

# Soy Sustainability – Focus on Brazil & Argentina

Transparency Update : Sourcing Profile and  
Deforestation/Conversion Risks

Complementing LDC's Sustainability Report

*Updated June 2020*

## Impact (*Policy implementation*)

- **Certification programs** ✓ (*see sustainability report for breakdown*)
- **Verified “D-FREE meal”** (Argentina) ●
- **Traceability to farm & Risk analysis** – Brazil, Argentina ✓ Paraguay, Uruguay ●

- **Commitment to sector solutions** – TFA secondment ✓
- **Soy Moratorium** ✓
- **Soft Commodity Forum (SCF) workstreams**  
Traceability ✓  
*Solidaridad, PCI* – producer projects on the ground ●
- **Long-term preferential financing in Brazil** – structure & proof of concept in place ●
- **TNC/LDC project in the Gran Chaco** ✓

*In progress* ●     *In place* ✓

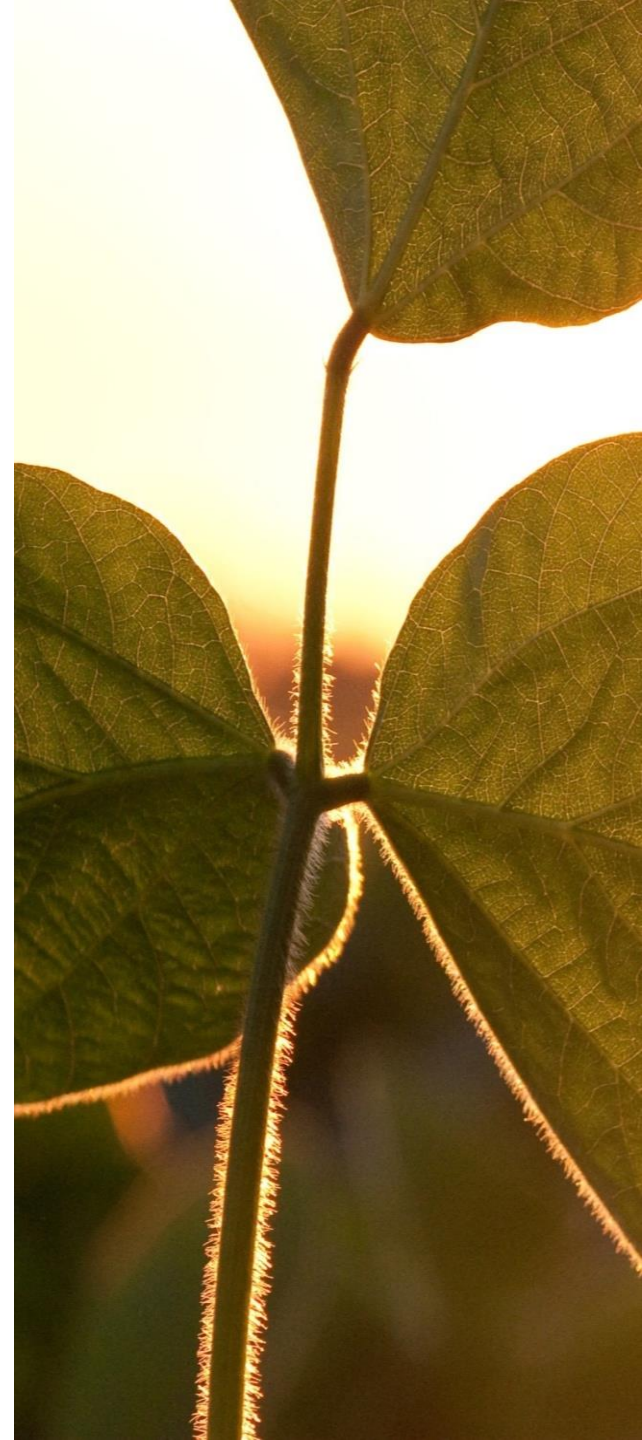
**Transformation** (*Outcome across industry*)



