

Soluciones basadas en la naturaleza: pago por servicios ambientales

The ethical dimension. Our common home is in danger

Universitat Politècnica de Valencia, setiembre 2022

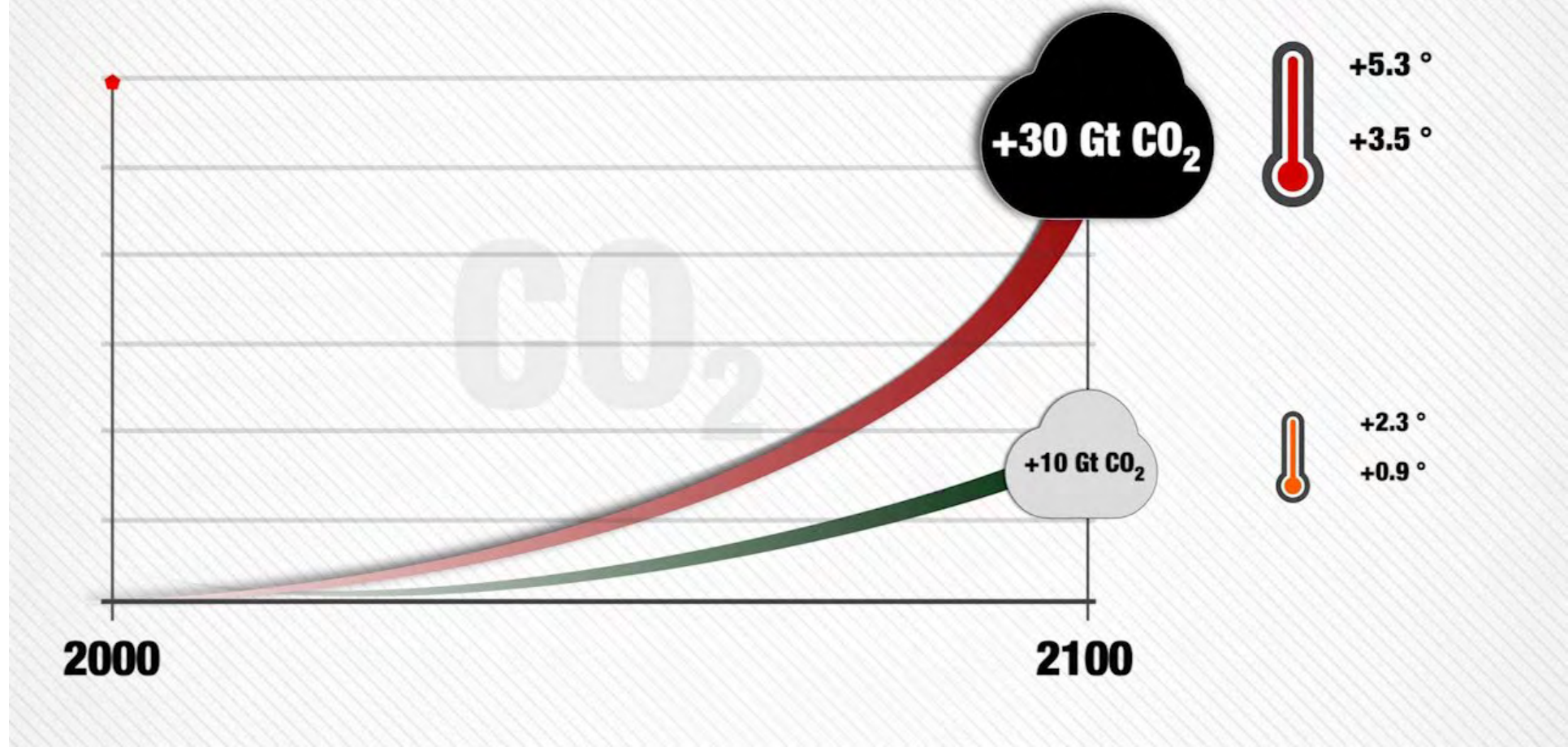
Dr. Rene Castro Salazar

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I) Climate Change is a global shock

