

# Misconceptions about Brazil's Agriculture



**ILLINOIS**

Agricultural &

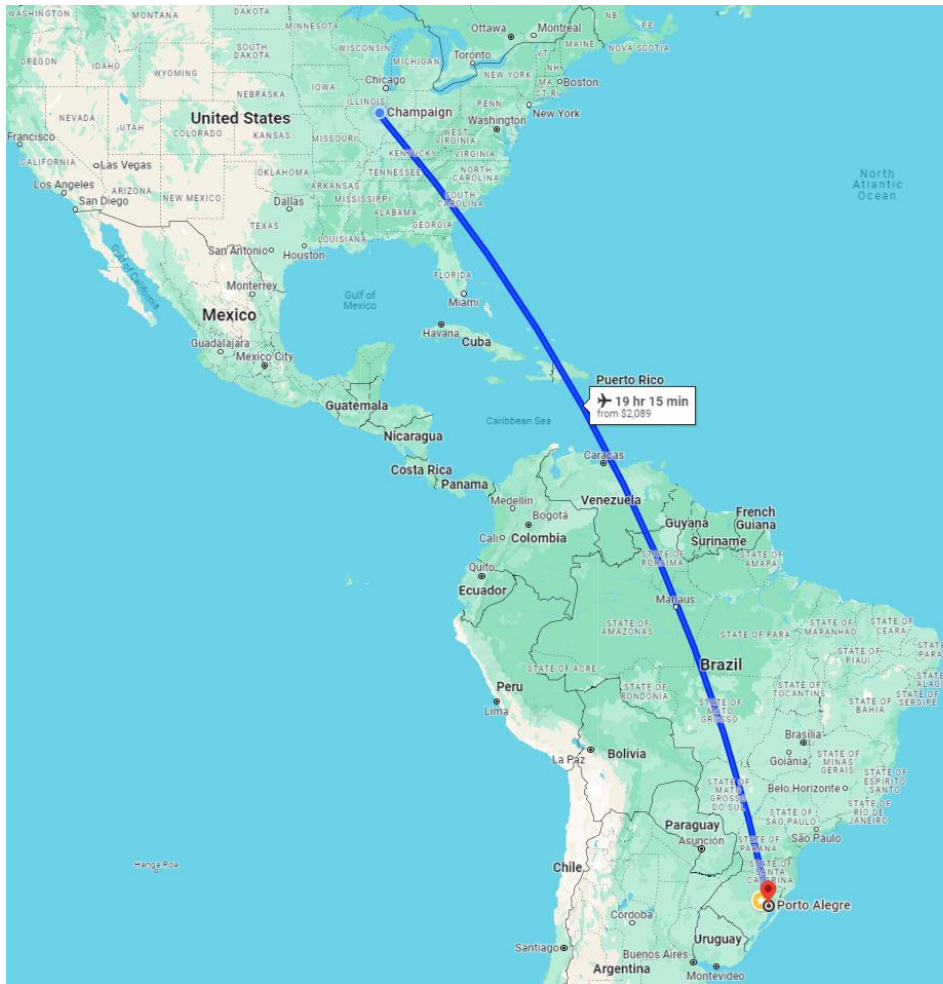
Consumer Economics

COLLEGE OF AGRICULTURAL, CONSUMER  
& ENVIRONMENTAL SCIENCES

**farmdoc**

Joana Colussi, Ph.D.

# From Rio Grande do Sul to Illinois



**Santa Rosa, RS**  
December 26, 2023

# 1. Myths and Facts on Brazilian Agriculture

Expansion into the Amazon represents a big portion of soybean production.



