Greening suppliers: Deforestation & Conversion-Free (DCF) as Market baseline

Beyond Silos

CSI Webinar 16/06/2022

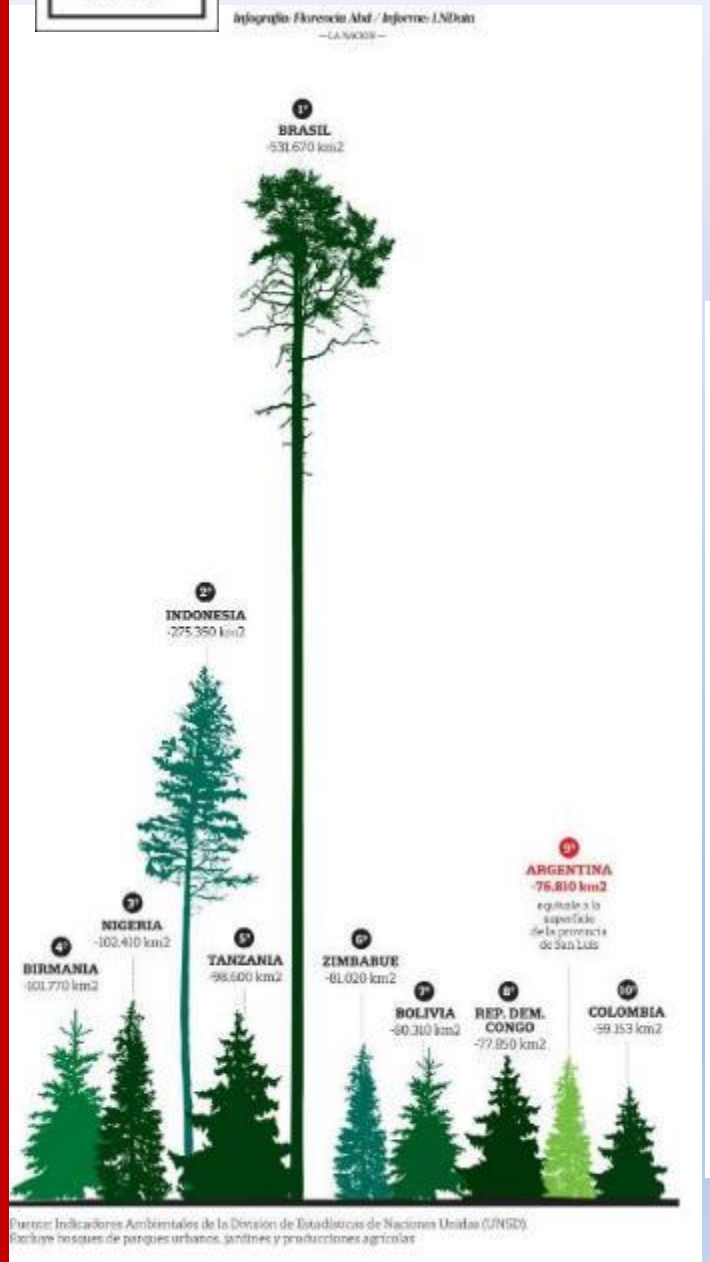
JF Timmers

WWF Policy and Advocacy Manager

DCF Supply Chains

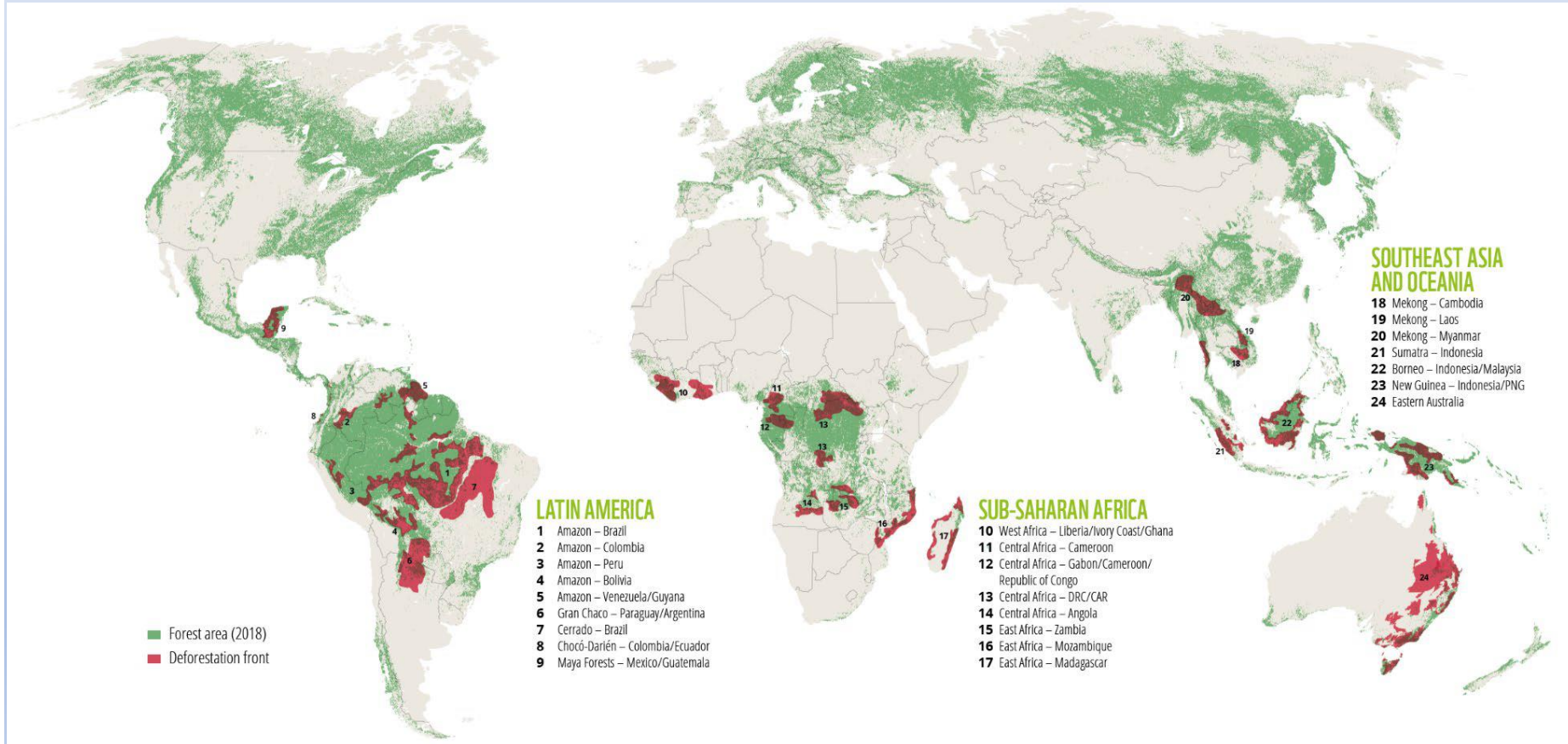
10 countries with largest deforestation 1990 – 2015
Source:
http://unstats.un.org/unsd/environment/qindicators.htm

Habitat loss is the biggest single (growing) source of pressure on biodiversity worldwide, from agriculture and forestry



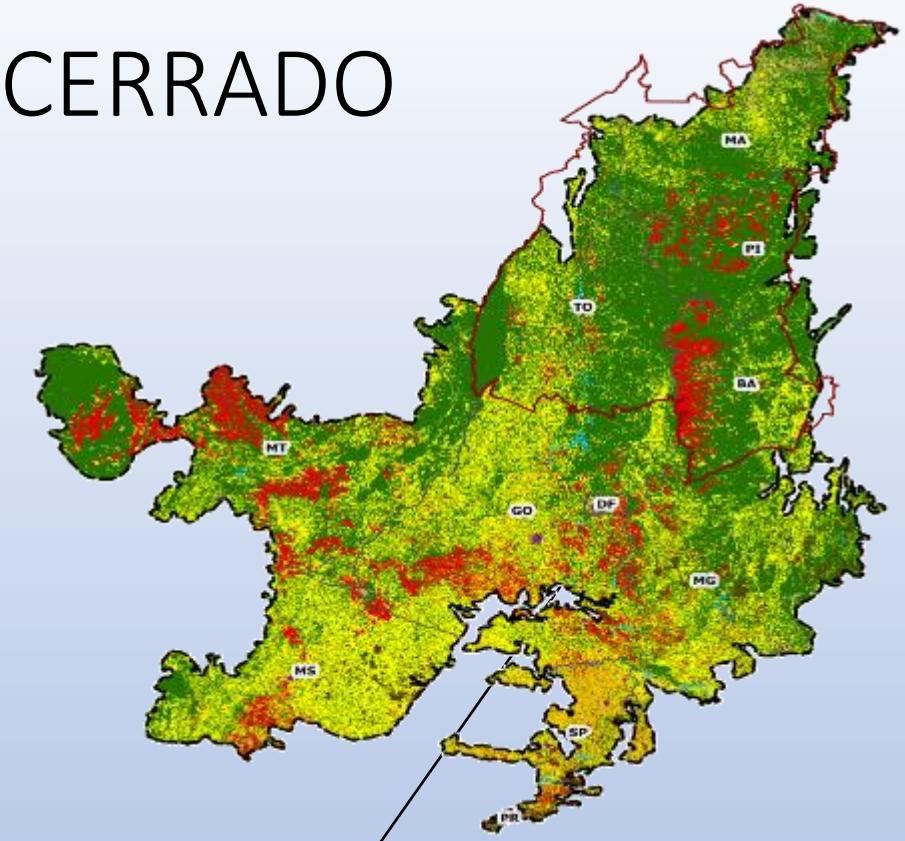
An estimated 23% of total anthropogenic **greenhouse gas emissions** (2007-2016) derive from Agriculture, Forestry and Other **Land Use** (IPCC, 2020)