- The World's still walking in the wrong path

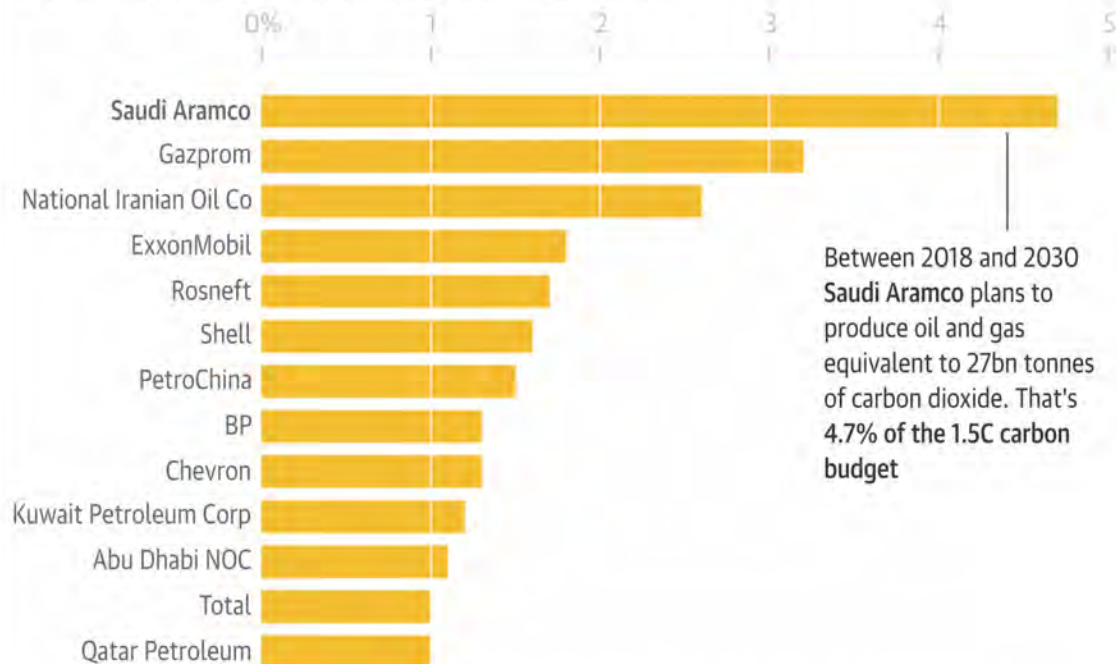
Following the destructive path



OIL companies increasing their use of CO2 planetary budget

13 companies are projected to blow almost a quarter of the remaining 1.5C carbon budget

CO₂ equivalent from total production between 2018 and 2030 and how much of the 1.5C carbon budget this accounts for



Between 2018 and 2030 Saudi Aramco plans to produce oil and gas equivalent to 27bn tonnes of carbon dioxide. That's 4.7% of the 1.5C carbon budget