©The Nature Conservancy

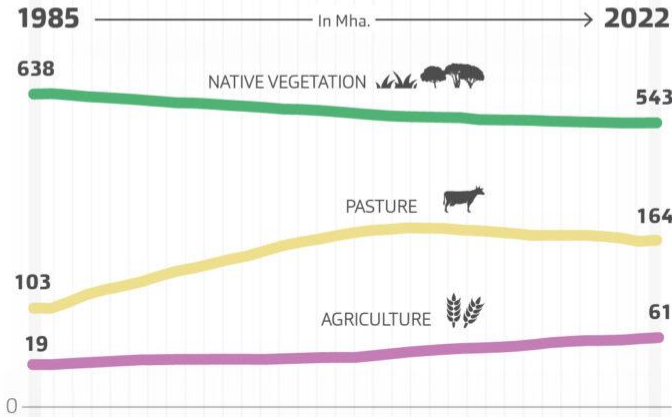
# Brazil

## Land use and land cover annual evolution (1985-2022)

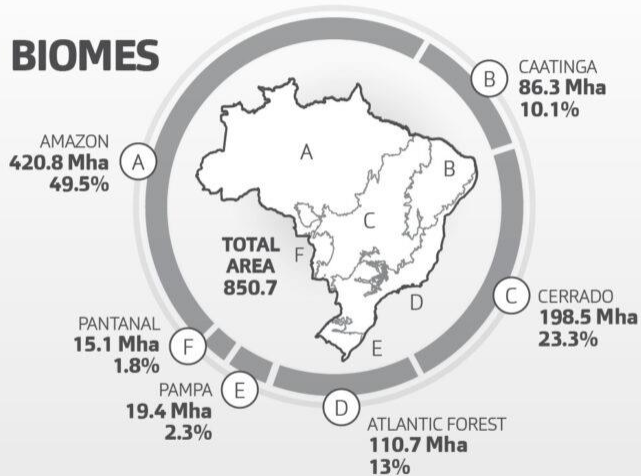


NET LOSS OF NATIVE VEGETATION FROM 1985 TO 2022

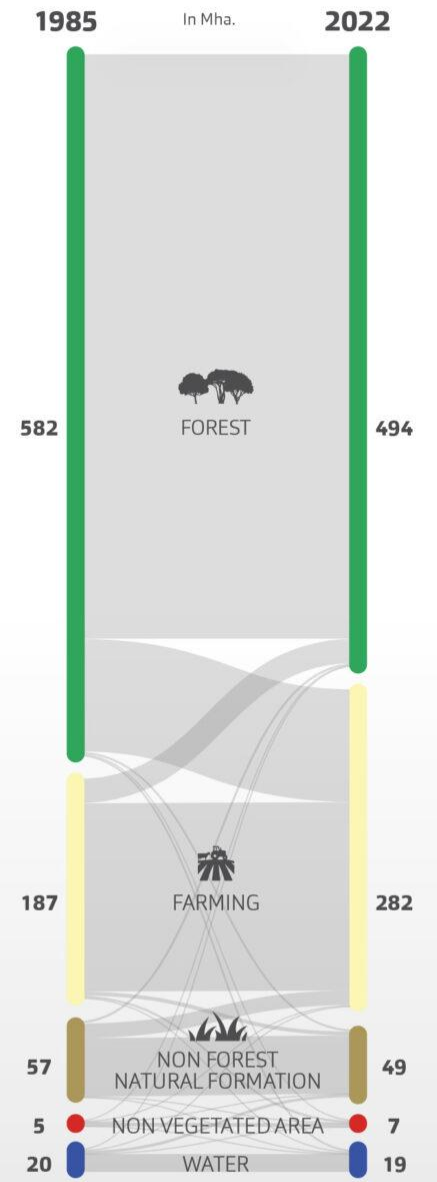
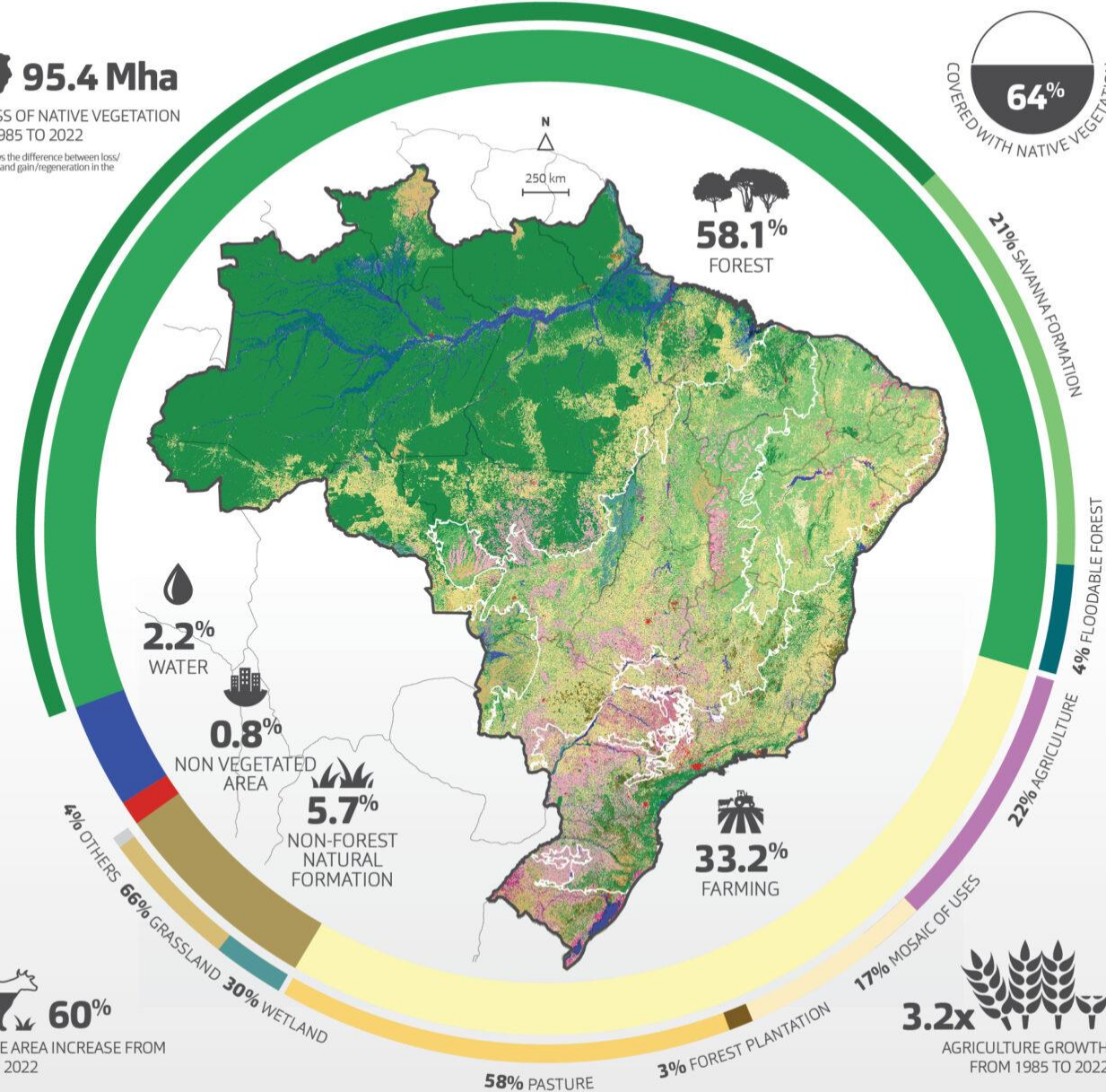
Net loss: shows the difference between loss/deforestation and gain/regeneration in the



### BIOMES



75% FOREST FORMATION



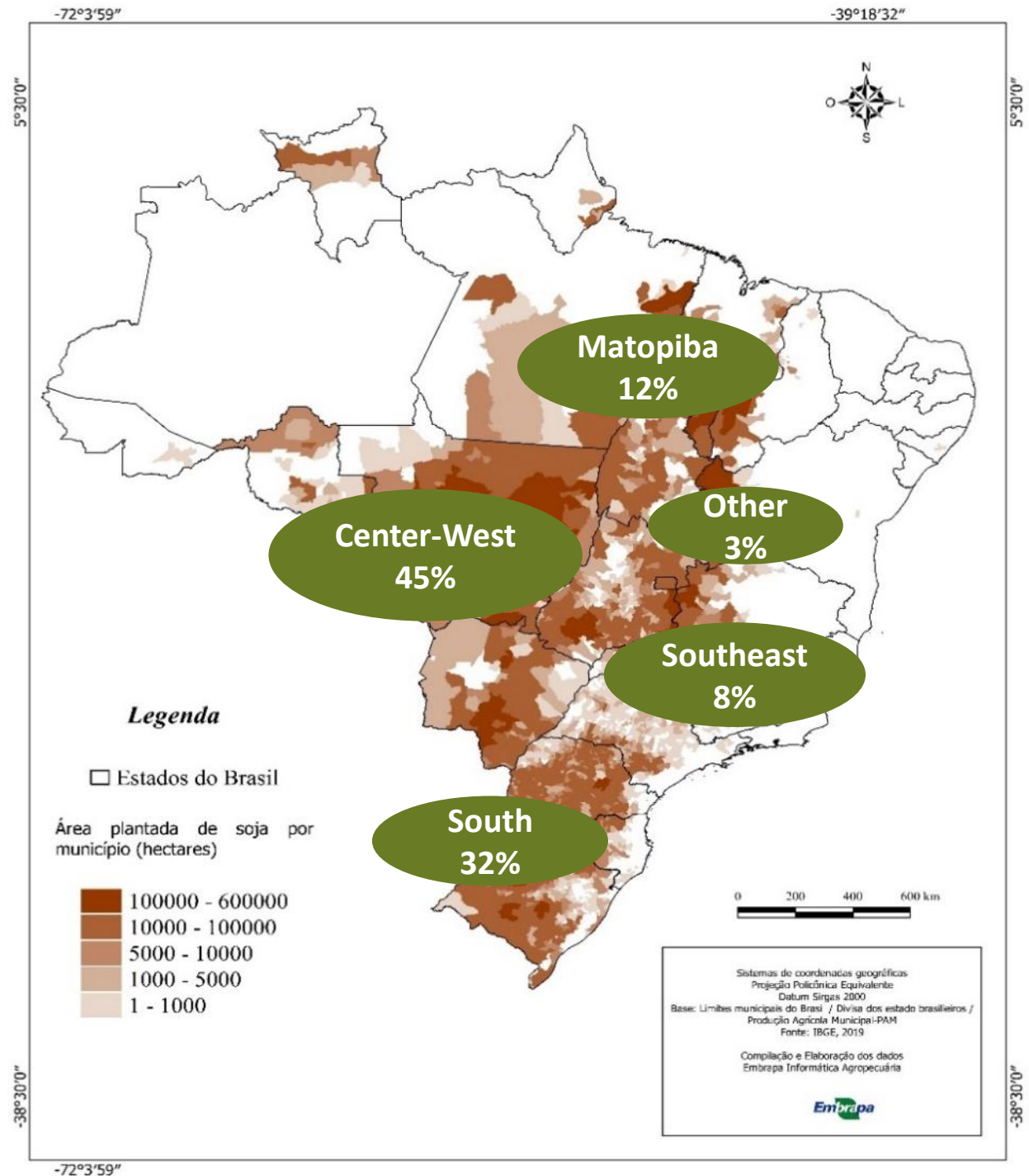
**60%** PASTURE AREA INCREASE FROM 1985 TO 2022

**3.2x** AGRICULTURE GROWTH FROM 1985 TO 2022

SOURCE: MapBiomas, Collection 6.0. The MapBiomas Project provides annual maps of land cover and land use, as well as maps showing changes over time for the entire period between 1985 and 2022. All data, as well as the method and accuracy assessment of MapBiomas Collections, can be accessed on the project's website [www.mapbiomas.org](http://www.mapbiomas.org).

# Soybeans by region

- **Three states in the Midwest** (Mato Grosso, Goiás, and Mato Grosso do Sul) and **two southern states** (Paraná and Rio Grande do Sul) represent **75% of soybean** production in Brazil.
- The Matopiba, in the North and Northeast, is considered the **new agricultural frontier in Brazil**, representing 12% of soybean production.



