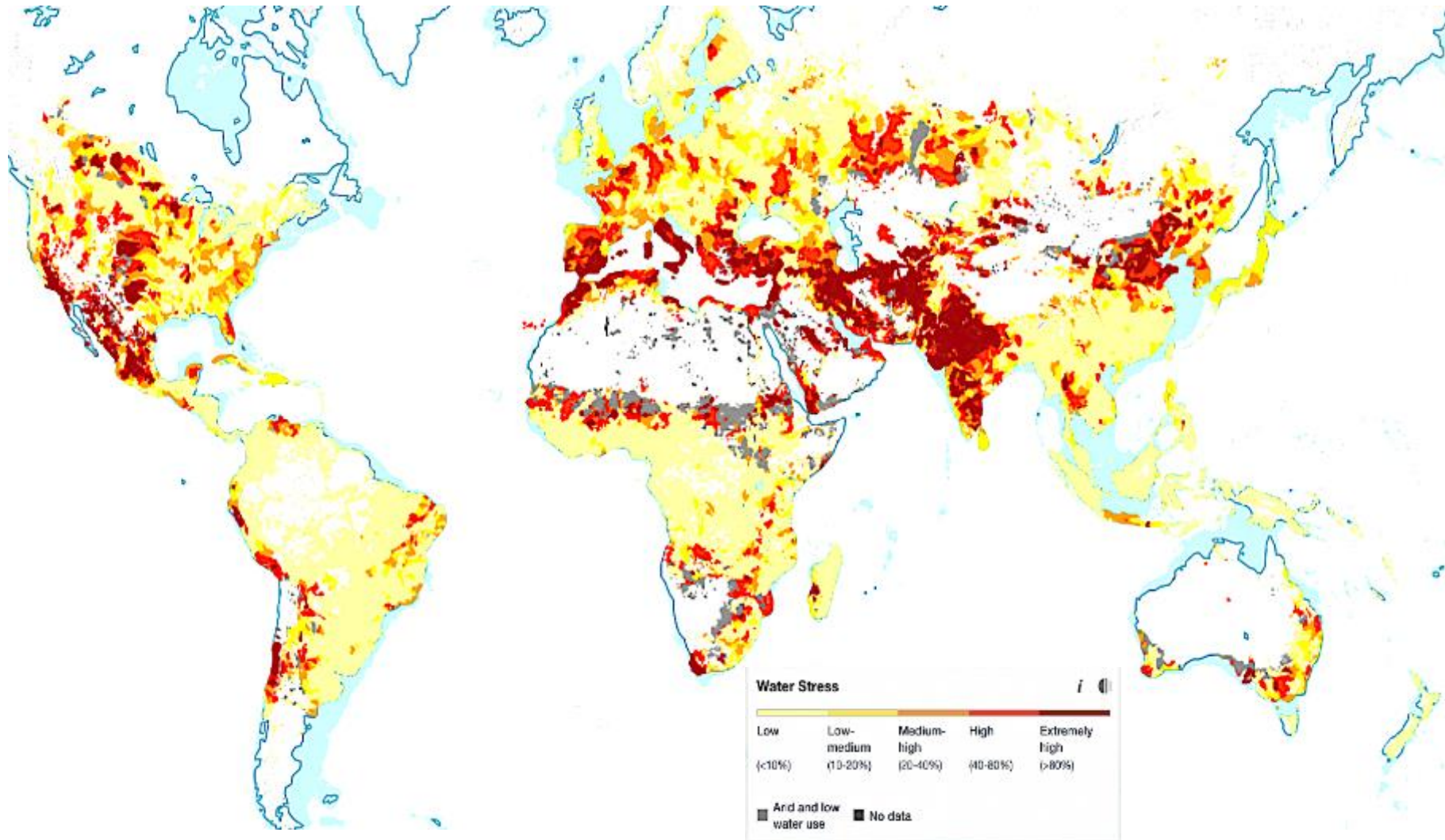
Eat Lancet diet (2500Kcal - 2019)