II) Paris agreement offers hope

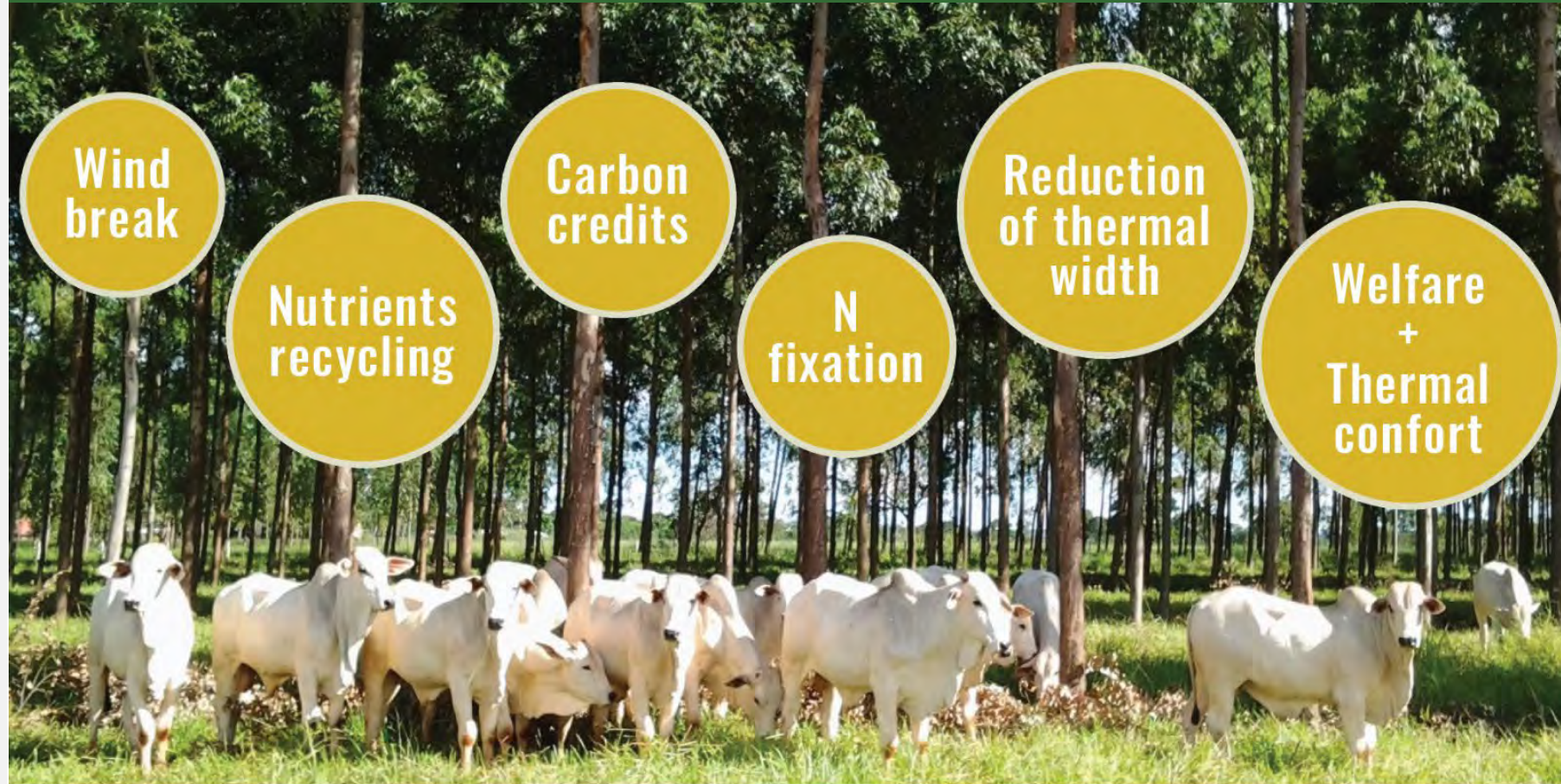
Developed and developing countries, big and small need to act now.

Low carbon coffee + trees= CO2 neutrality in Costa Rica



Ref: RCS Self elaboration
2020

Brazilian CO₂ neutral beef



TREE PRESENCE IN TROPICAL LIVESTOCK PRODCUTION SYSTEMS



Ref: Bernardo Aguilar and Costa Rican ministry for the environment, August 29 2019



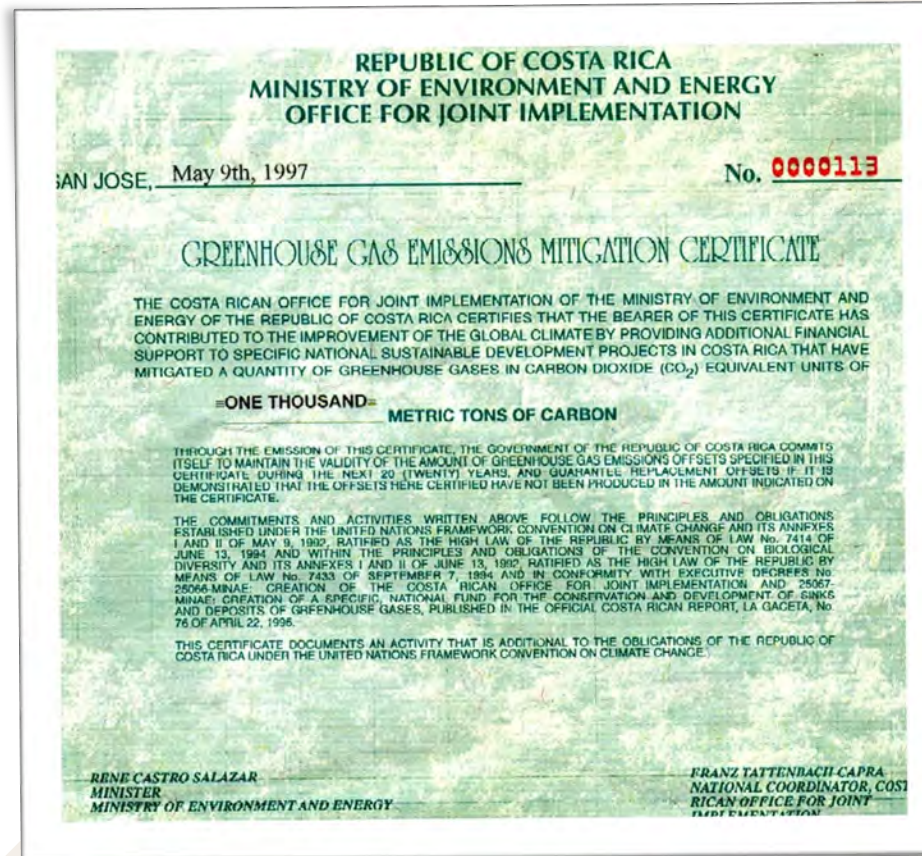
Manejo del Fuego CRC 🇬🇲 @tonopizote · 17h