# Cerrado accounts for 65% of Brazil's soybeans



## 2. Myths and Facts on Brazilian Agriculture

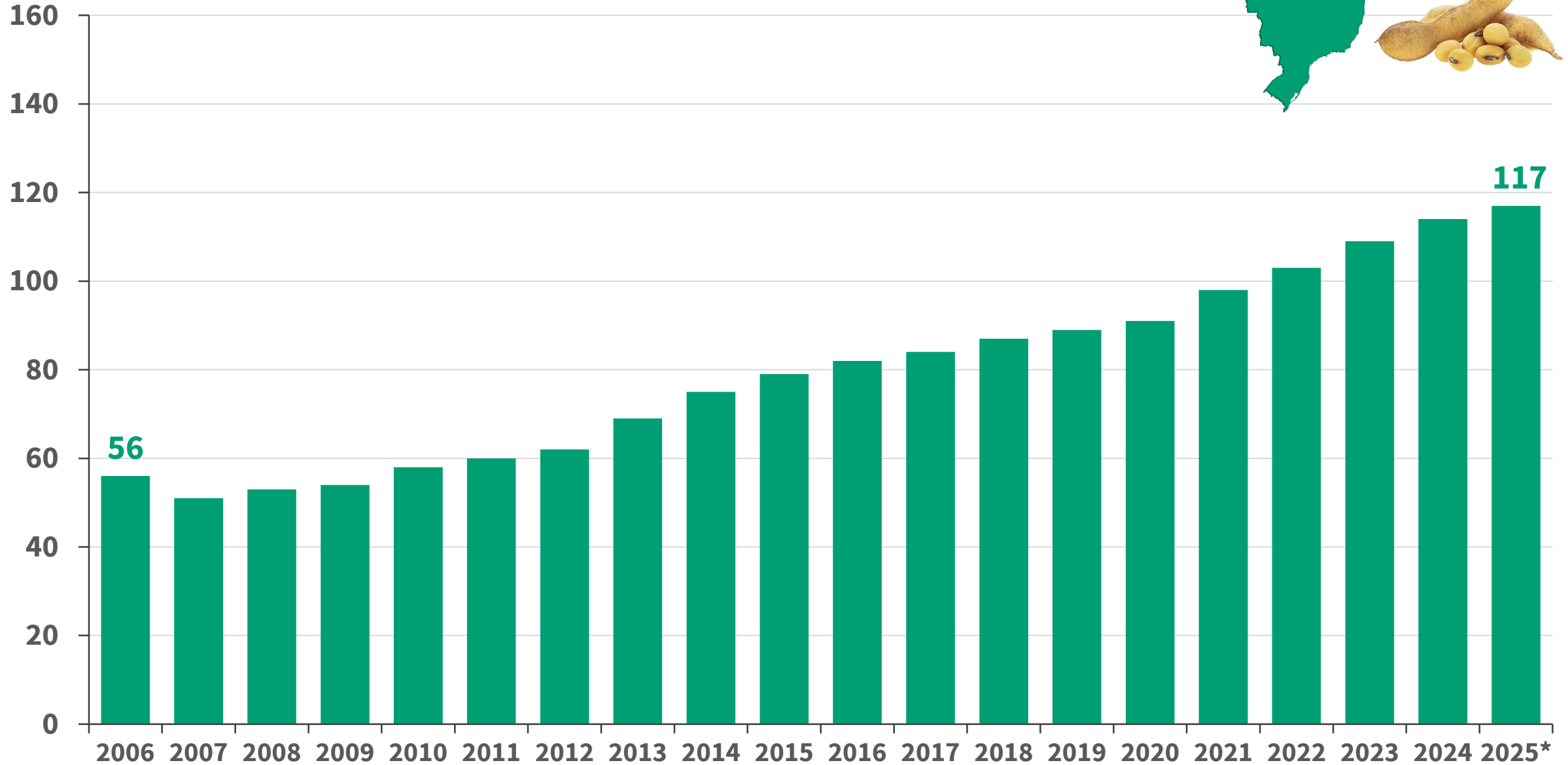
The soybean planted area doubled in the last two decades.



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# Total Soybean Planted Area in Brazil