WWF 2021: Deforestation fronts: drivers and responses in a changing world



AMAZON

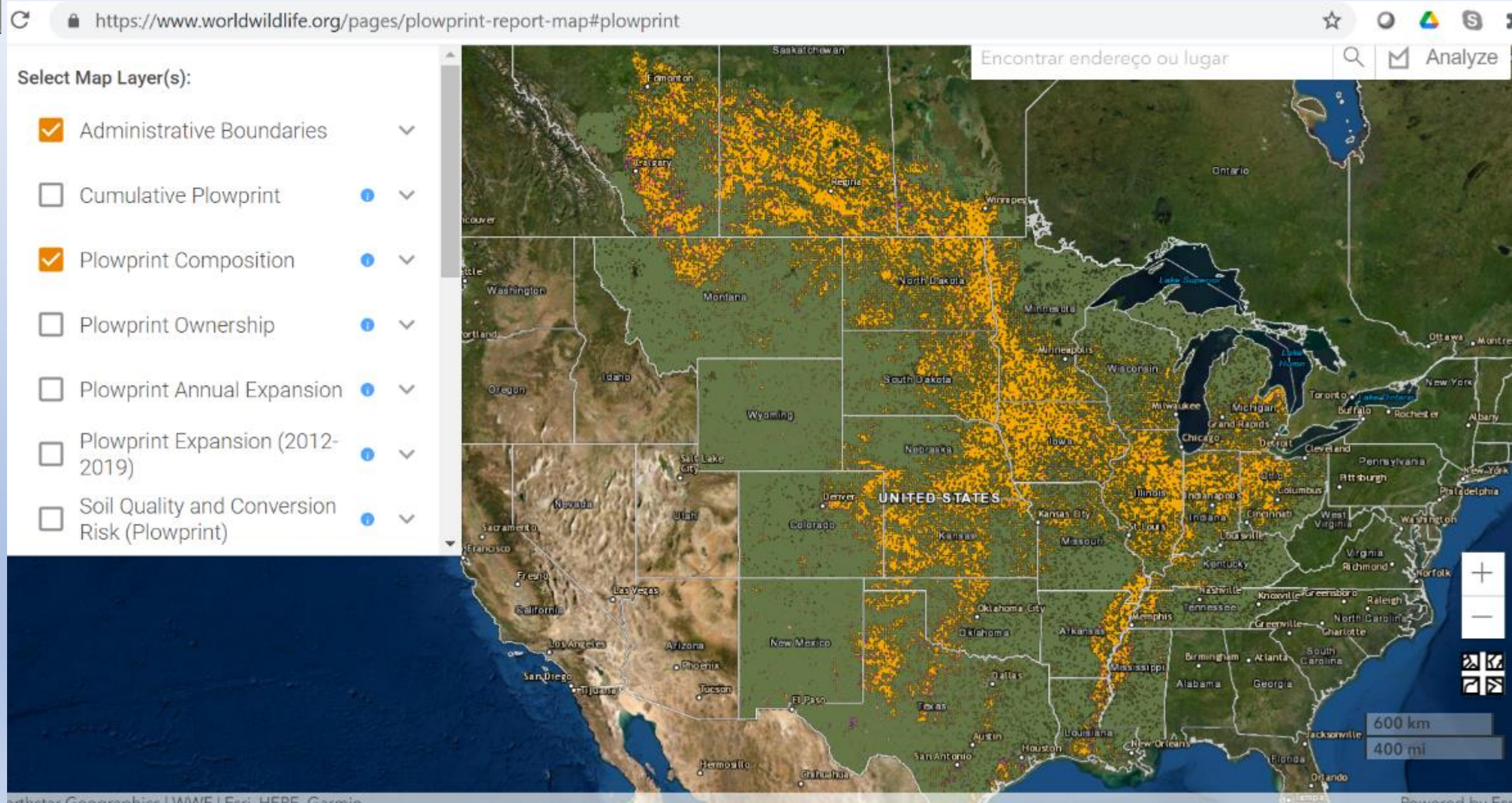
CERRADO



- 12% CONVERSION
- ~ 650.000 ha/year
- LIVESTOCK AS MAIN DRIVER
- MOSTLY ILLEGAL DEFORESTATION

- 48% CONVERSION
- ~ 1,000.000 ha/yr
- LAND SPECULATION linked to SOY
- MOSTLY LEGAL CONVERSION

NOT JUST FORESTS, NOT ONLY IN THE TROPICS – 3rd largest, overlooked conversion frontier: the North American Great Plains



Impacts of crop expansion on traditional and indigenous communitie

- Land grabbing
- Forced eviction
- Threats and violence
- Loss of traditionnal livelihood
- Loss of culture, identity, references
- Pain and shame
- Water shortage and pollution
- Etc.

| 04-07-2018

Land speculation is leading to human rights violations and eco-destruction in Brazil

A new report uncovers how international pension funds, foreign investments and institutions are tearing down any future for rural communities in Northeastern Brazil.

The advance of agribusiness in the MATOPIBA region (an area of around 73 million hectares expanding across the Brazilian States of Maranhão, Tocantins, Piauí, and Bahía), backed by international capital, is destroying the livelihoods of rural communities and significantly eroding local biodiversity.

The MATOPIBA region is situated in the northern part of the Cerrado, an ecoregion, which is home to 5% of the biodiversity on Earth. Although it is less known than the Amazon, it is just as vital for both the country's and the planet's ecology. The indigenous and traditional communities living there have developed strategies of survival and coexistence with this ecosystem and their practices and knowledge are indispensable for the survival of the

https://news.mongabay.com/2018/07/cerrado-traditional-communities-win-back-land-from-agribusiness-firm
https://news.mongabay.com/2018/03/cerrado-u-s-investment-spurs-land-theft-deforestation-in-brazil-say-experts/
https://www.fian.org/en/news/article/land_speculation_is_leading_to_human_rights_violations_and_eco_destruction_in_brazil/
https://www.globalwitness.org/en/campaigns/environmental-activists/their-faces-defenders-frontline/#chapter-4/section-1
https://www.cptnacional.org.br/component/jdownloads/send/60-dados-2017/14076-en-suggested-guideline-murders-in-the-countryside-hit-a-new-record-and-reach-the-highest-number-since-2003-cpt-communication-office?Itemid=0
https://news.mongabay.com/2018/09/connect-the-dots-cerrado-soy-drives-inequality-to-provide-eu-with-chicken/

Deforestation, conversion and pandemic

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Diseases Are Associated With Changes in Forest Cover and Oil Palm Expansion at Global Scale

Serge Morand[1,2,3]* and Claire Lajaunie[4]

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[2]Faculty of Veterinary Technology, Kasetsart University, Bangkok, Thailand
[3]Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand
[4]Inserm-Laboratoire Population Environnement Développement (Aix-Marseille Université, IRD), Marseille, France

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Deforestation is a major cause of biodiversity loss with a negative impact on human health. This study explores at global scale whether the loss and gain of forest cover and the rise of oil palm plantations can promote outbreaks of vector-borne and zoonotic diseases. Taking into account the human population growth, we find that the increases in outbreaks of zoonotic and vector-borne diseases from 1990 to 2016 are linked with deforestation, mostly in tropical countries, and with reforestation, mostly in temperate countries. We also find that outbreaks of vector-borne diseases are associated with the

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https://www.frontiersin.org/articles/10.3389/fvets.2021.661063/full

*"**Reforestation** can increase biodiversity loss when forest expansion is made **at the expense of grasslands, savannas, and open-canopy woodlands**…Temperate and tropical countries with grassy biomes at risk of afforestation and forest expansion according to Veldman et al. (39) … are the ones showing a **positive association between reforestation and disease transmission**…"*

https://news.stanford.edu/press/view/33295

ress/view/33295

APRIL 8, 2020

Stanford researchers show how forest loss leads to spread of disease

In Uganda, loss of forested habitat increases the likelihood of interactions between disease-carrying wild primates and humans. The findings suggest the emergence and spread of viruses, such as the one that causes COVID-19, will become more common as the conversion of natural habitats into farmland continues worldwide.

BY ROB JORDAN

Stanford Woods Institute for the Environment

Viruses that jump from animals to people, like the one responsible for COVID-19, will likely become more common as people continue to transform natural habitats into agricultural land, according to a new Stanford study.