El #SINAC #MINAE fortalece la capacidad técnica en #manejodelfuego para sus funcionari@s a nivel nacional.

Instructores del Programa de Manejo del Fuego y de CONRED de Guatemala; capacitaron

TOÑO PIZOTE

The first CO2 certificate sample from 1997...then Kyoto Protocol collapsed.



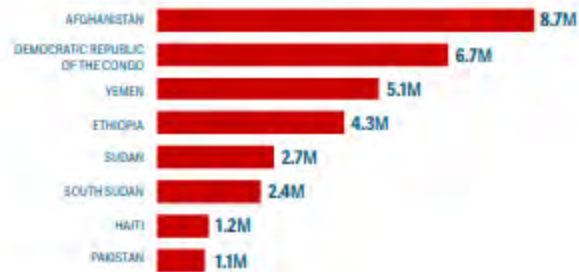
Ref: First transaction in the World, Costa Rica and Norway 1997.

III) Food crisis: distribution chain interruption, increasing prices and waste

After the climate and the COVID shocks...the food shock

Extreme cases in food emergency in 8 countries

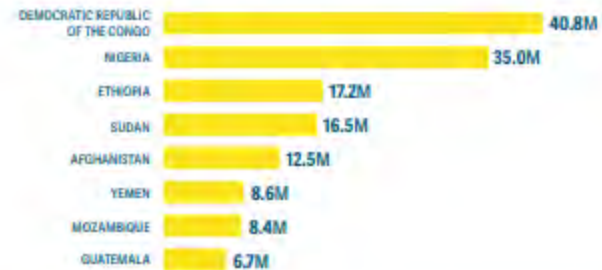
FIGURE 1.3
Eight countries/territories had over one million people in Emergency (IPC/CH Phase 4) in 2021



Source: FSIN using IPC data.

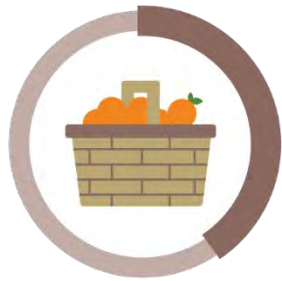
5 The Government of Ethiopia did not endorse the findings of this IPC analysis.

FIGURE 1.4
Eight countries/territories with the largest populations in Stressed (IPC/CH Phase 2) in 2021



Source: FSIN using IPC and CH data.

Food loss is a CRIME and waste comes in different shapes



In developing countries 40% of losses occur during **harvest** and **processing level**



In industrialized countries 40% of losses happen at the **retail** or **consumer level**