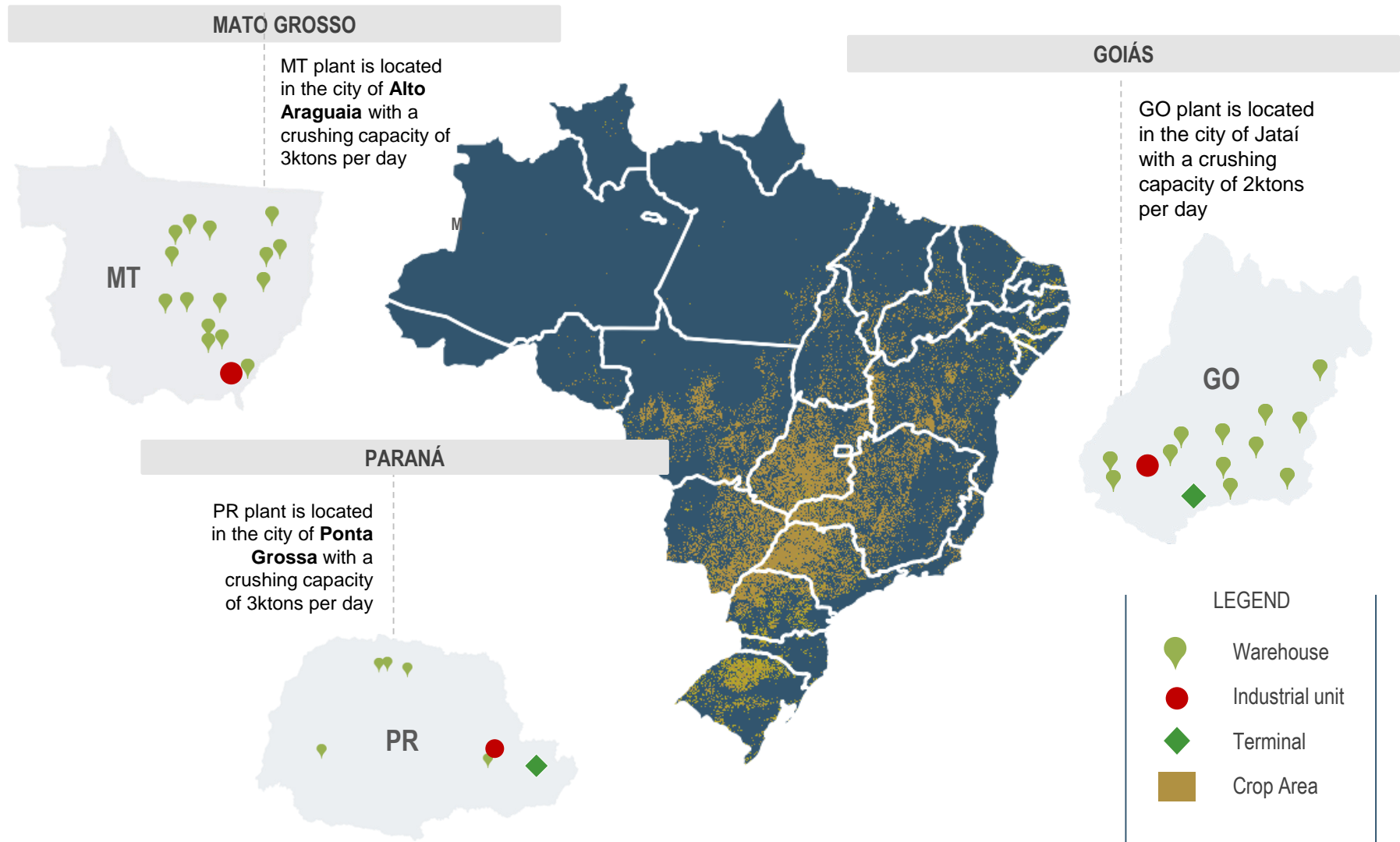
# Brazil

Sourcing Profile and

Deforestation/Conversion Risks

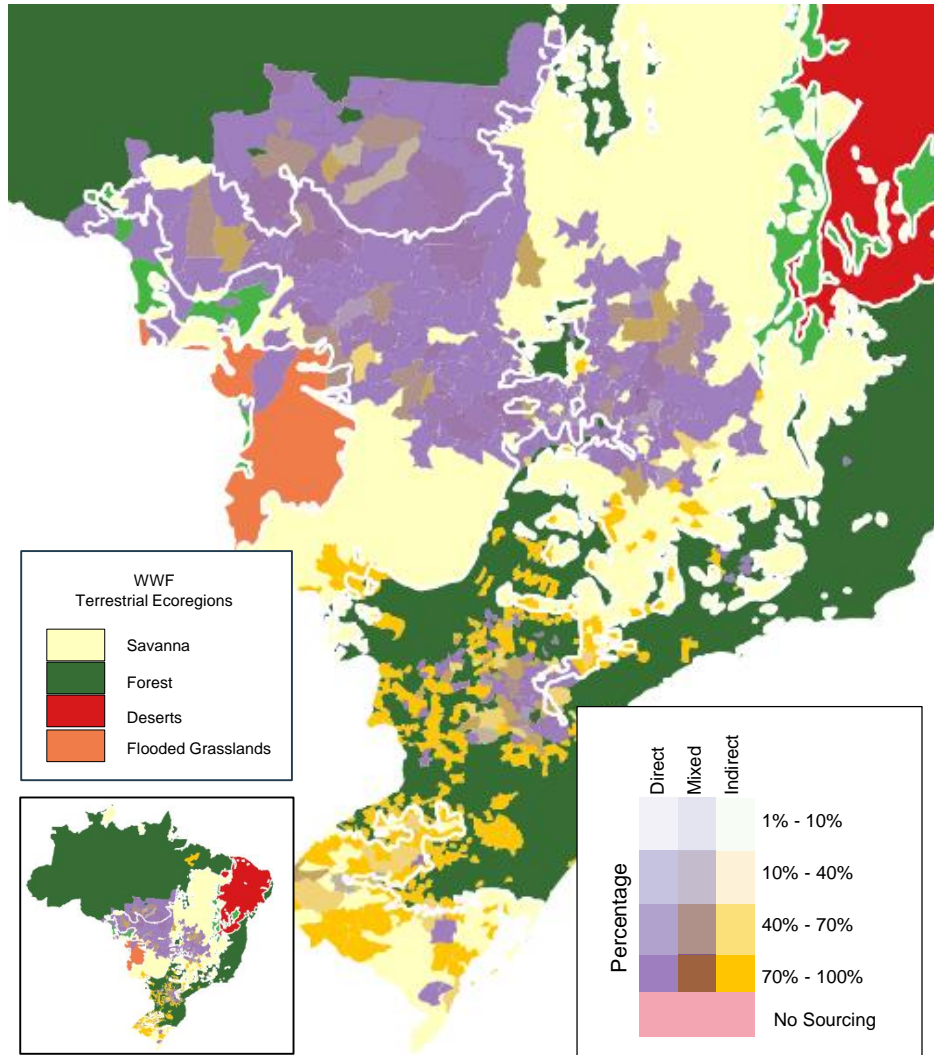


Warehouses and crushing plants are located in the main soybean productive areas, outside the main conversion frontiers