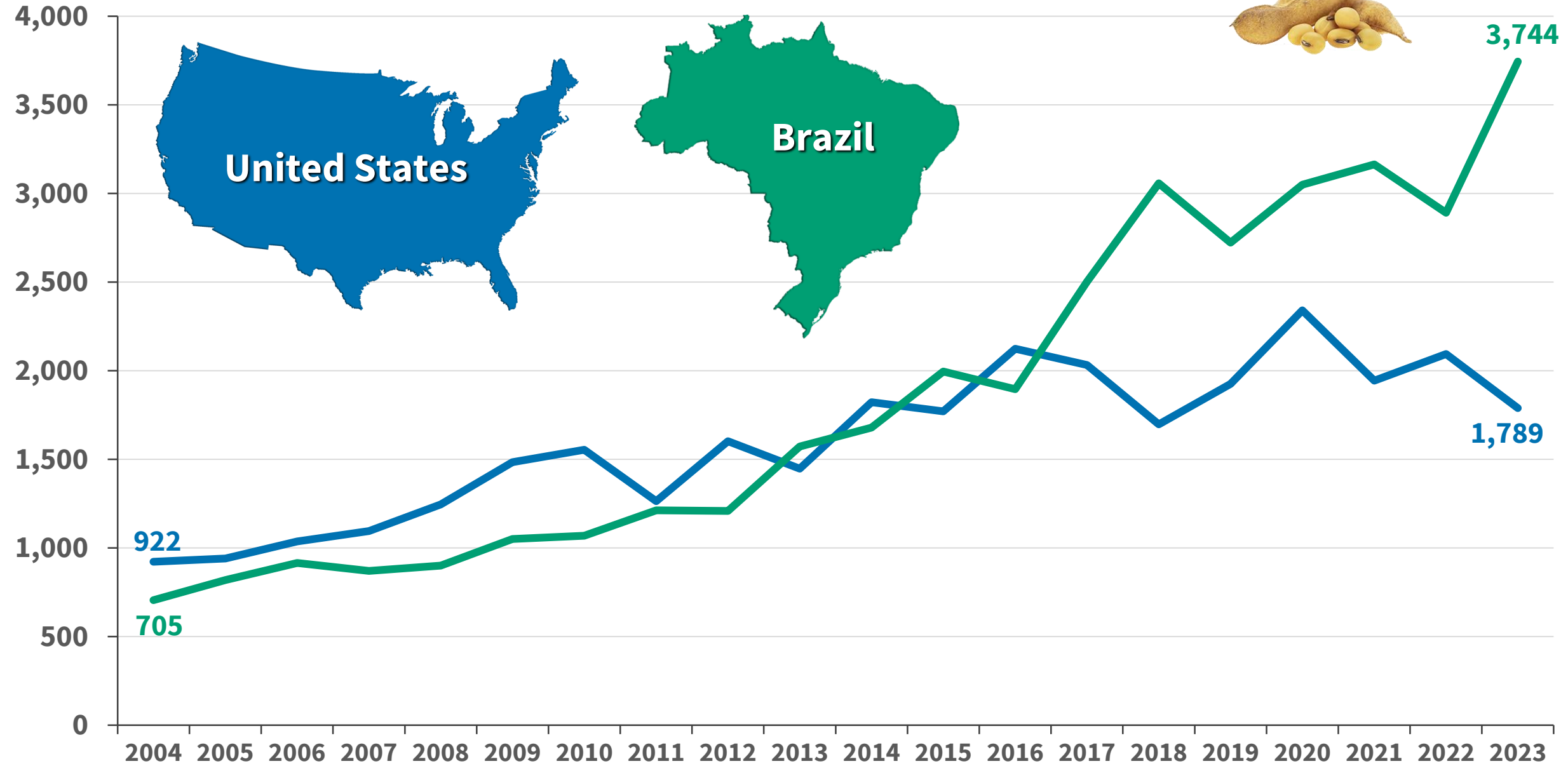
*in million acres*



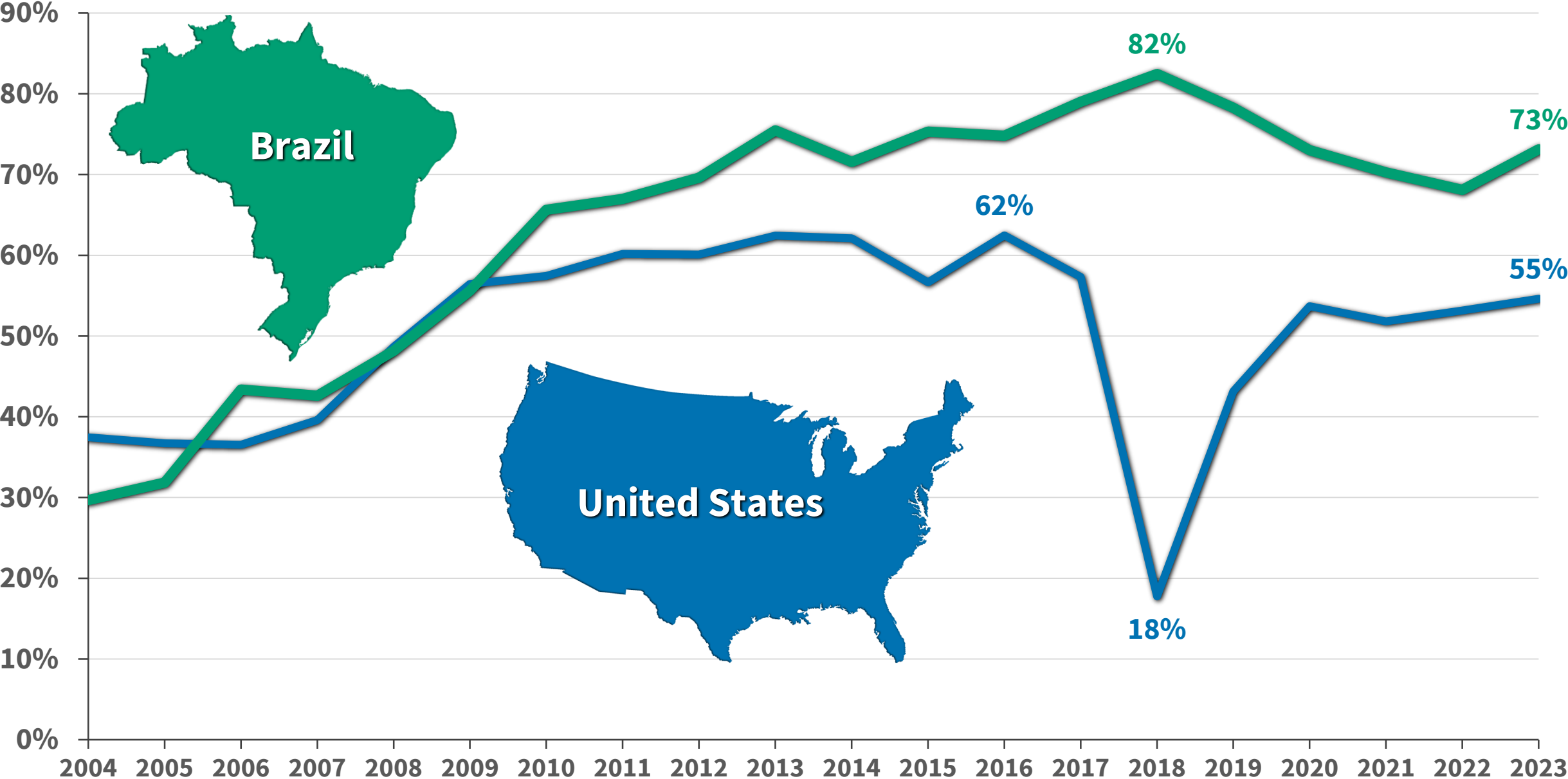


# Total Soybean Exports by the United States and Brazil

*in million bushels*



# China's Share of the United States and Brazil Soybean Exports



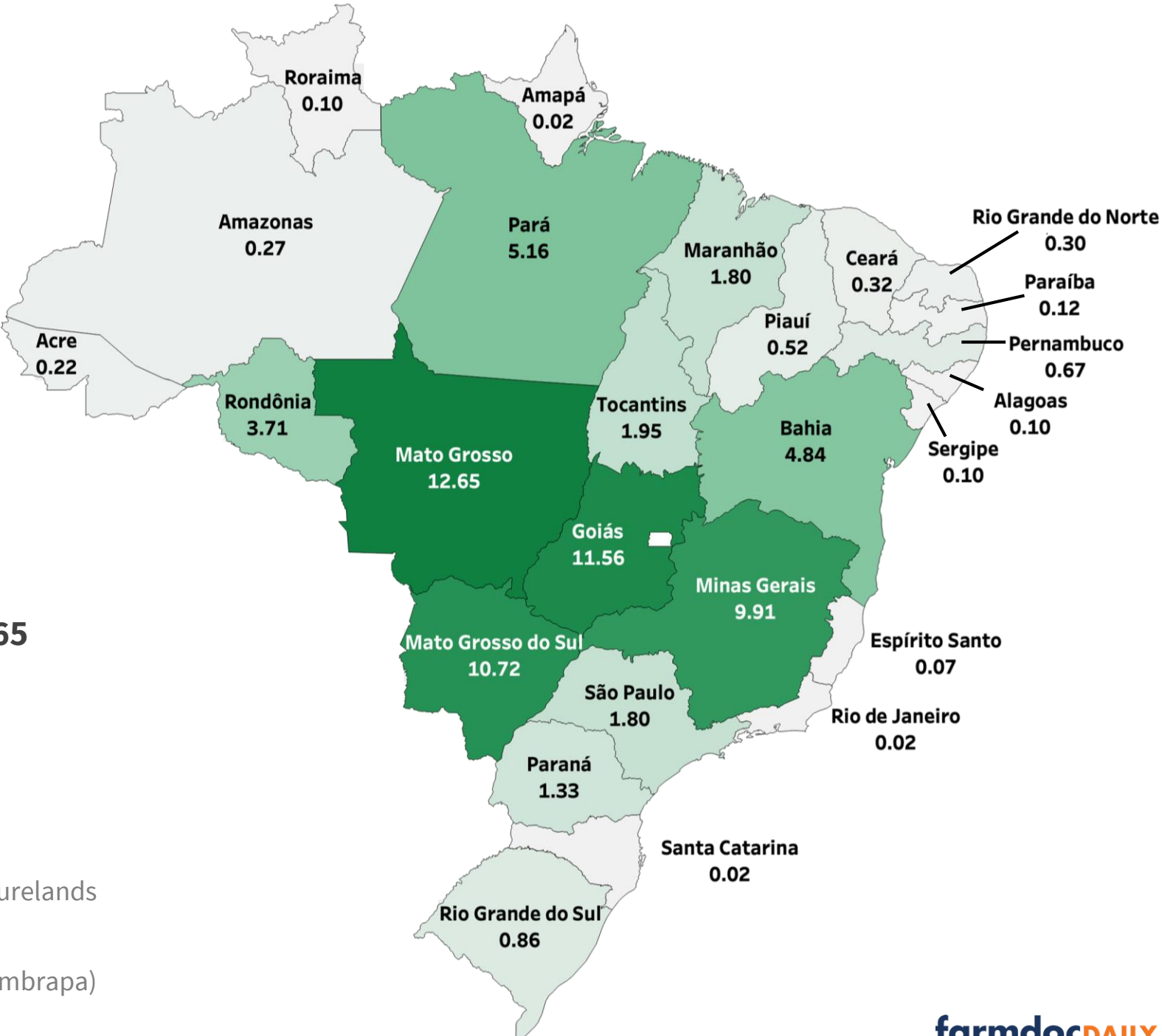
# 3. Myths and Facts on Brazilian Agriculture

Brazil could convert an additional 70 million acres of pastureland to crop production – including deforestation.