Eat Lancet diet
(to respect planetary limits)

Fruit and vegetables
Approx. 40% of food consumption (g)
Approx. 50% of cal. Calorie consumption (Kcal)



Water stress is increasing and complicating the agricultural equation



A "thirst for water
in the world

50% of the population
in 2050 under water stress

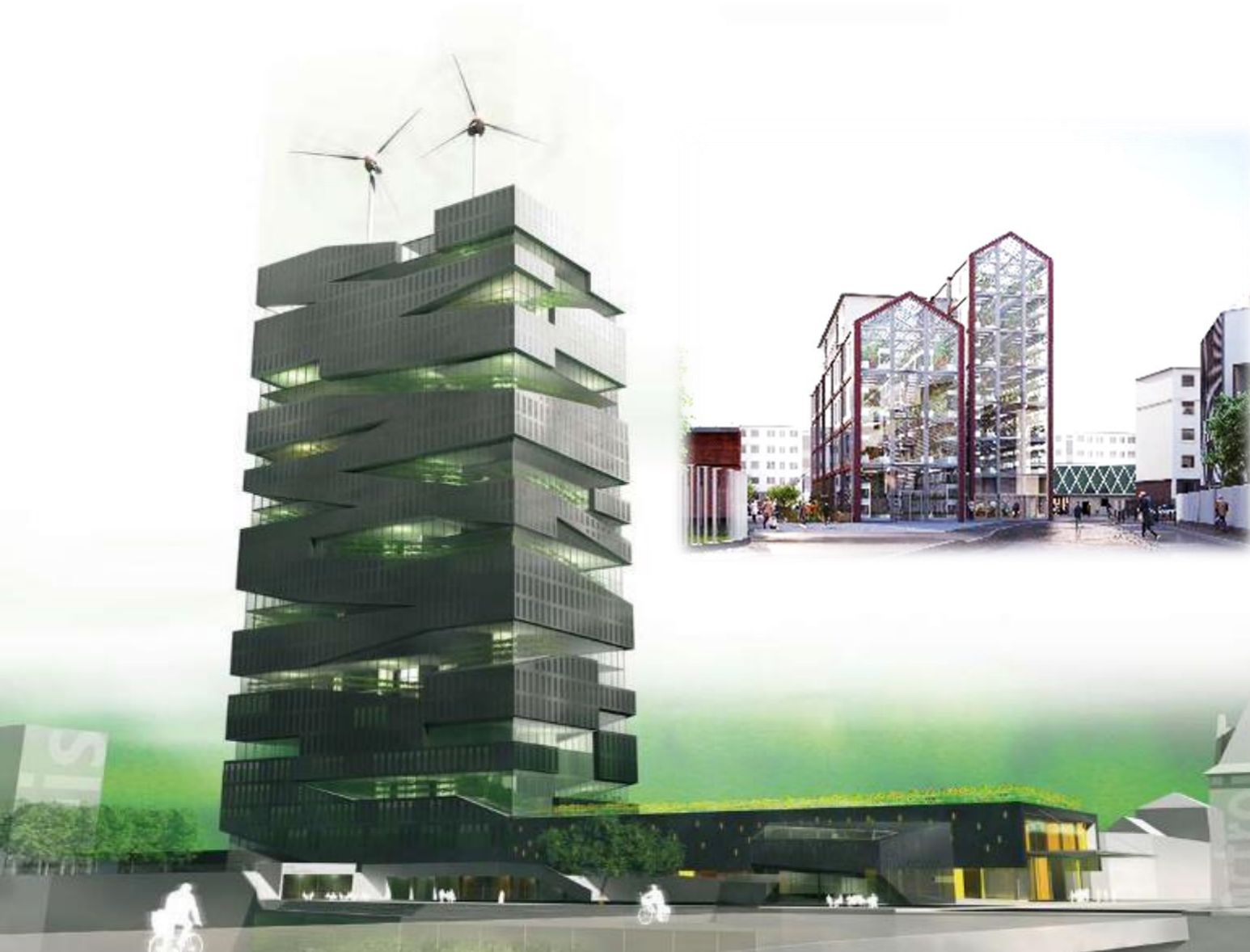
Conflicts
between users

Hydraulic violence
local

Hydro-dependencies
Hydro-diplomacy

Gains from irrigation
and reducing waste

How far can vertical farms go?