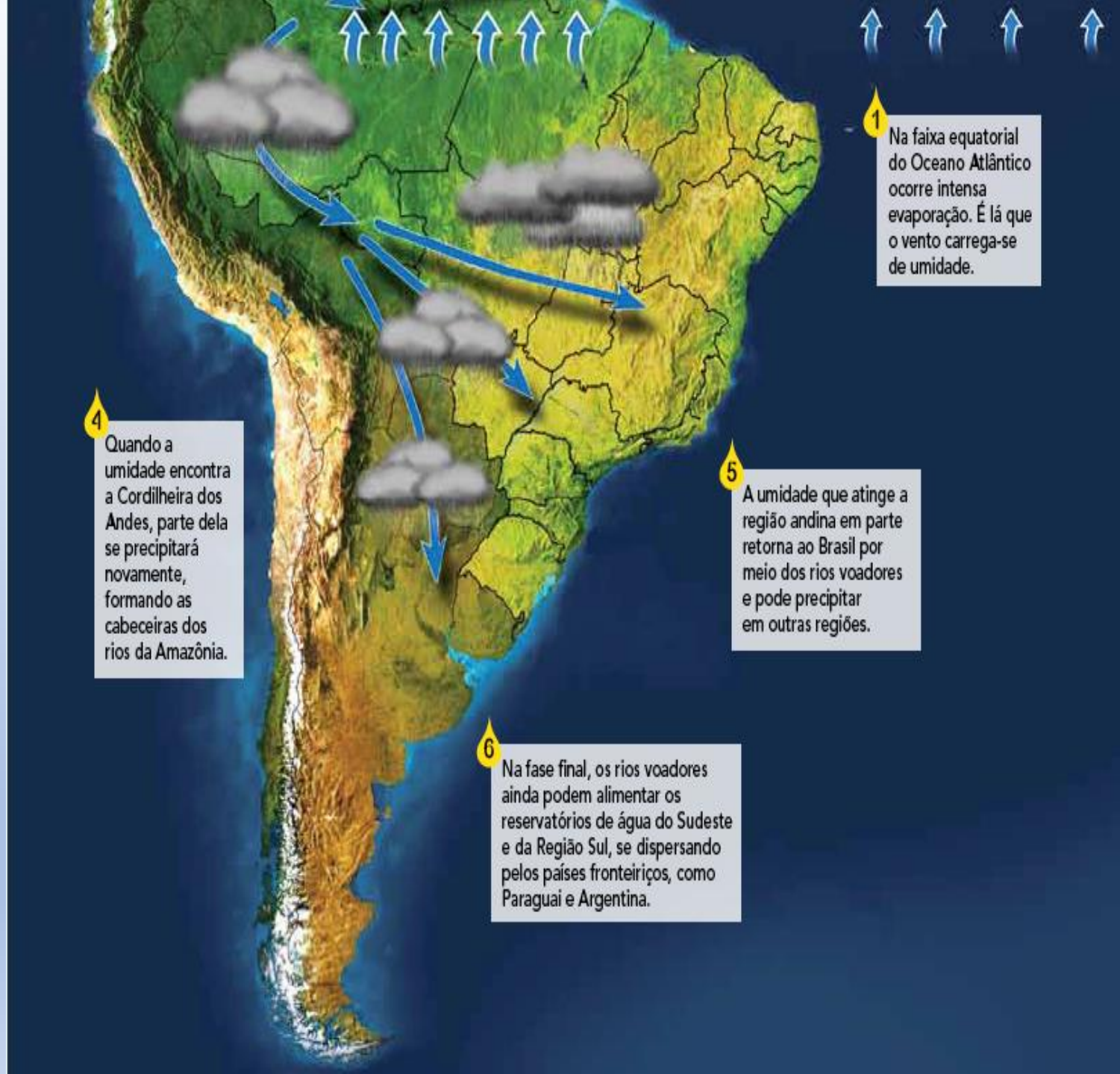
The analysis, published in *Landscape Ecology*, reveals how the loss of tropical forests in Uganda puts people at greater risk of physical interactions with wild primates and the viruses they carry. The findings have implications for the emergence and spread of infectious animal-to-human diseases in other parts of the world, and suggest potential solutions for curbing the trend.

Impacts of Deforestation and Conversion on Agriculture

Flying Rivers:

Deforestation of the Amazon may **reduce by 50%** the rains southwards,

Impacts on crop production in Brazil, Argentina and Paraguay
+ water supply of half of population
+ 80% of Brazilian energy.

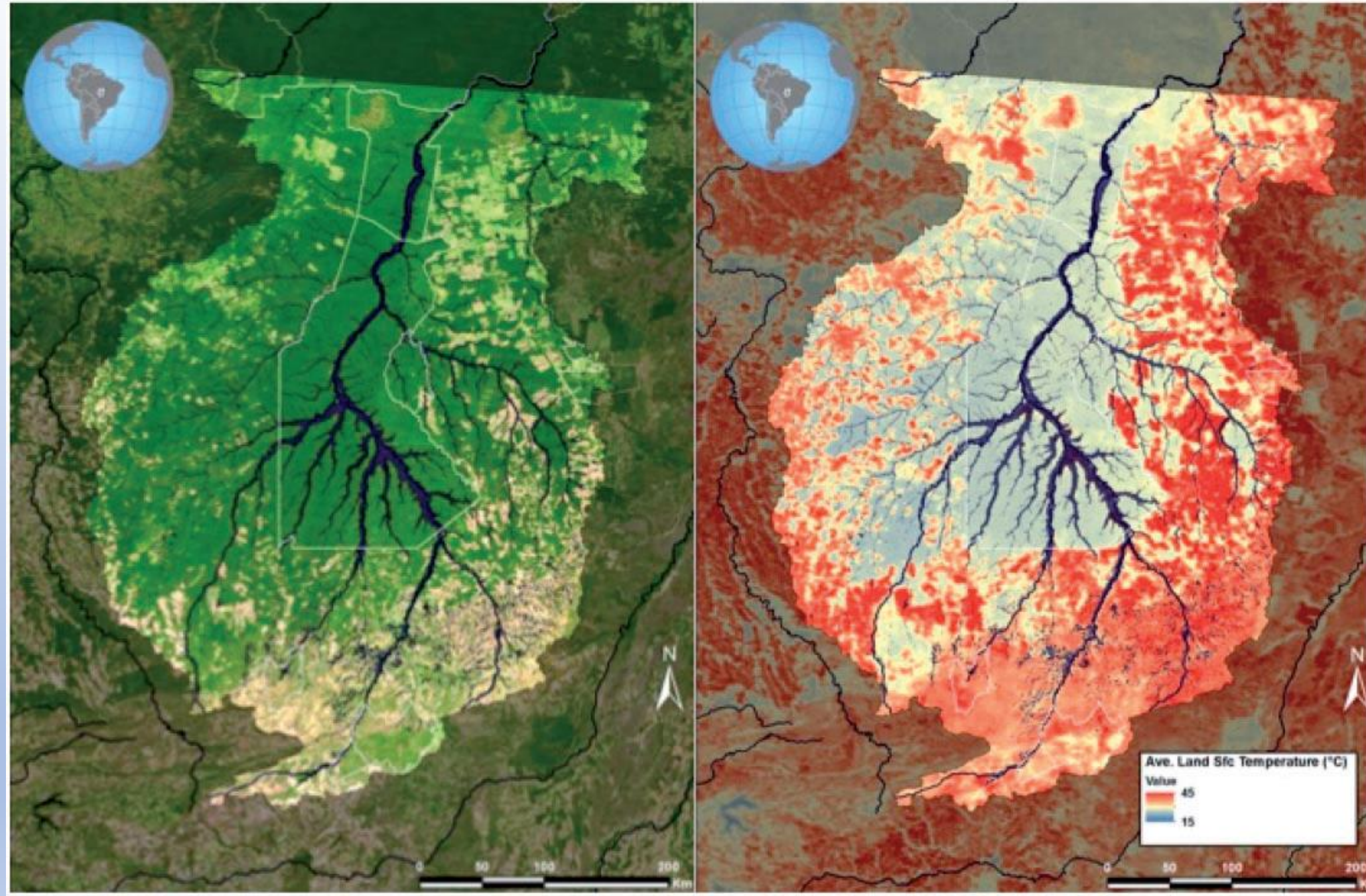


http://riosvoadores.com.br/english/the-flying-rivers-phenomenon/

http://www.bbc.com/future/story/20130326-amazons-invisible-flying-rivers

http://news.nationalgeographic.com/news/2009/12/091217-amazon-flying-rivers-climate/

Direct Impact of Deforestation and Conversion on regional climate: shift of rain system