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# Crop Expansion Potential in Brazil Based on Degraded Pastureland\* (in Million Acres)



\* Crop expansion potential area means degraded pasturelands with a high potential for rainfed crop plantation

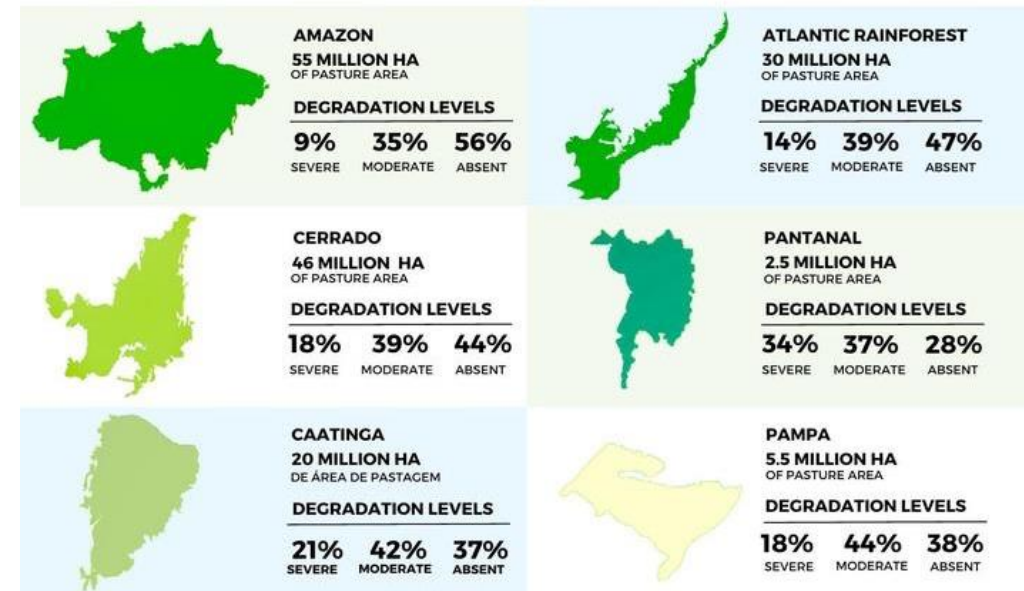
Source: Brazilian Agricultural Research Corporation (Embrapa)

# Degraded Pastures Recovered

- **Degraded pastures** have been seen as potential areas for cropland expansion
- **Pasture degradation** is related to overgrazing, pest control, and lack of soil fertilization. Rather than improve the pasture, it is more profitable to convert it.
- Brazil converted **21 million ha (52 million acres)** of degraded pastures into cropland from 2000 to 2021 (Federal University of Goiás/UFG).



Source: Lapig



# 4. Myths and Facts on Brazilian Agriculture

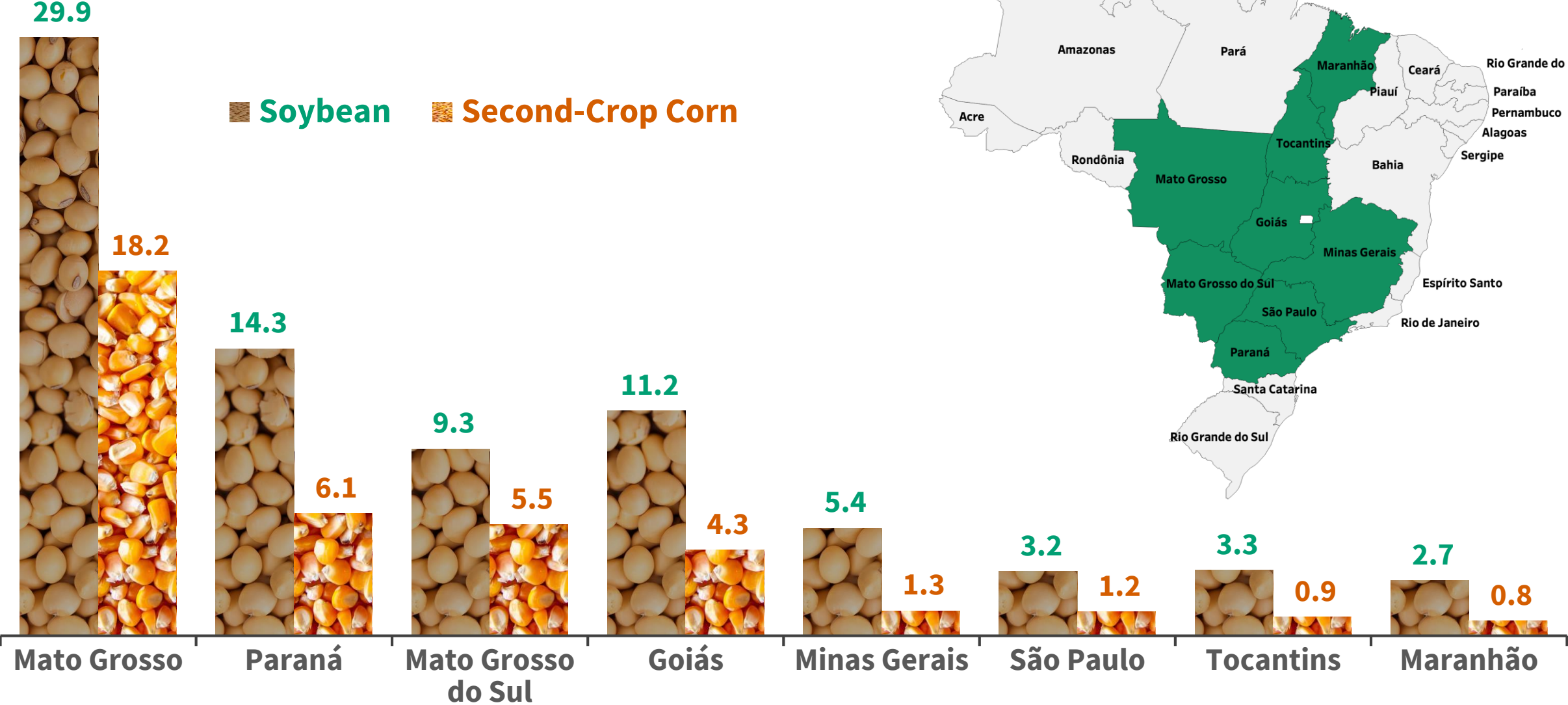
Brazil could further expand its currently cultivated area by 40 million acres by intensifying land use for second-crop corn (*safrinha*).



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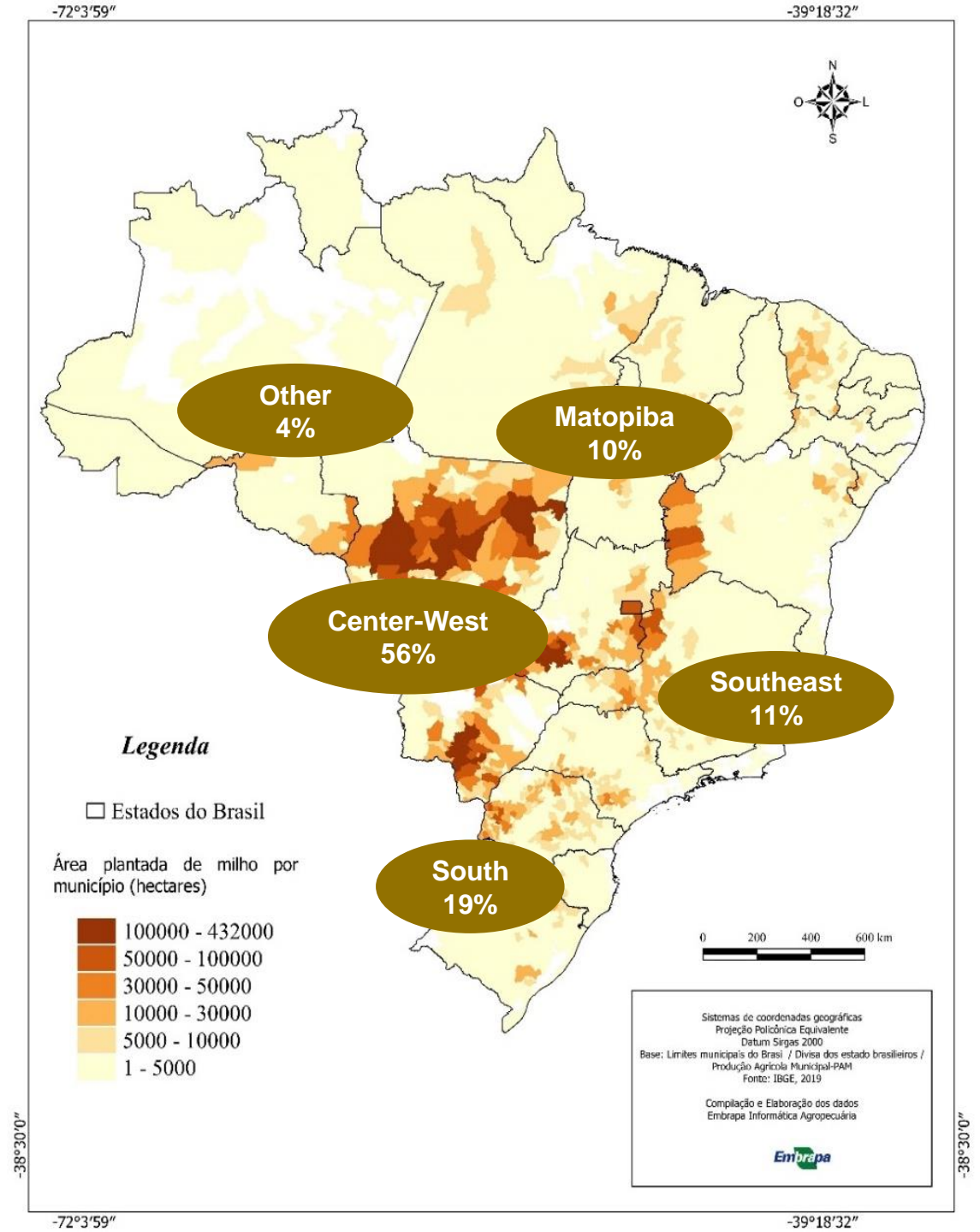
# Comparison of Soybean and Second-Crop Corn Planted Area