A solution for specific countries
(Singapore, U.A.E., Qatar, Malaysia, Netherlands, etc.)
or more global?

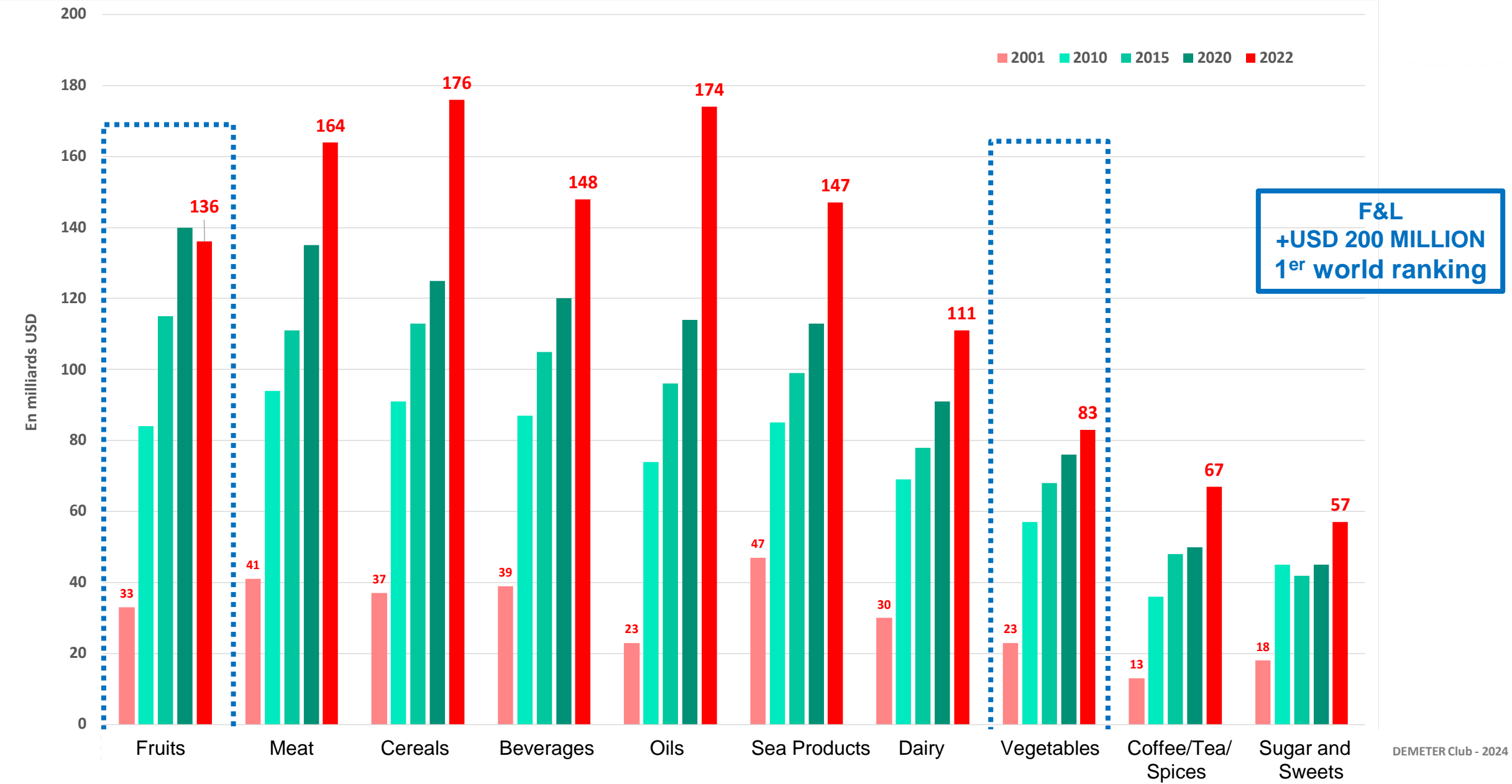
A solution for specific crops
(F&V, aromatic and medicinal plants, etc.)
or more global?