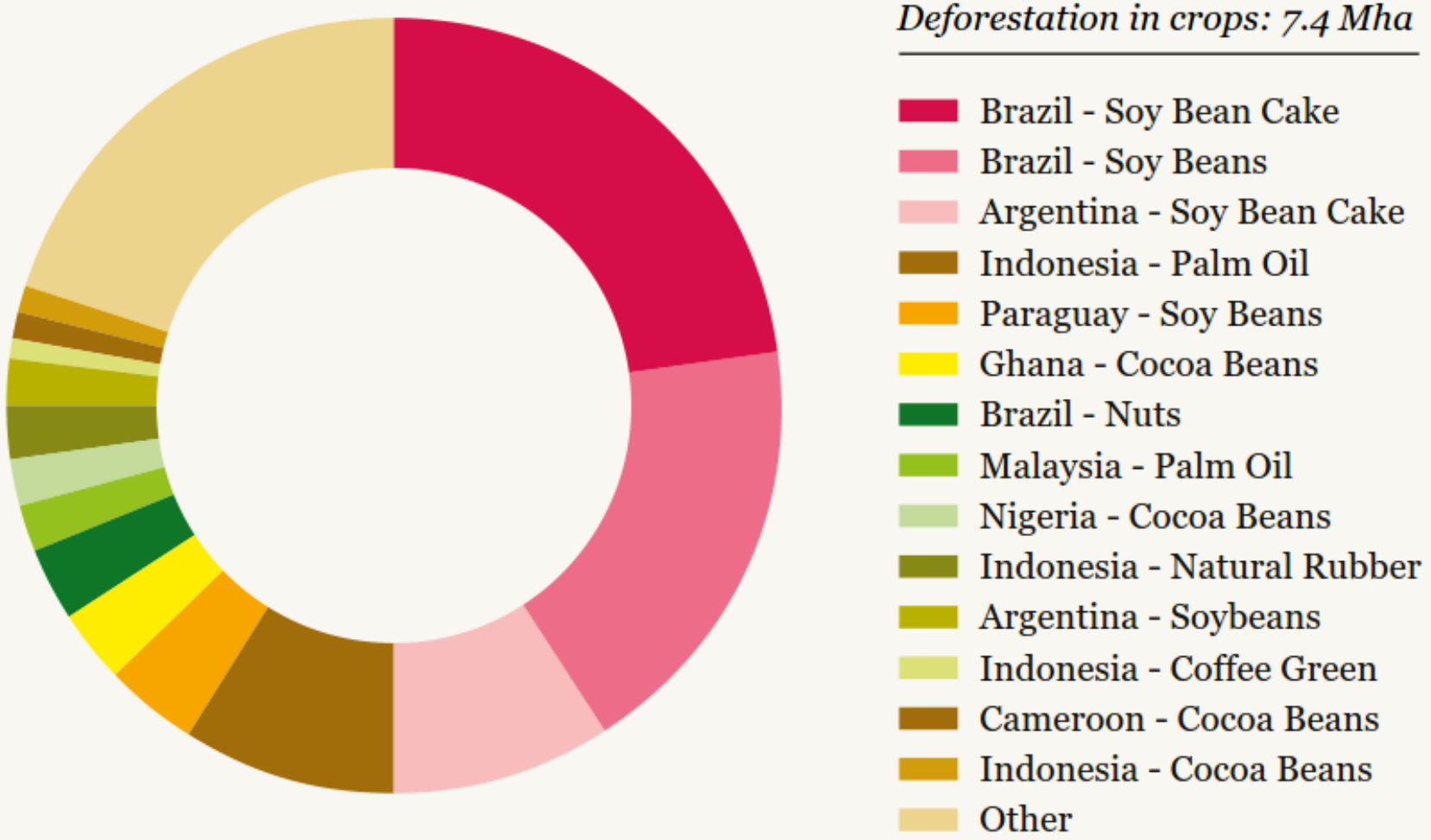


Coe et al, 2017


By Frits Ahlefeldt

Cumulative impact of Europe (1990 – 2008)

Figure 4: Most important crop commodities and countries of origin for deforestation embodied in crop imports into the EU27 (1990-2008)



EC 2013 Study "The impact of EU consumption on deforestation“

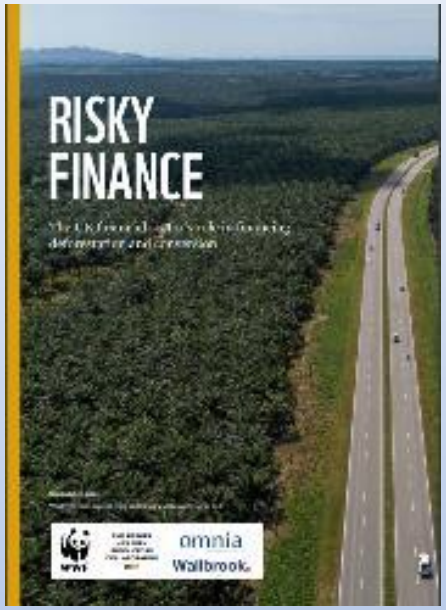
Source: European Commission. 2013. The impact of EU consumption on deforestation.

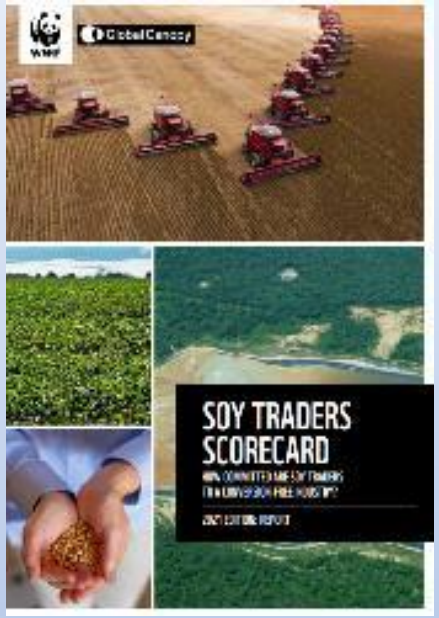
Synthesis of the WWF DCF Guiding Principles

1. **Critical first step toward achieving global climate and biodiversity targets** (CBD, UNFCCC, SDGs) and to prevent **new pandemics**.
2. **Not only to protect forests, but all the remaining natural ecosystems**
3. **Human rights´ respect is a fundamental principle and their protection the top imperative**
4. **Regardless of legal status – Legal and Illegal deforestation and conversion need to stop**
5. **It is achievable**. Much degraded land available to be rehabilitated. Preserved ecosystems also generate incomes and livelihoods.
6. **Large scale is critical** to have impact on the conversion fronts
7. **Beyond boundaries of individual supply chains and portfolios**. Greening suppliers is more critical than greening supplies
8. **Economic and technical incentives are required** for good production practices rehabilitating soils and degraded areas,
9. **DCF is urgent, but not WWF´s only ask** on supply chains**. Also:** nature positive food systems, diets and other consumption habits.

Non State Actors	General asks
Downstream Buyers (manufacturers, retailers)	Ensure **own supply chains** (including embedded materials) are verifiably free of deforestation, conversion and human rights abuses. Require and support **direct and indirect suppliers to take equivalent action across their entire operations**. Strengthen support for large-scale, mainstream, biome-wide solutions.
Upstream buyers (traders, meatpackers)	Ensure **own supply chains** (across all commodities and origins), as well as all land concessions and real estate, are verifiably free of deforestation, conversion and human rights abuses. Require and support **direct and indirect suppliers to take equivalent action across their entire operations**. Strengthen support for mainstream, biome-wide solutions.
Producers	**Halt all deforestation and conversion**, as well as expansion into recently deforested and converted areas (with a clear cut-off date) and avoid any human rights abuse. Adopt responsible agriculture, aquaculture and/or forestry production practices. Rehabilitate existing agricultural and/or degraded lands. When needed, remediate any human rights abuses and restore any land converted after the cut-off date.
Financiers	Eliminate deforestation, ecosystem conversion and human rights abuses from all investments, loans and portfolios, and from any related land concessions and real estate. **Require that corporate clients and investees comply with a robust DCF and human rights policy** and implement an action plan that delivers on time-bound targets. Engage regulators to develop DCF policies, guidelines and rules to mitigate systemic risks such as climate change and biodiversity loss.
State Actors	
Consumer countries/regions (supra & sub-national jur.)	Adopt and **enforce binding legislation**, policies and incentives to eliminate all domestic and imported conversion and related human rights abuses in soft commodity supply chains**. Support inclusive and just conversion-free, nature-based development pathways** in regions at high risk of natural ecosystem loss.
Producer countries/regions (supra & sub-national jur.)	Adopt and **enforce binding legislation, rules and incentives** to eliminate all deforestation, conversion and human rights abuses from soft commodity production. Implement policies for inclusive and just conversion-free, **nature-based development pathways in high-risk regions**.