(2022/2023 Crop Season, in Million Acres)



# Corn by region

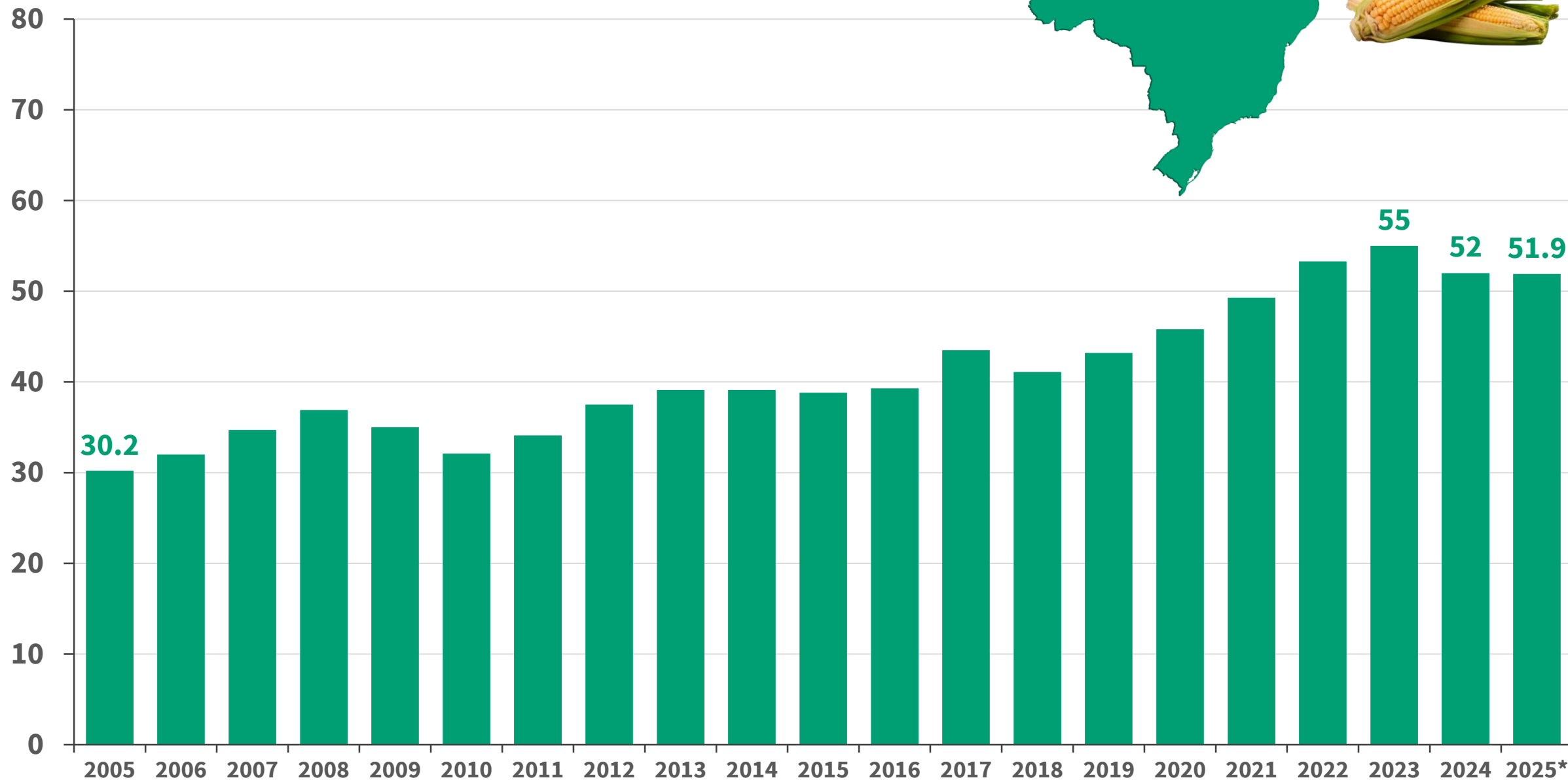
- **More than half** of corn production is concentrated in the Center-West as a second crop, planted right after the soybean harvest.
- Corn production is also advancing as a second crop into the new agricultural frontier, **Matopiba**.
- The **growth in the second corn crop (safrinha)** is an opportunity for Brazil to double its corn production in the coming years.



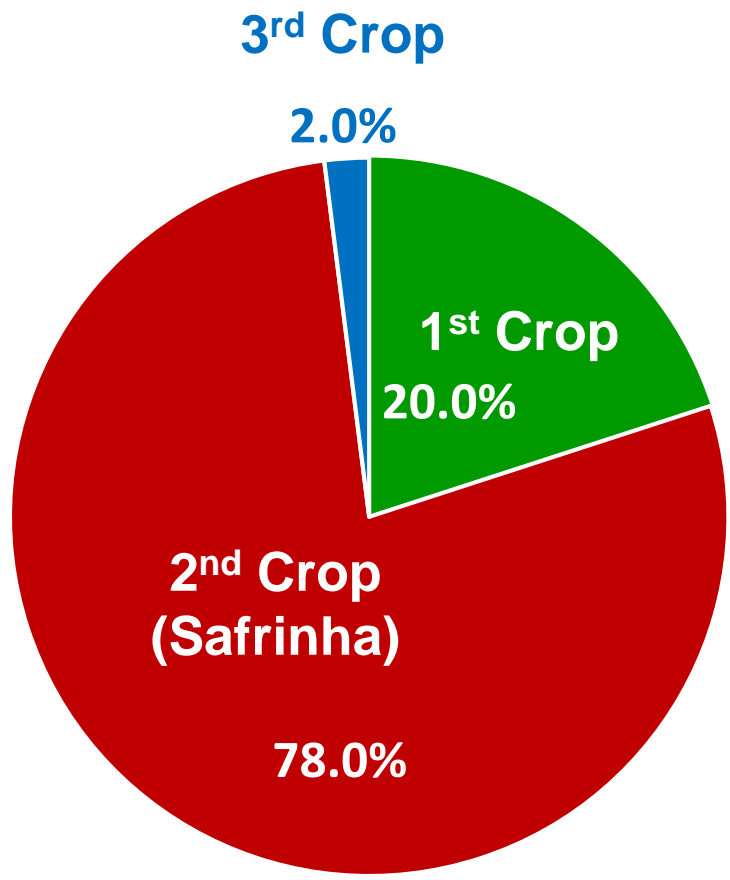
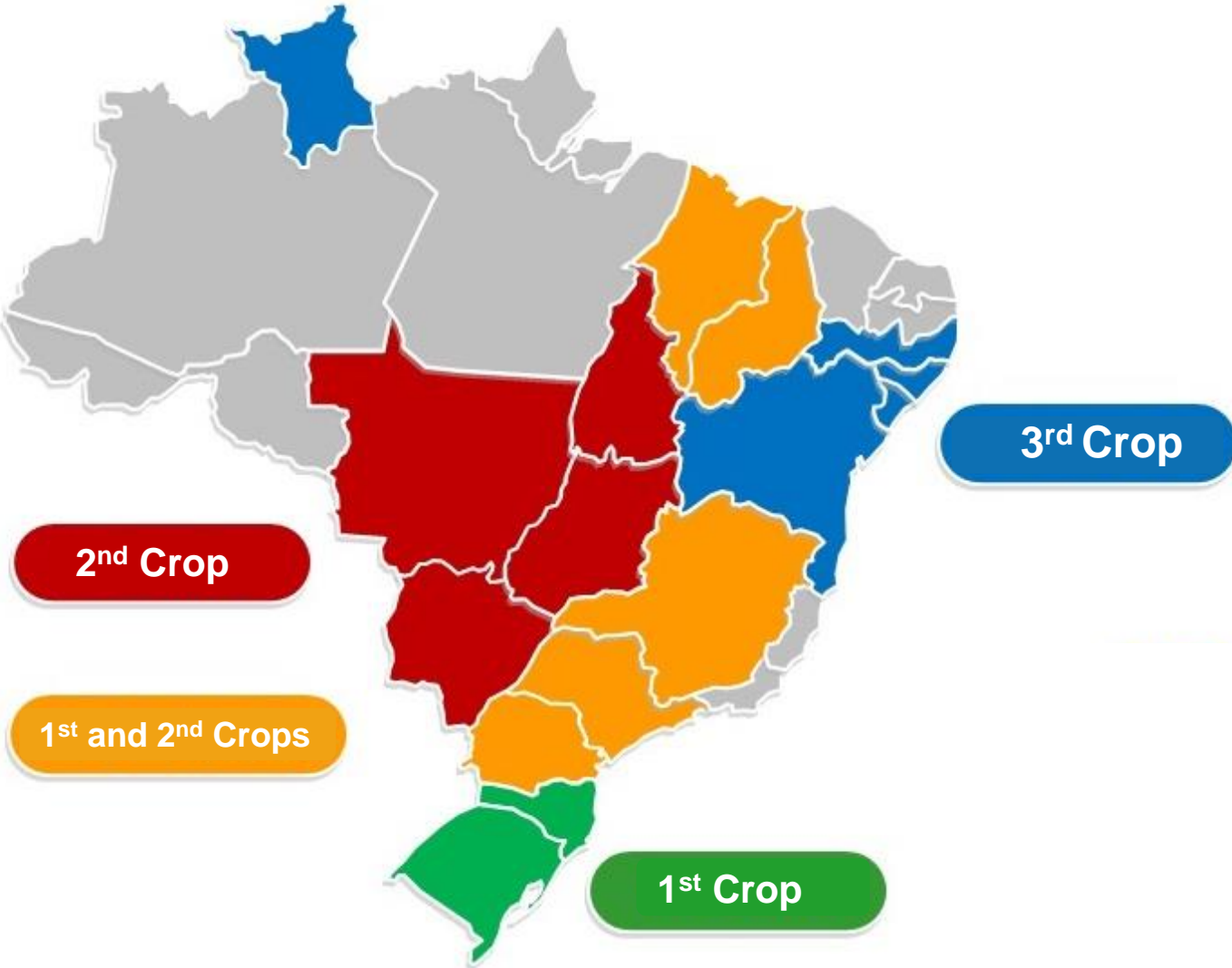