A solution for the future?
Financial cost and energy balance issues
and product quality

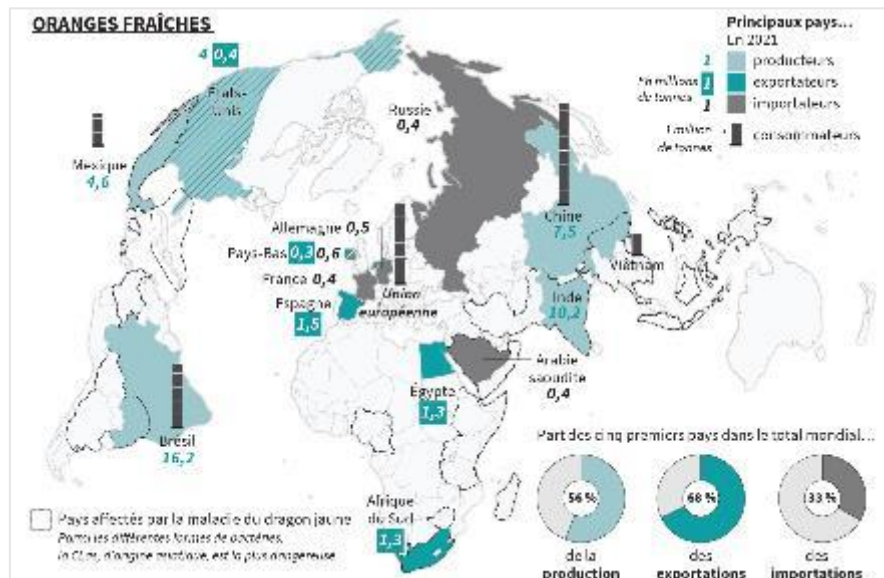
A modular solution?
Buildings, cupboards, containers,

Vertical farms in controlled environments
Climate control, zero pesticides,
customised quality