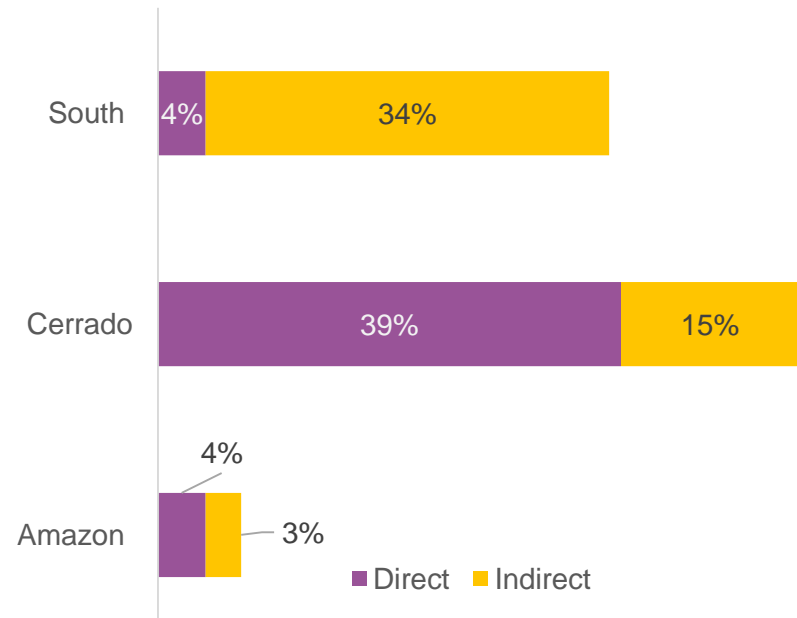


# LDC Brazil - Approx. Volume Breakdown by Biome and Direct/ Indirect of Total Origination

**Sourcing in the Cerrado is largely “direct”; in the “consolidated south”, sourcing is primarily through local cooperatives**



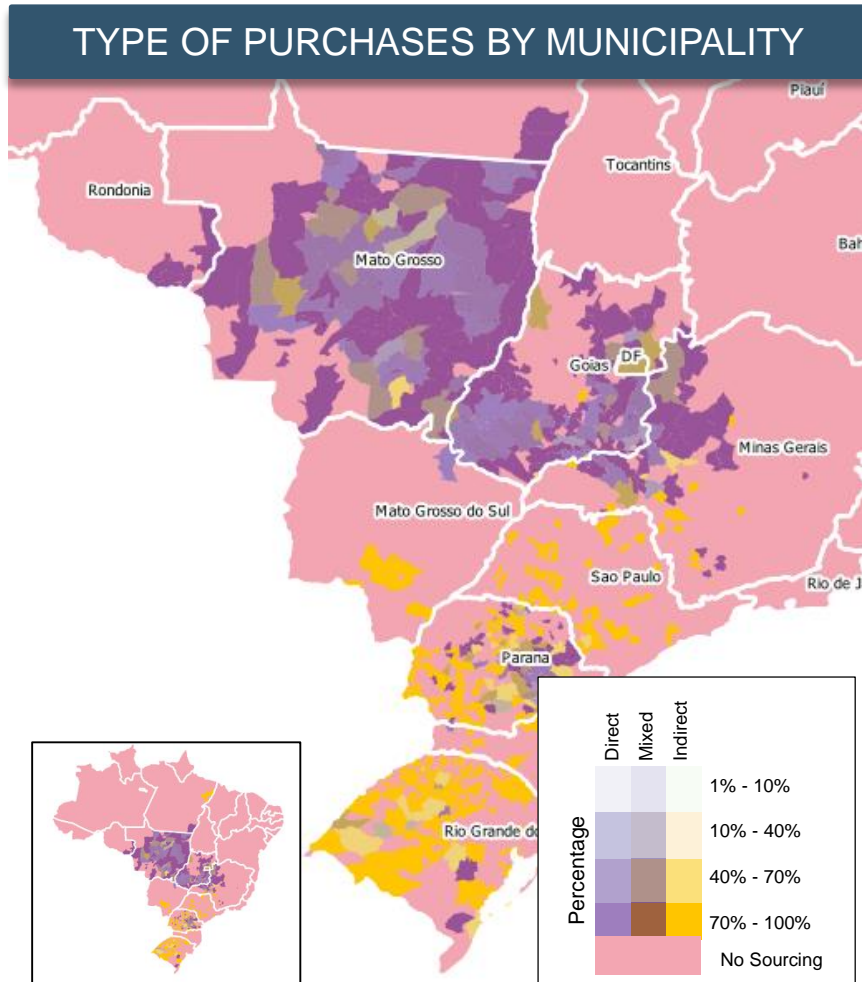
Approx. volume breakdown by biome and direct / indirect - 2019