Examples of uses to date





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FACT DIALOGUE
Forest, Agriculture & Commodity Trade

G20
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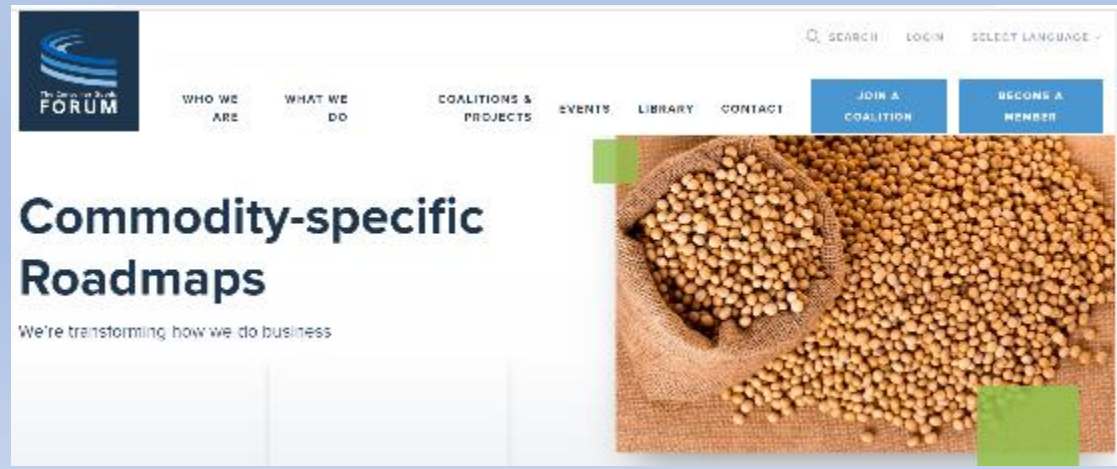
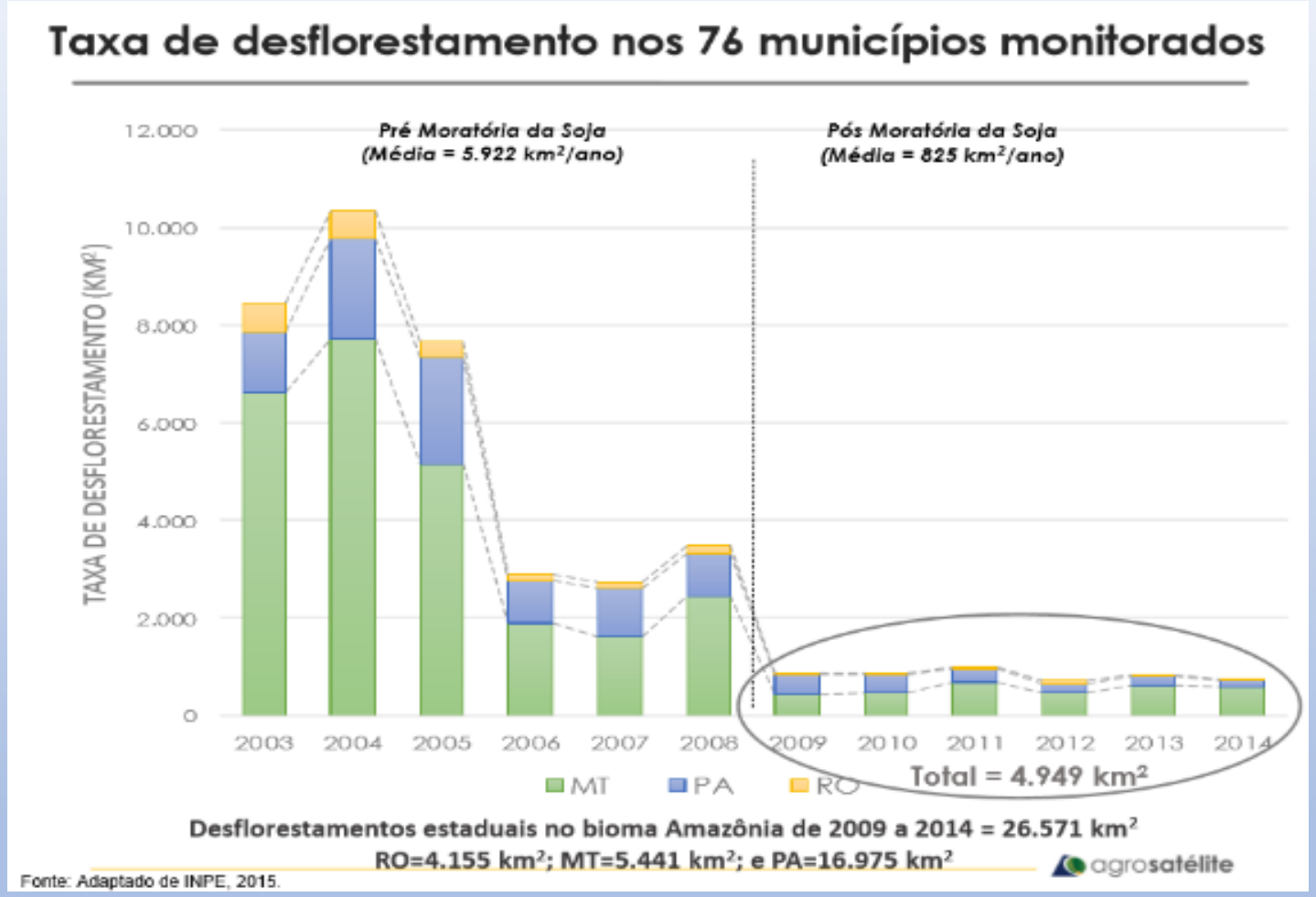
G7
United Kingdom 2021



Traceability to the farm level works at large scale

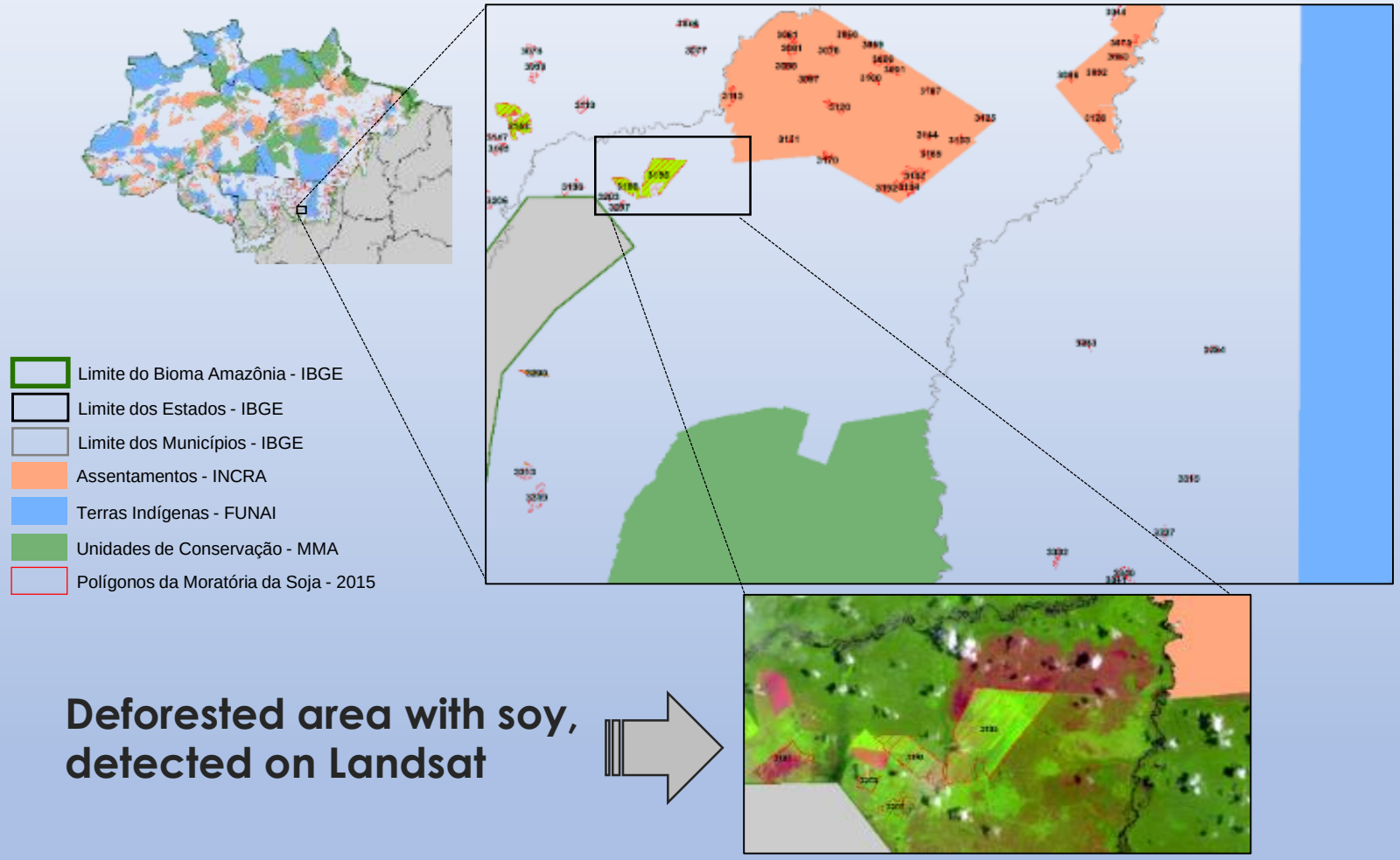
- **Yes**, after the traders agreed to the Amazon Soy Moratorium deforestation from soy in the Amazon decreased from 30% to less than 1 %

- At the same time, production of soy has also increased 4X in the Amazon (through using only existing agricultural land)



Result: immediate deforestation curb.