Destroyed in transport



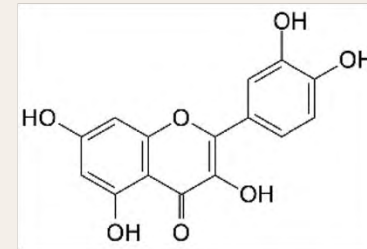
Not bought at a supermarket



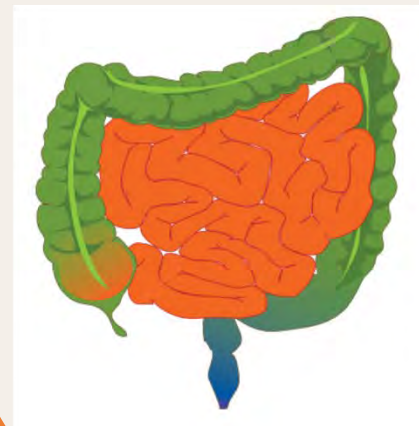
Thrown away by the consumer

...and in new forms

Malnutrition

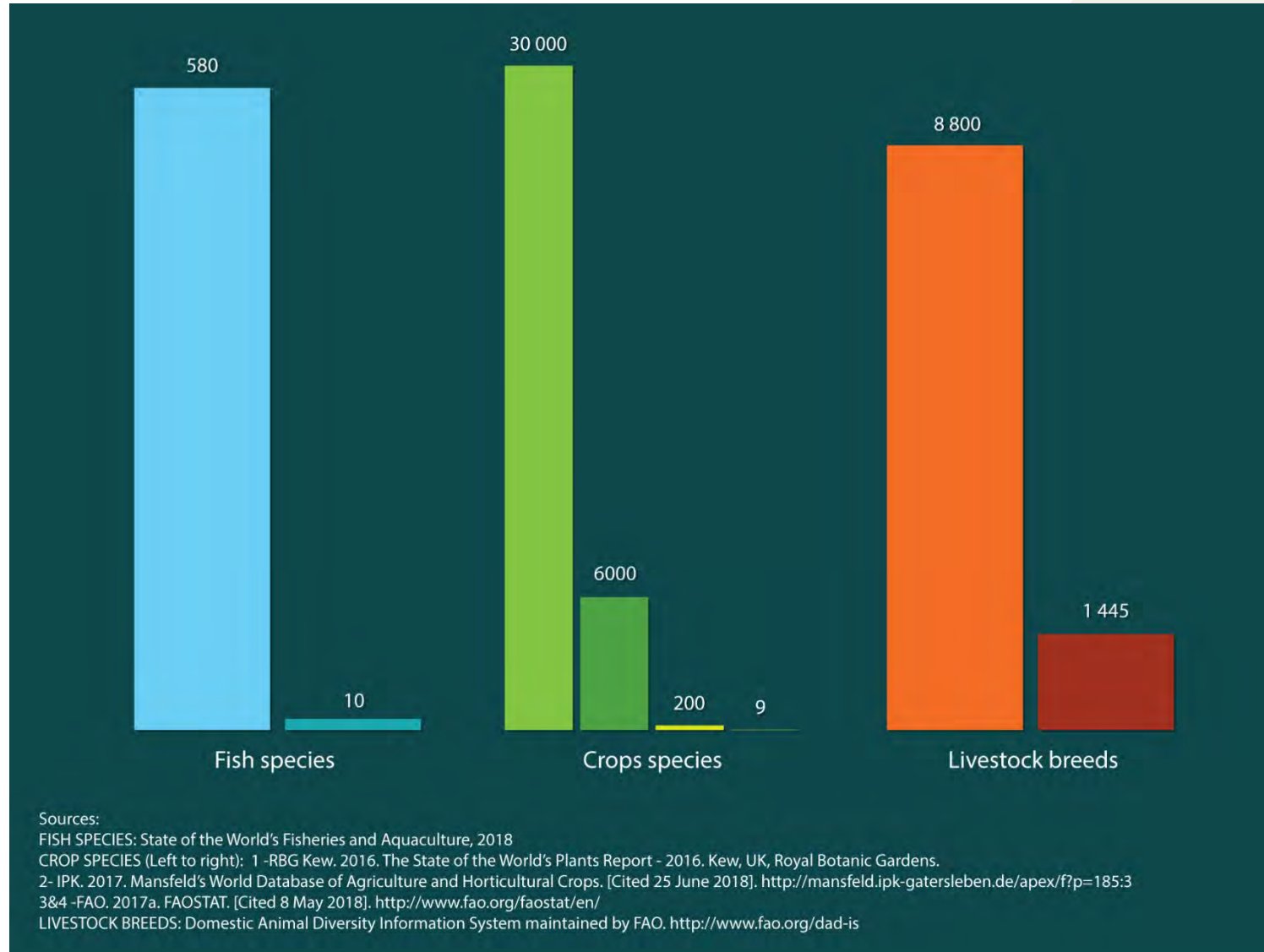


In both developing and industrialized countries losses also happen **within the consumer**



Nutrients are lost when dietary intake and nutritional requirements do not match

A less diverse diet is bad for biodiversity and nutrition



Growing (Mal)nutrition...and food waste...the ethical dimension

**821 million
hungry**

**1.9 billion
overweight**





Food is an inalienable right

“Hunger is criminal. Food
is an inalienable right”