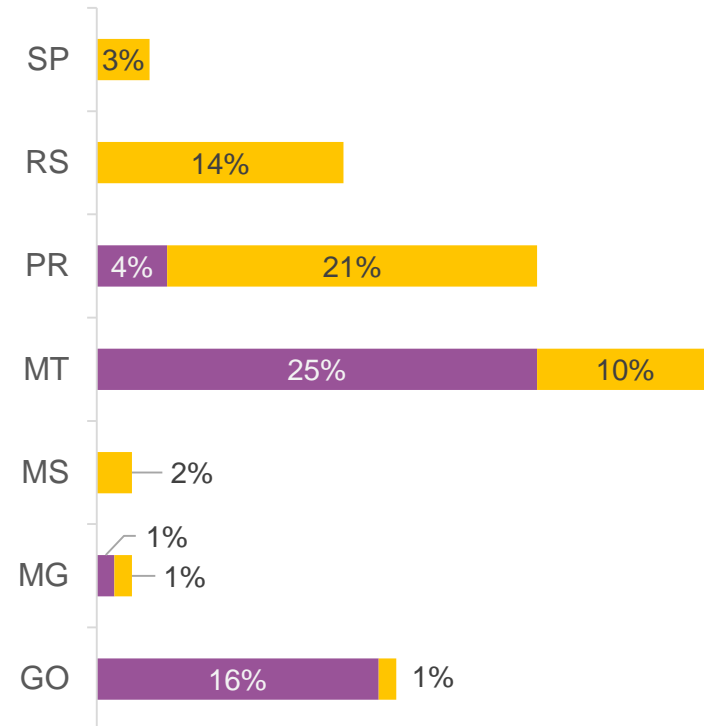
- Direct: soy sourced directly from a farmer
- Indirect: soy sourced from aggregators, cooperatives, and other third parties
- Sourcing in south is largely through local cooperatives (where traceability to farmer is possible)
- Sourcing from the Amazon biome is monitored under the Soy Moratorium
- *Soft Commodities Forum* definition of the Cerrado includes municipalities mainly/completely in the Cerrado, for which LDC sourcing volume is 27%

**Direct sourcing concentrated in states of Goiás (GO) and Mato Grosso (MT)**

**Southern “consolidated” states where there is significantly reduced conversion risk e.g. Parana (PR), Rio Grande do Sul (RS), source largely through cooperatives (and traceability to farmer is possible)**