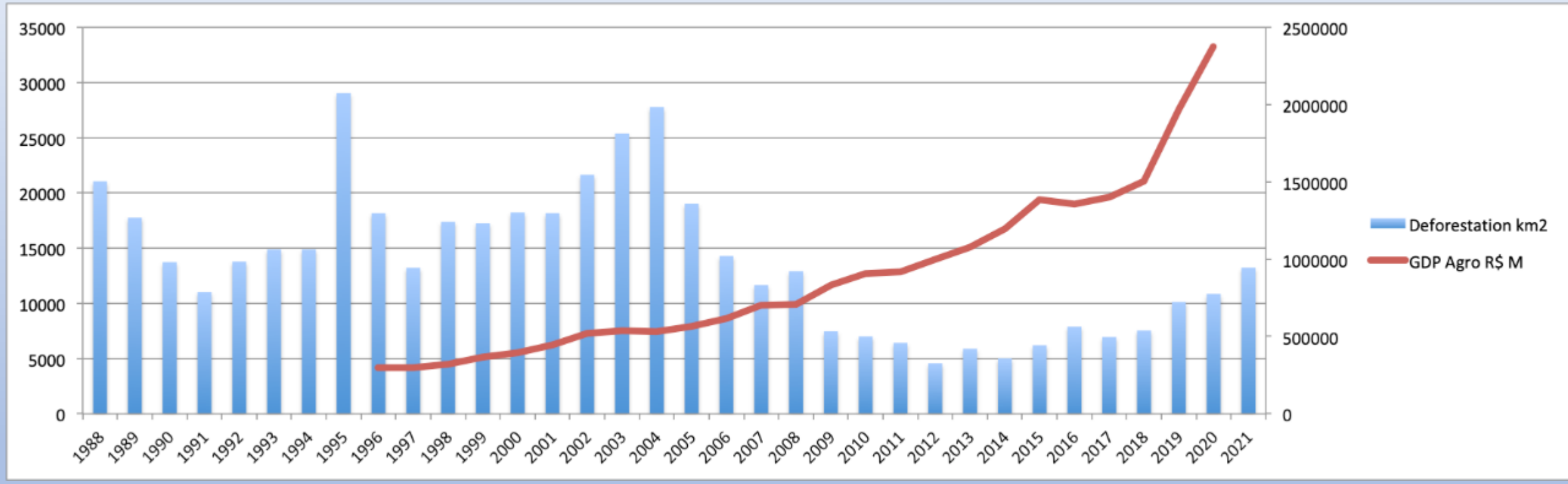
HOW TO DO IT?



Benchmark of large scale, precise deforestation control of soy supply.

Region – District – Farm.

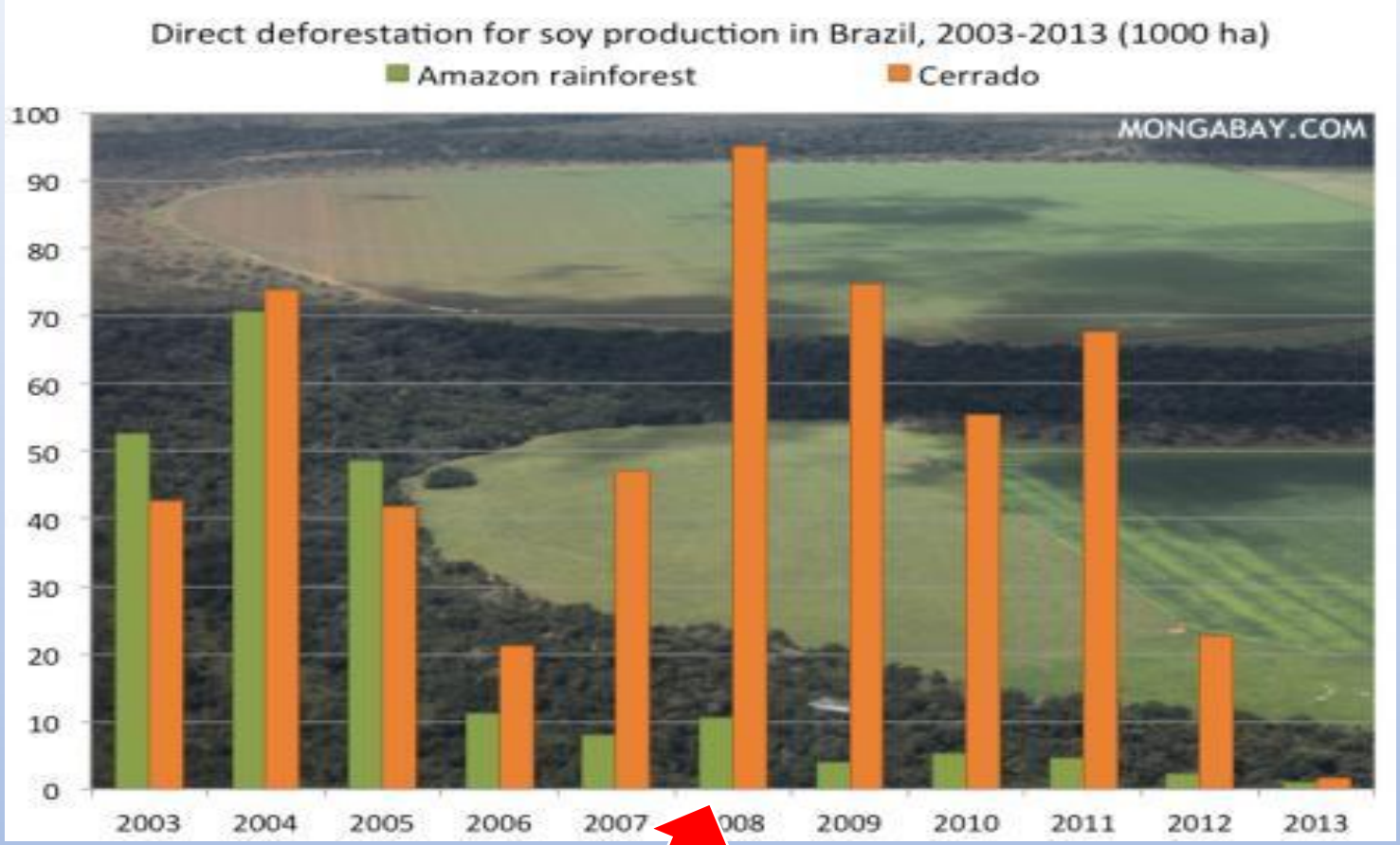
Deforestation in the Amazon and agricultural GDP are uncoupled



Sources: Prodes/Inpe, Cepea-USP

Slide: Brazil Climate Observatory 2022

Supply-chain governance key to avoid deforestation.



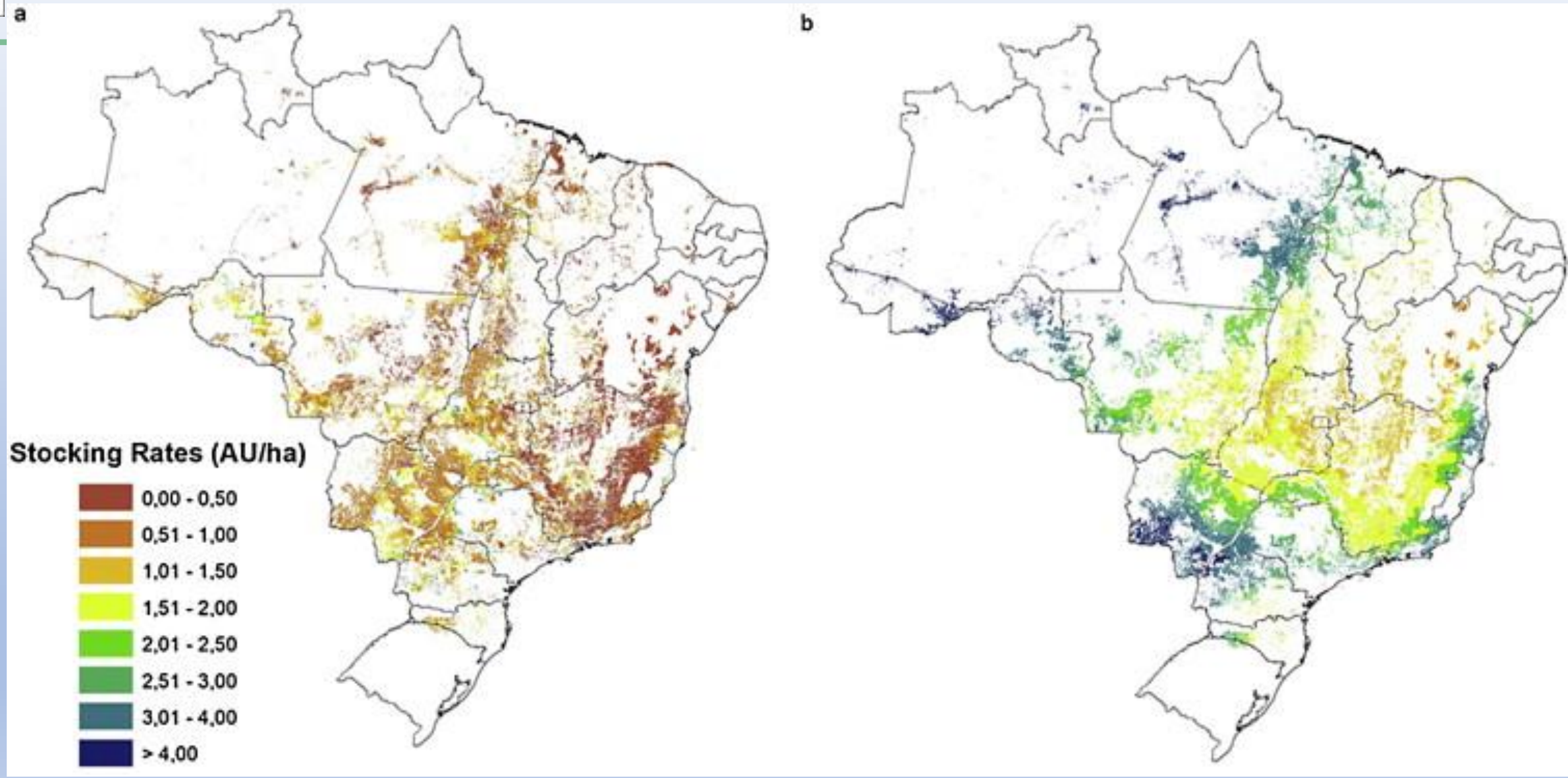
Gibbs et al. 2015:

- **Amazonian food production increased even as deforestation decreased** (Moratorium effect)
- **Direct conversion increased in the Cerrado**, where the Moratorium does not apply

Potential Leakage of Soy-related land speculation from the Amazon into the Cerrado

Read more: http://news.mongabay.com/2015/0123-brazil-deforestation-soy-amazon-cerrado.html#ixzz3SXrtcQmL
Also: http://www.news.wisc.edu/23435

Strassburg et al. 2014: There is enough space for deforestation and conversion-free expansion until at least 2040, through better pasture management



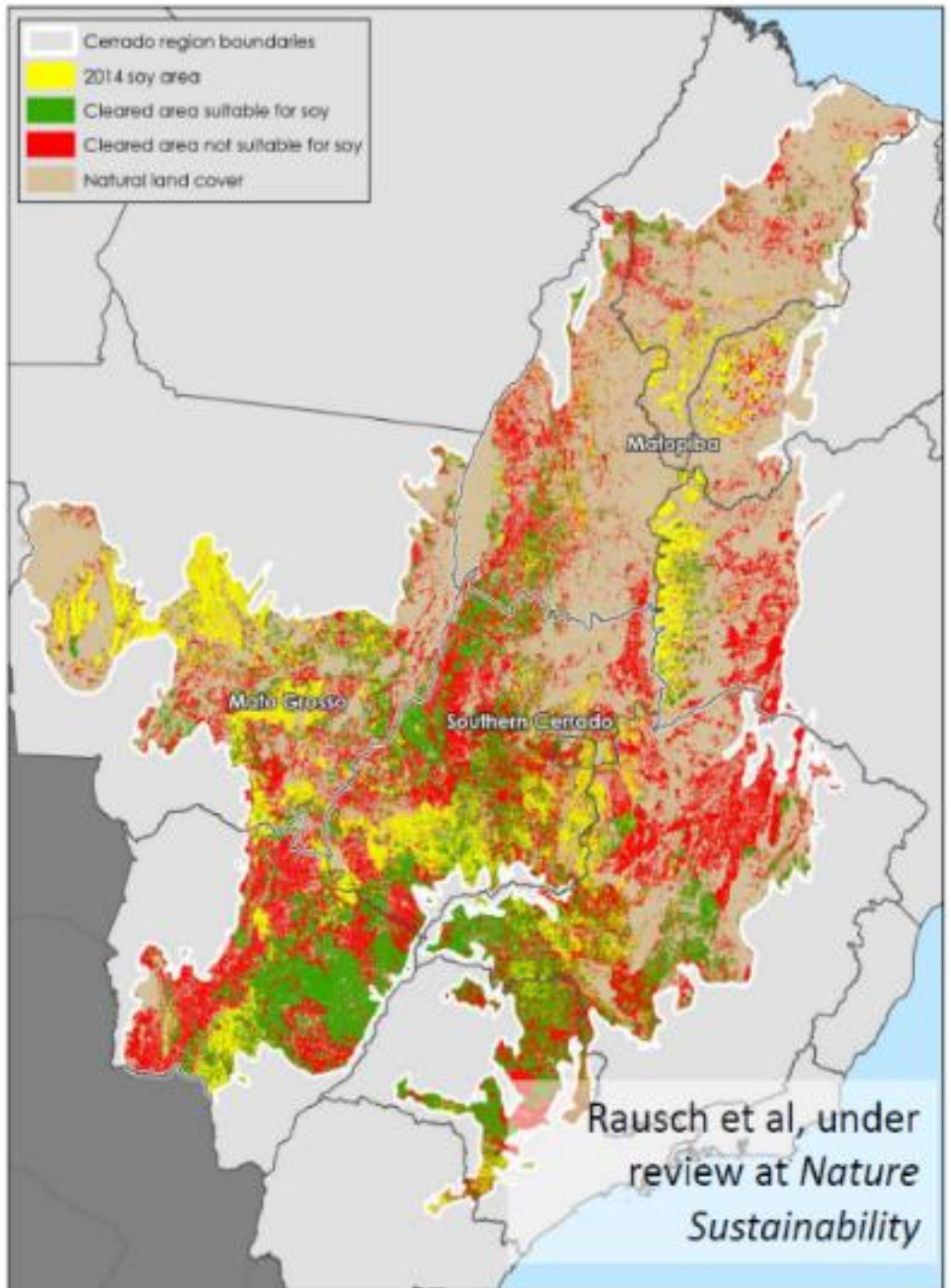
Current and potential productivity and sustainable carrying capacity of cultivated pasturelands.

38 million hectares of highly suitable, already cleared land available in the Cerrado, to triple Cerrado soy production without cutting one single native scrub (or tree).

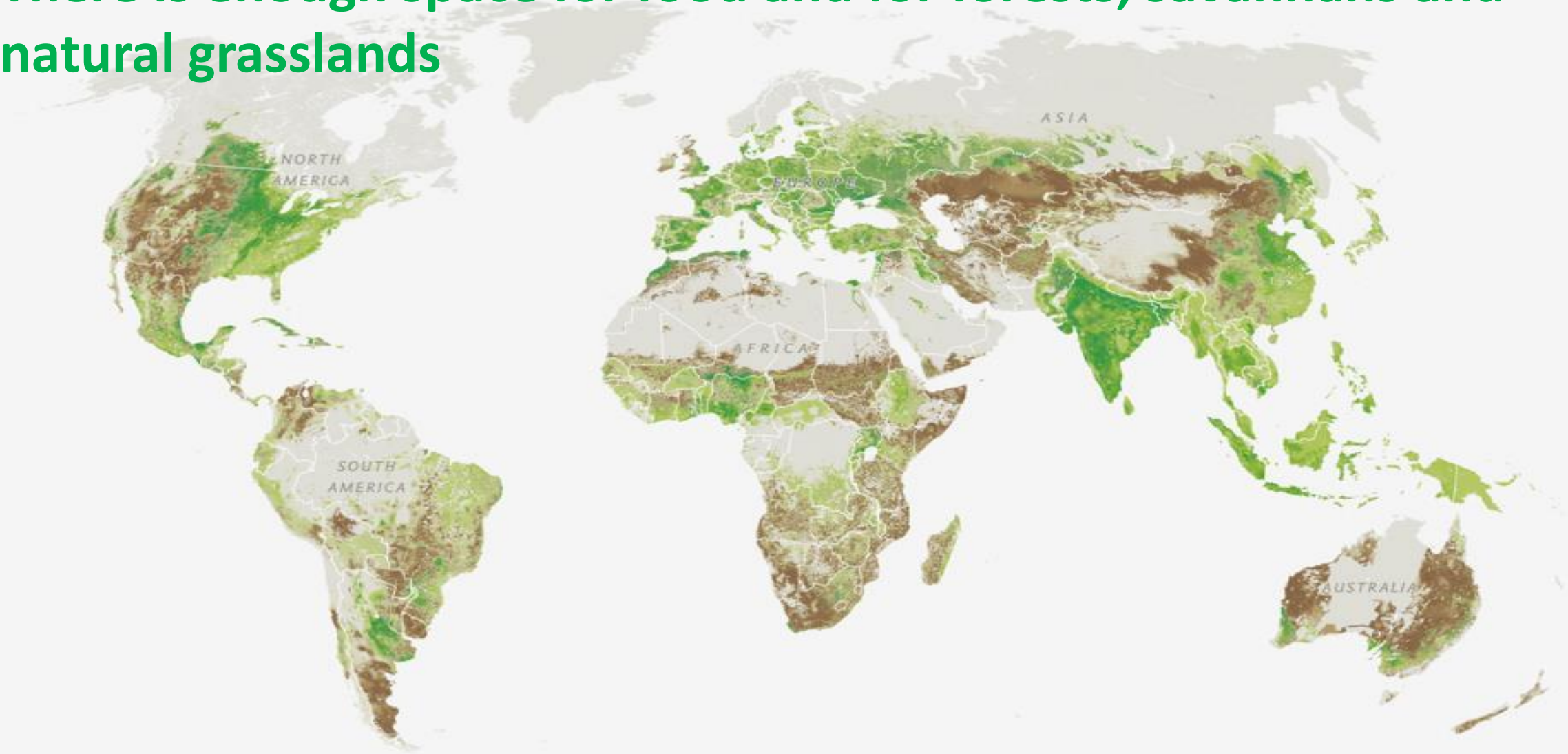
There is enough cleared and suitable land to triple soy area in the Cerrado – up to 38Mha