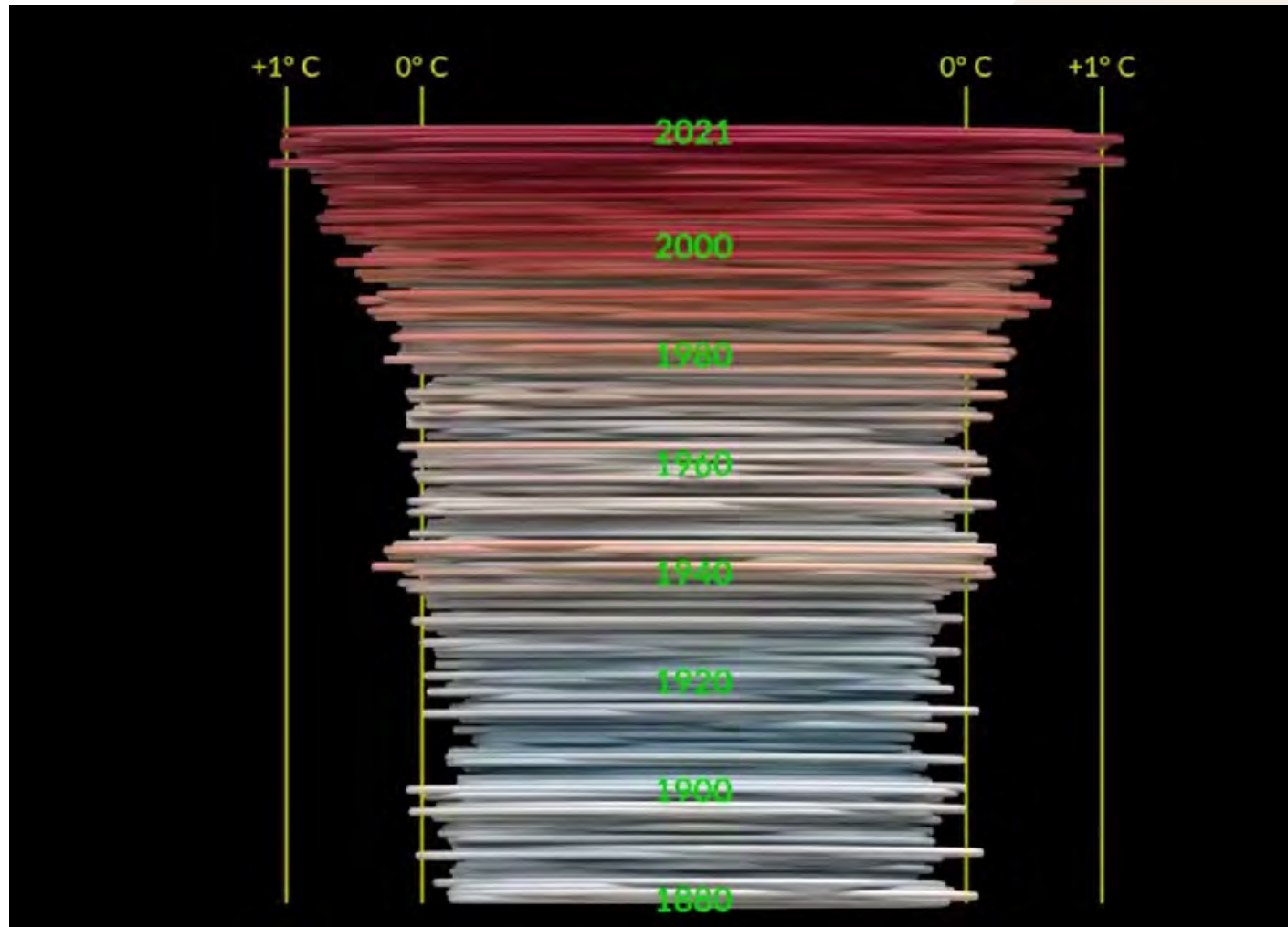
*(Pope Francis, 2014, p. 37 FAO
Dialogues, 2016)*



Part IV: If we fail?

Forced permanent migration and social chaos.

The climate spiral 1880-2021



How a Warming Planet Drives Human Migration

Climate displacement is becoming one of the world's most powerful — and destabilizing — geopolitical forces