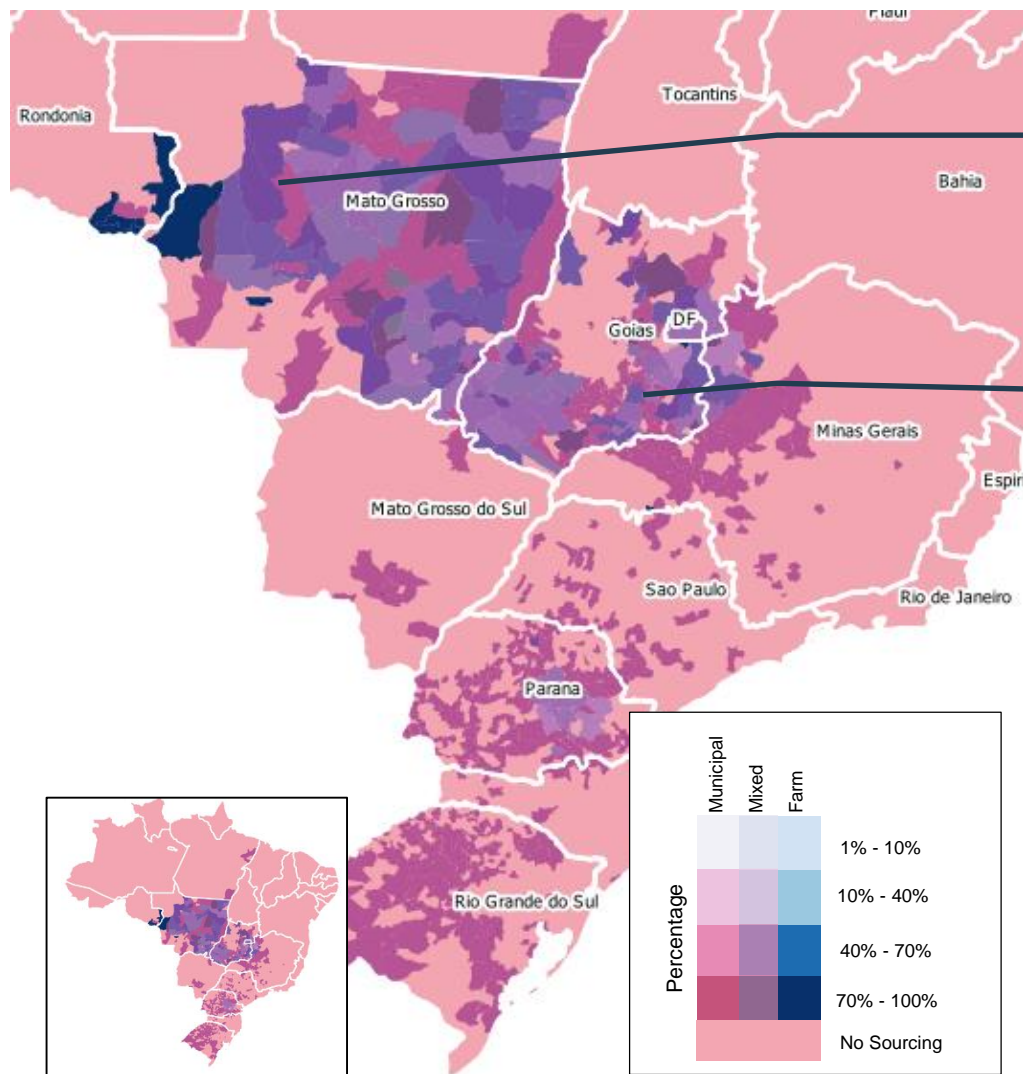
Approx. volume breakdown by state, direct and indirect - 2019



■ Direct ■ Indirect

# Traceability data for all purchases by municipality – as of end May 2020 *(based on crop year)*

Traceability to farm : areas of higher risk have been prioritized for gathering farm-level traceability



From what LDC sources in MT, 45% of volumes are traceable, with 29% with farm level polygon and 16% GPS points of the farm

From what LDC sources in GO, 33% of volumes are traceable, with 29% with farm level polygons & 8% GPS points of the farm

## Traceability to Farm and/or Municipality:

- LDC has 100% polygon level traceability to farm for municipalities of “high priority” as defined by the Soft Commodity Forum
- LDC currently has 33% traceability to farm for all direct purchases and traceability to municipality for the remainder
- LDC has set the objective of reaching 50% traceability to farm in 2020 for direct purchases, with a focus on higher risk areas

- LDC spatially monitors all sourcing with traceability to farm (polygon and GPS points, where a buffer was applied \*\*)
- PRODES Cerrado and PRODES Amazon are used to monitor all land use conversion; a series of reference dates are applied to identify when clearance has taken place.
  - Over the **10-year period 2010-2019**, a **cumulative amount of 2.2%** out of a total 4.3 million hectares under surveillance have undergone land-use change, not necessarily for soy.
  - For the **4-year period 2016-2019**, a **cumulative 0.73%** out of 3.8 million hectares underwent land-use change.
  - In **2019**, satellite monitoring found land use change in approximately **0.58% of 700,000 hectares** where LDC currently has direct traceability to farm. It is not yet clear if the clearance was soy-driven or not.
- Among the specific 25 municipalities identified by the *Soft Commodities Forum* as higher priority, LDC is present in two (in Mato Grosso), with **100% traceability to farm at a polygon level**.
  - One farm lost c. 400ha of native vegetation in 2019. It has been monitored for embargos on IBAMA and has no restrictions. Soy has not been established as yet. Further investigation and engagement will be carried out at the next planting season.
  - No other farm supplying LDC in these priority municipalities cleared land in 2019.
  - From our analysis so far, **over 99% of the LDC sourcing from the two priority municipalities, where there is 100% traceability, were deforestation-free**.