Cleared and suitable area is concentrated in the Southern Cerrado

70% of highly suitable, cleared area is currently used as pasture

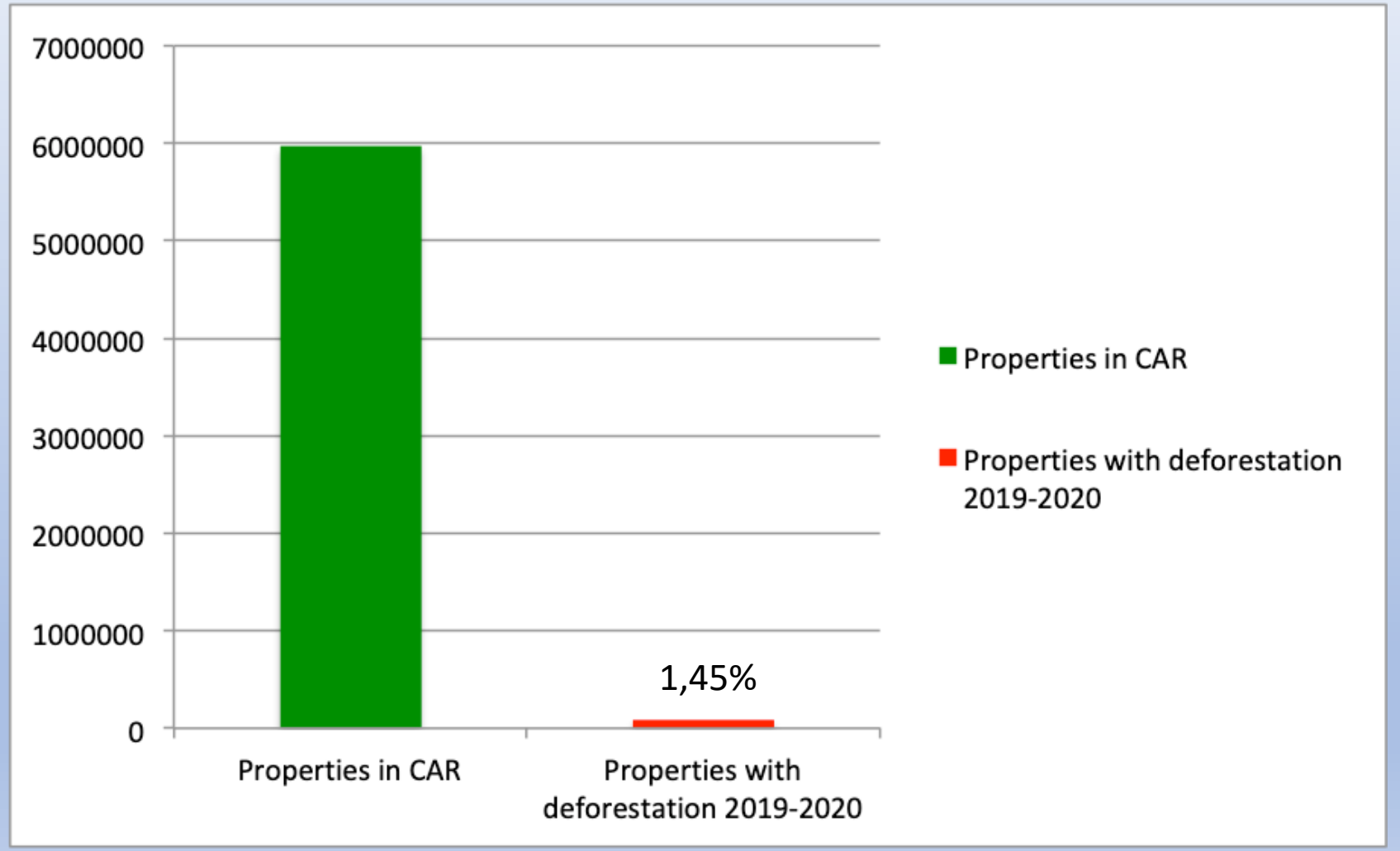


There is enough space for food and for forests, savannahs and natural grasslands



Source: Jonathan Foley. 2014. A Five-Step Plan to Feed the World. The Future of Food. National Geographic Magazine. http://www.nationalgeographic.com/foodfeatures/feeding-9-billion/

Less than 2% of all Brazilian rural properties incur in deforestation and conversion



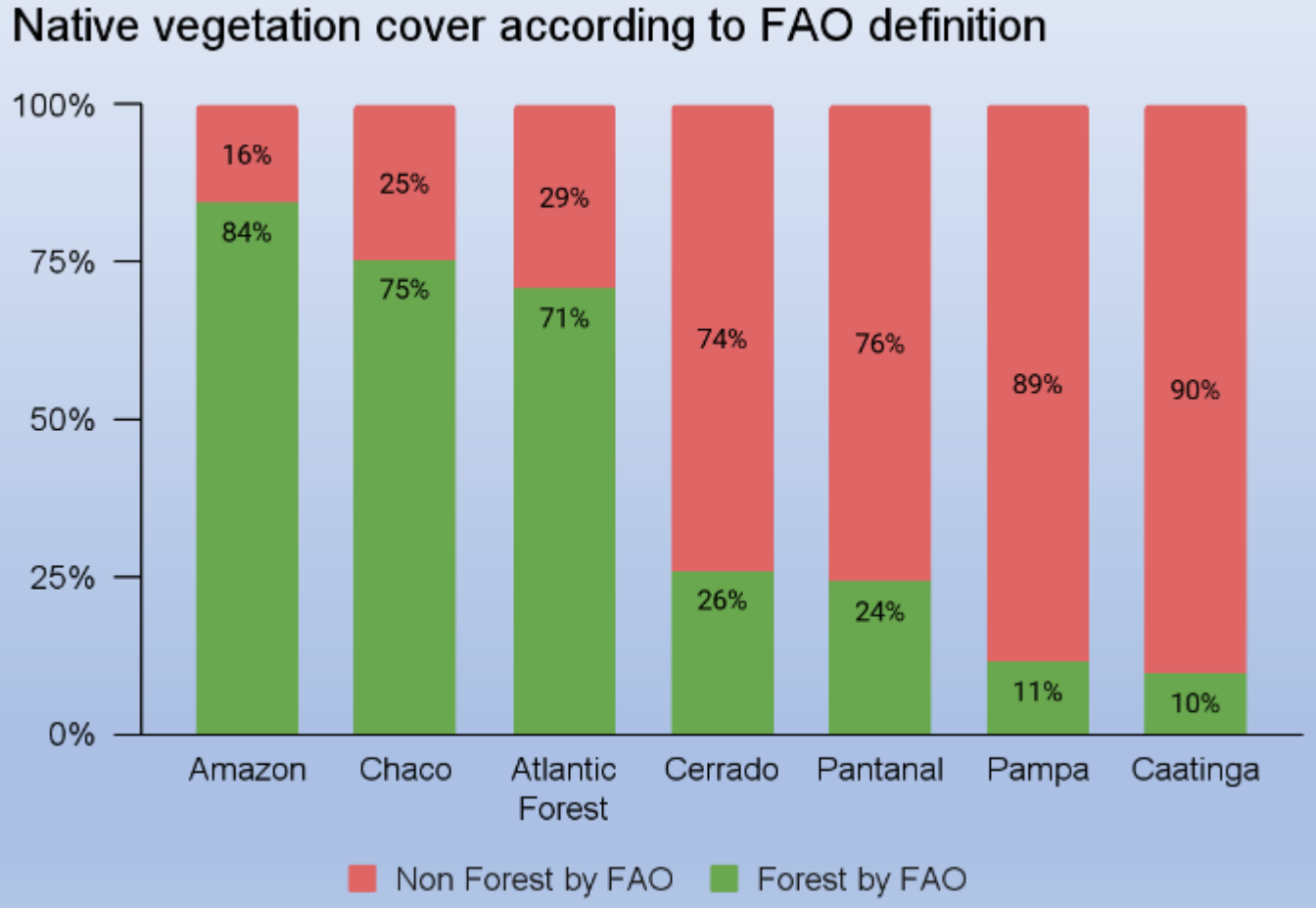
Souce: MapBiomas Alerta: https://s3.amazonaws.com/alerta.mapbiomas.org/rad2020/RAD2020_MapBiomasAlerta_FINAL.pdf

Slide: Brazil Climate Observatory 2022

2 key aspects of the EU law:

1. **Traceability and transparency to the farm level**. Plot of land = farm or plantation – Technology demonstrated with the Amazon Soy Moratorium
2. **Including savannahs and natural grasslands NOW** – to avoid massive leakage – Technology is available (Prodes, Imazon, Mapbiomas)

Mapbiomas new Technical Note (in prep.):
Potential impacts of due diligence criteria on the protection of threatened South American non-forest natural ecosystems



- The FAO Forest definition covers mostly three of the seven mapped biomes: the **Amazon (84%), Chaco (75%) and Atlantic Forest (71%).**

- The **Caatinga, Pampa, Pantanal and Cerrado showed the largest gaps** (only 10% forest in Caatinga, 11% in Pampa, 24% in Pantanal, 26% in the Cerrado).


Thank you!