THE EXPLOSION IN WORLD TRADE IN AGRICULTURAL AND FOOD PRODUCTS



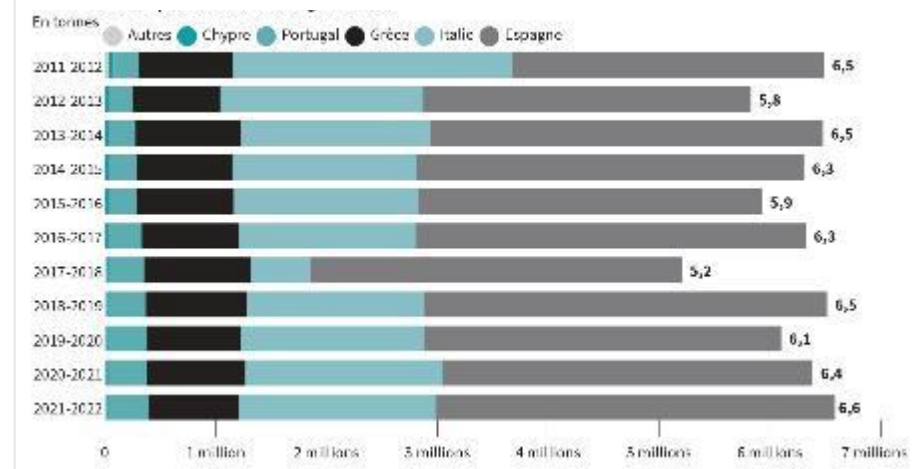
Production and market for fresh oranges



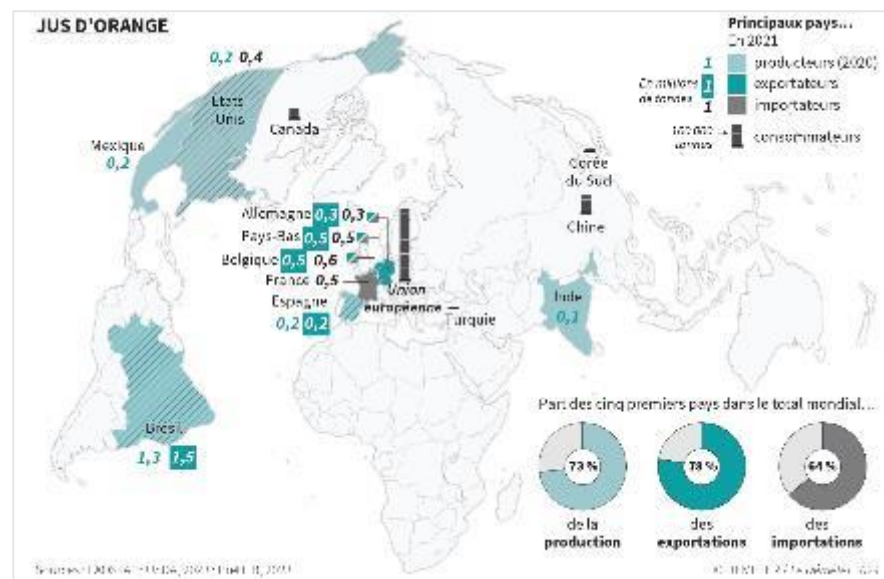
Spain, EU leader



Evolution of orange production in the EU



Orange juice production and market



Fruit for success



Production vulnerable



Grown in **over 110 countries**

Main producers: **Brazil, China, India, Mexico, United States**

4^e fruit produced (76 Mt in 2022), behind bananas (135 Mt), watermelons (100 Mt) and apples (96 Mt)

Spain: 7^e world producer

Pests: e.g. Huanglongbing or "**yellow dragon disease**

→ fall in US production: 2.3 Mt in 2022-2023: + low volume for 56 years
→ risk for the Mediterranean basin

Climate: **droughts** (e.g. Mexico, 2023, 30% drop in production), **excess water** (e.g. Brazil, orange concentrate), **hurricanes** (e.g. Florida), **movement of cultivated areas** (northwards)

Fall in volumes and availability: **price increase**
→ orange juice +77% (July 2022-February 2023) on world markets

THREE KEY PRODUCTS: WHY IT'S USEFUL TO LOOK AT EU PERFORMANCE FROM TIME TO TIME



Bananas

India, China and Indonesia
= 40% world production

Ecuador = 30% world export



Apples

China = 50% world prod.
Poland = 10% world export



Fresh tomatoes

China, India and Turkey
= 55% world production
Mexico, P-B and Morocco
= 45% world export

Producers

- ① India: 33.8 Mt
- ② China: 11.8 Mt
- ③ Indonesia: 9 Mt

EU: 0.6 Mt

Exporters

- ① Ecuador: 6.9 Mt
- ② Guatemala: 2.5 Mt
- ③ Philippines: 2.4 Mt

EU: 2.9 Mt

Importers

- ① United States: 4.6 Mt
- ② China: 1.8 Mt
- ③ Russia: 1.5 Mt

EU: 8.1 Mt → n°01

- ① China: 47 Mt
- ② Turkey: 4.7 Mt
- ③ United States: 4.5 Mt

EU: 12.5 Mt → n°02

- ① China: 1 Mt
- ② Poland: 0.9 Mt
- ③ Italy: 0.8 Mt

EU: 2.9 Mt → n°01

- ① Russia: 0.6 Mt
- ② Germany: 0.6 Mt
- ③ India: 0.4 Mt

EU: 2.2 Mt → n°01

- ① China: 67.4 Mt
- ② India: 20.9 Mt
- ③ Turkey: 13.1 Mt

EU: 16.6 Mt → n°02

- ① Mexico: 1.9 Mt
- ② Netherlands: 0.9 Mt
- ③ Morocco: 0.7 Mt

EU: 2.5 Mt → n°01

- ① United States: 1.8 Mt
- ② Germany: 0.7 Mt
- ③ France: 0.5 Mt

EU: 2.8 Mt → n°01

The EU and the Mediterranean: competition or complementarity?