# Total Corn Planted Area in Brazil

*in million acres*



# Corn Production: 3 Crops per Year



Source: National Supply Company (Conab), Brazil

Source: Cogo Intelligence in Agribusiness

# 5. Myths and Facts on Brazilian Agriculture

Logistics is the biggest challenge to continue growing



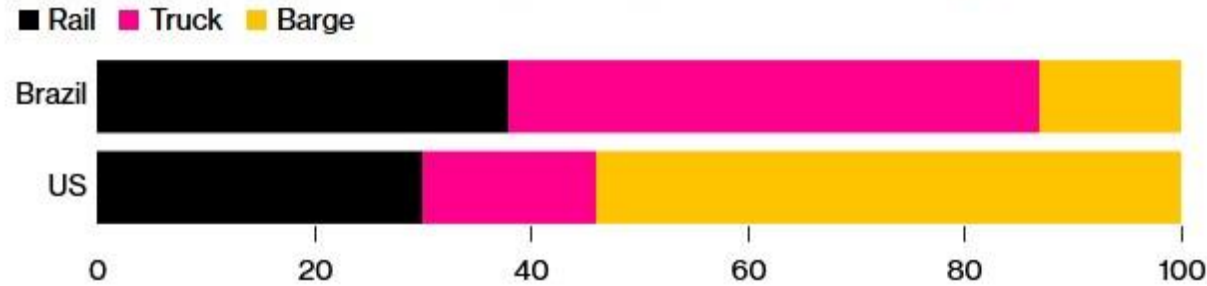
©Venderson Araujo, Confederação Nacional da Agricultura

**Mato Grosso, Brazil – May 2023**



# Brazil Try to Reduce the Dependence of Trucks

Share of export soybeans transported by each mode of transportation



Source: US Department of Agriculture, University of Sao Paulo

Source: Bloomberg

- Recent investments led the Brazilian government to project that **barge** and **rail** will play a more significant role.
- By 2030, the share of **highways** for general cargo in Brazil is expected to decrease from **60% to 30%**.
- The role of **railways** in moving grain to ports will grow from **21% to 35%**, and the role of **barges** will more than double, from **14% to 29%**.

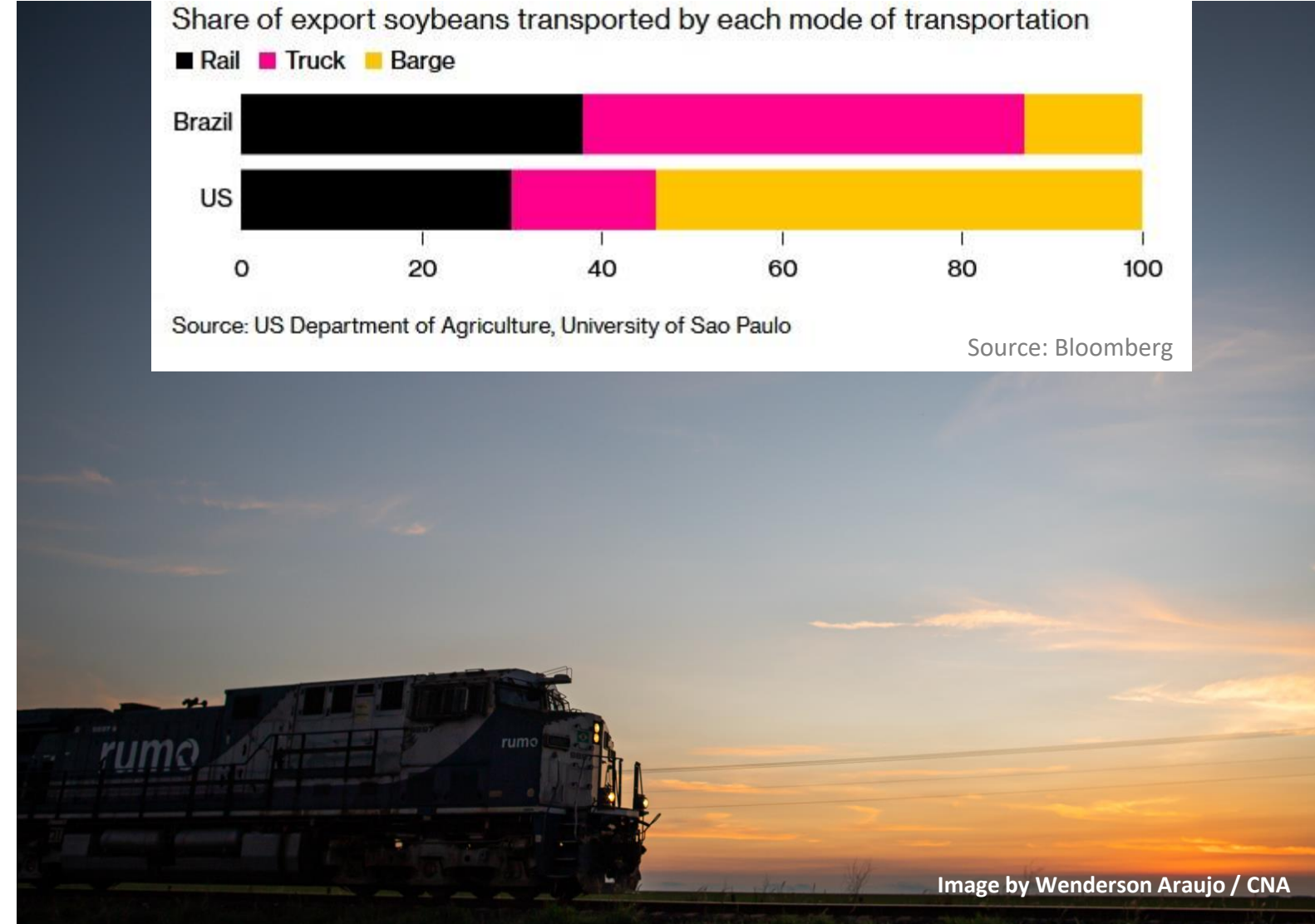
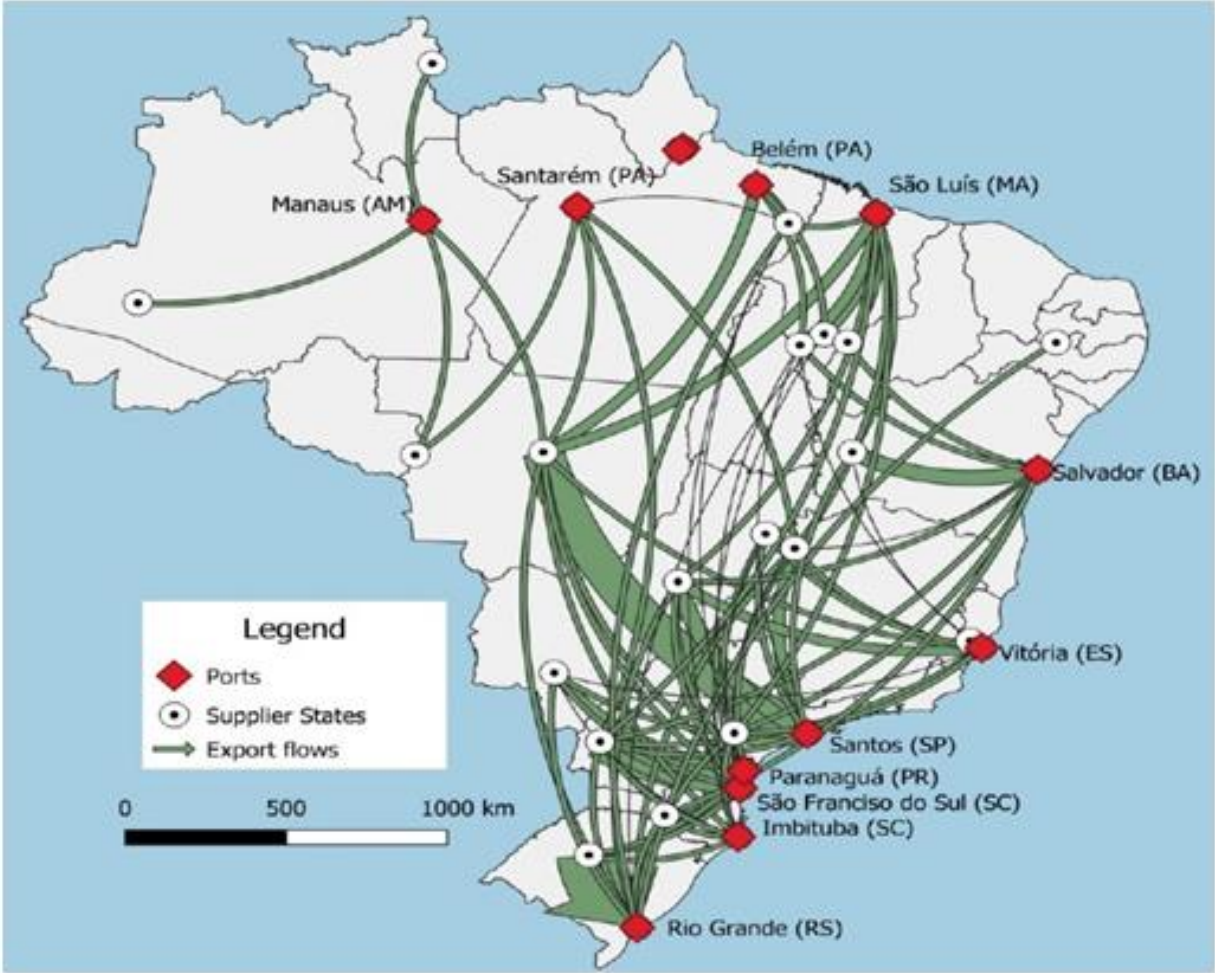


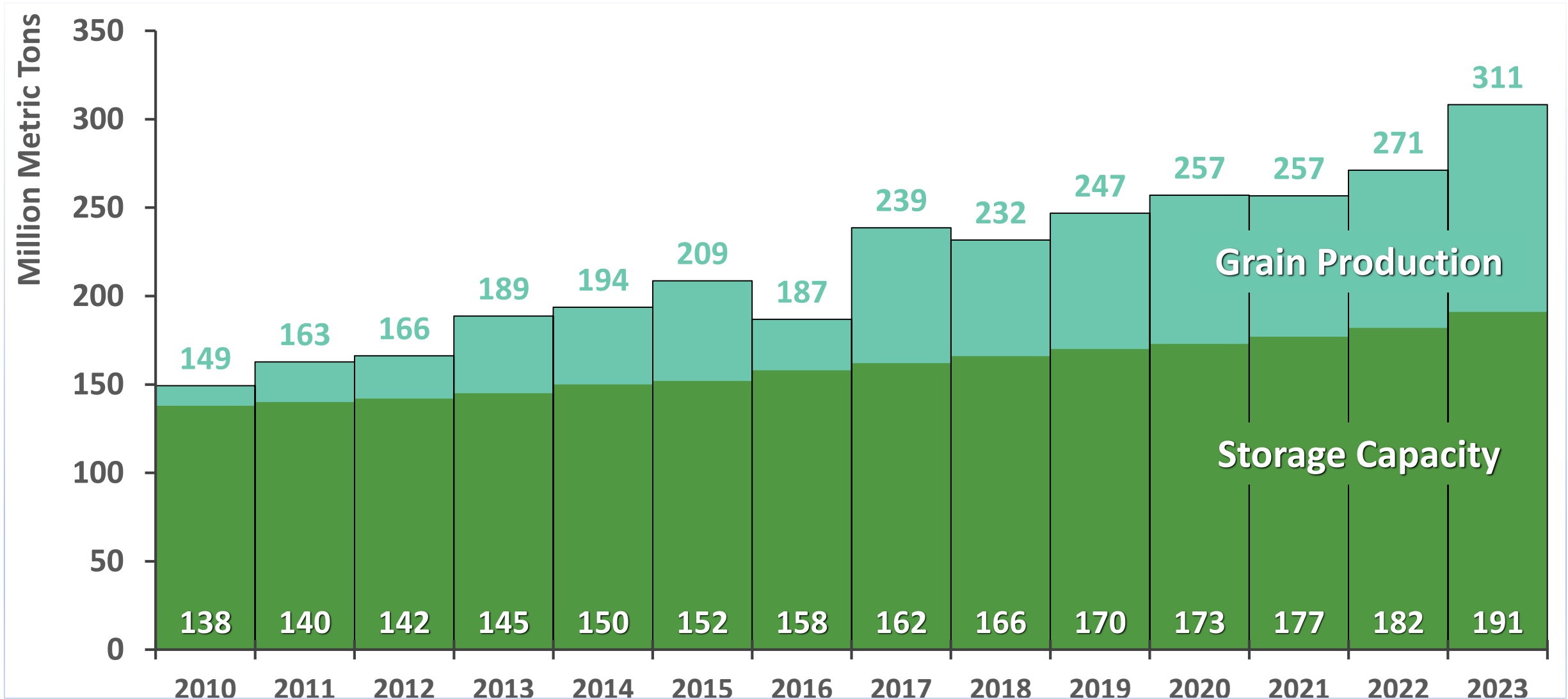
Image by Wenderson Araujo / CNA

# Logistics Flows of Grain Exports in Brazil



Source: University of São Paulo, Escola Superior de Agricultura “Luiz de Queiroz,” Brazil (ESALQ/USP)

# Storage deficit of 100 million tons in 2023



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**Thank you!**  
**Muito obrigada!**



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