MOROCCO



- Green Plan since 2008
- Exports to EU + Russia + Africa
- EU-Africa logistics hub
- Breakthroughs on avocados, red fruit, clementines
- Labour competitiveness
- Water fragility



**Circum-Mediterranean countries
account for 20% of world production
of F&V**

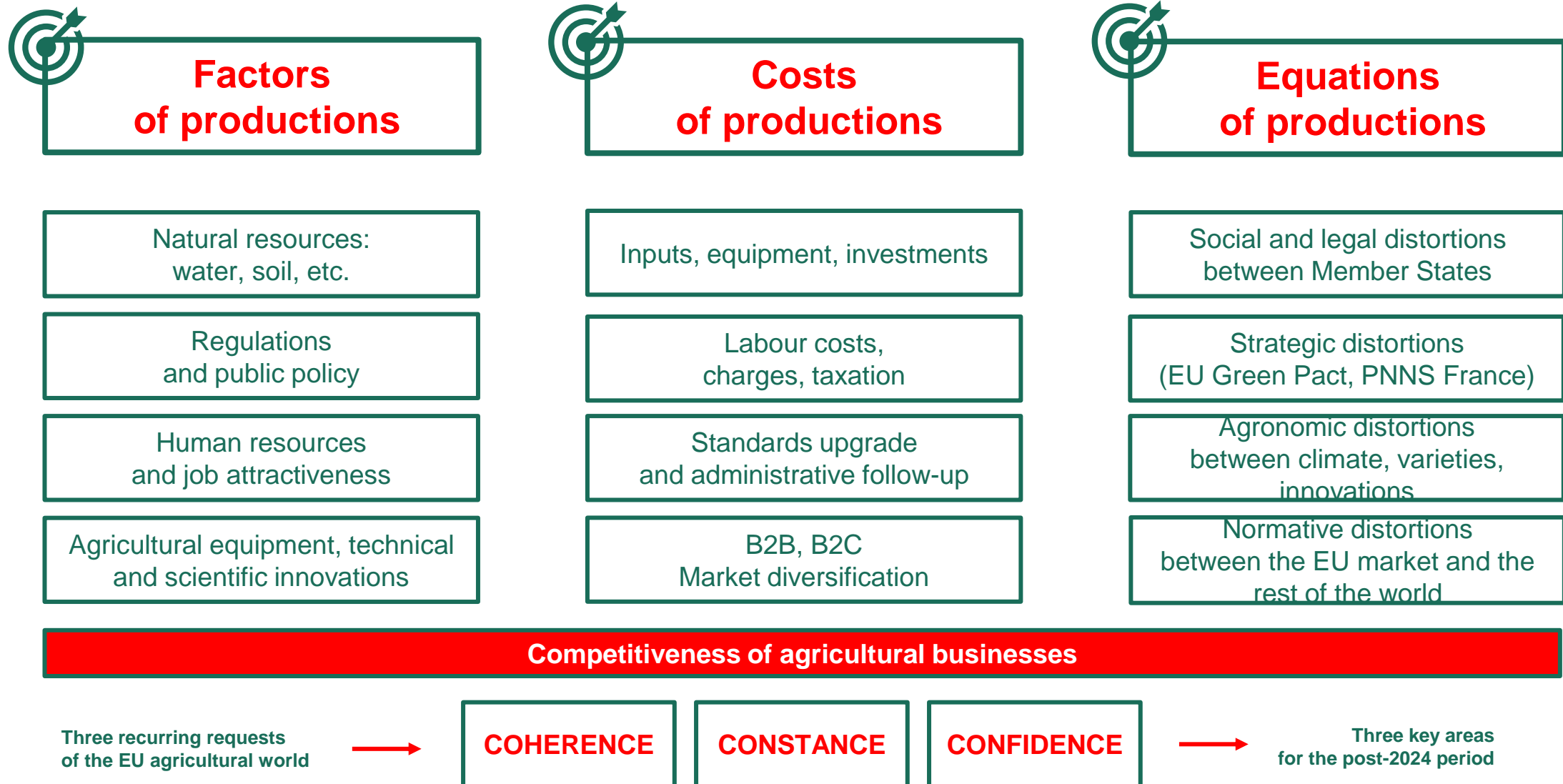
TURKEY



- Climate diversity
- Exports to EU + Russia + Central Asia + Middle East
- Global logistics hub
- Agro-industrial forces
- Water resources
- Adana and its region, the new California/Spain in F&V

3 key factors on which we need to take collective action

DEMETER Club - 2024



Plural innovations, sustainable transitions, food education

Eco greenhouses



Zero pesticide residues



Organic



Integration of foreigners



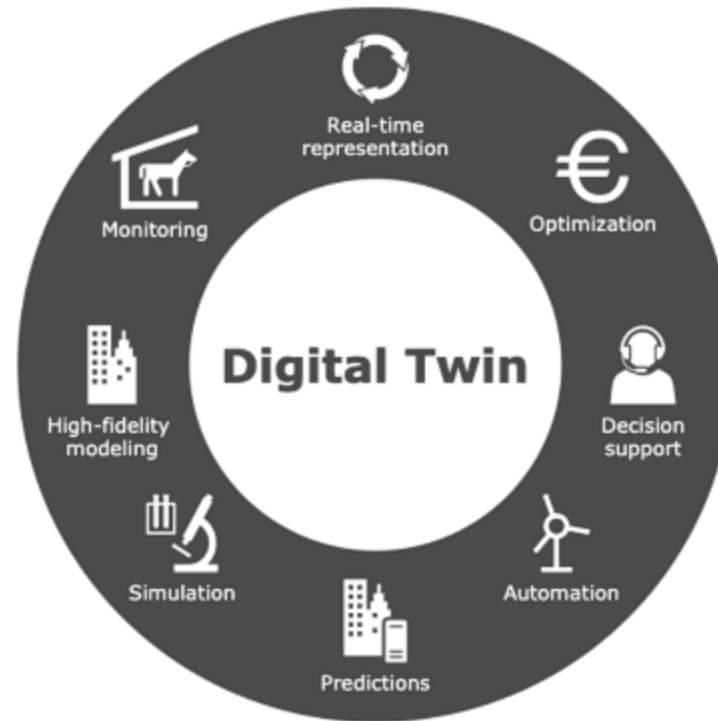
Plastic packaging



Customers-Citizens-Consumers



From fork to farm, data, intelligence...and people



Innovation is...

**technology
environmental
socio-organisational
mental!**

...

Intelligence is...

**welcome
artificial
human
combinatorial!**

...



This document and its presentation are not binding on the companies and professional bodies that are members of the DEMETER Club.

The information contained in this document and the comments made are the sole responsibility of the author.

55 rue La Boétie

Village by CA

75008 Paris

demeter@club-demeter.org



THE FRUITS AND VEGETABLES INDUSTRY SERIES

Thank you



FRUIT AND VEGETABLES SCHEME



The OECD-COLEAD Fruits and Vegetables Industry Series focuses on market access conditions and opportunities for the fruit and vegetable sector, especially for fruit and vegetables producers and exporters from ACP-countries. This activity is supported by the Fit For Market Plus programme, implemented by COLEAD within the Framework of Development Cooperation between the Organisation of African, Caribbean and Pacific States (OACPS) and the European Union.