*\*Based on July-July monitoring, to accommodate seasonal cloud cover/weather so as to allow more accurate monitoring*

*\*\* Based on a 95% confidence of the size of CARs/farm size for the respective municipality/state*

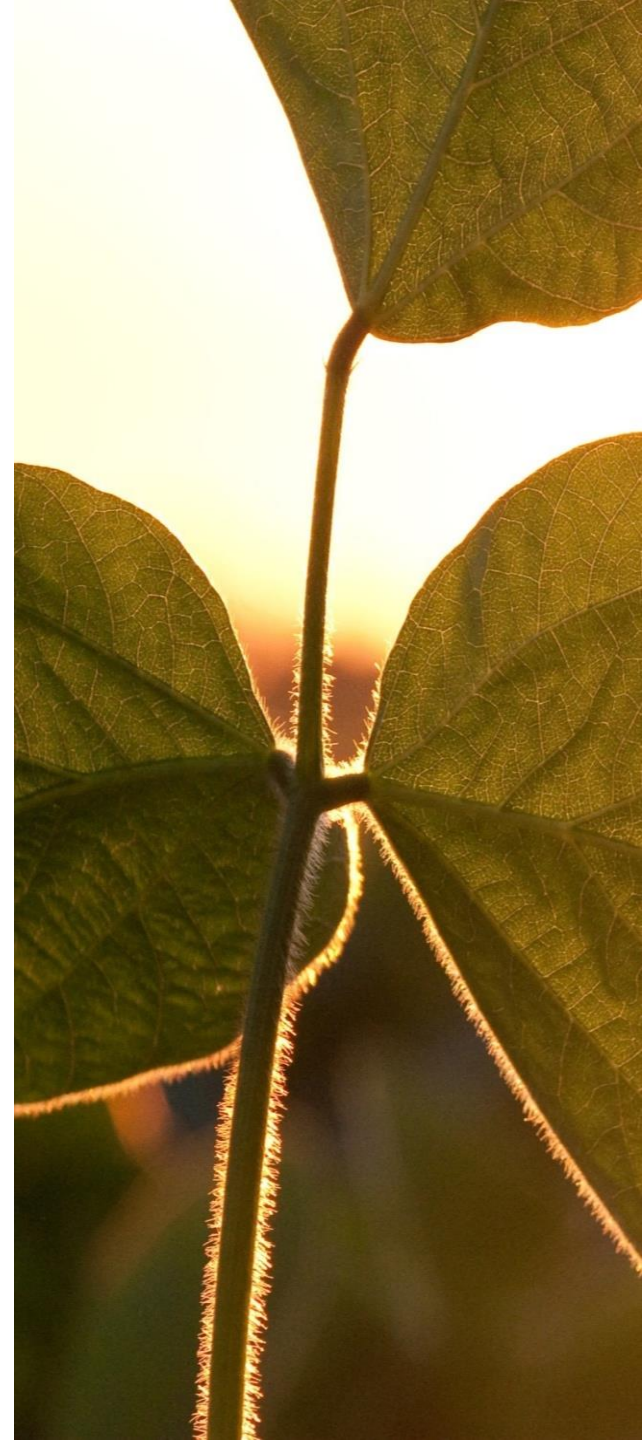
*\*\*\* This report does not include any soy volumes sourced by ALZ Grãos, in which LDC has a minority stake*



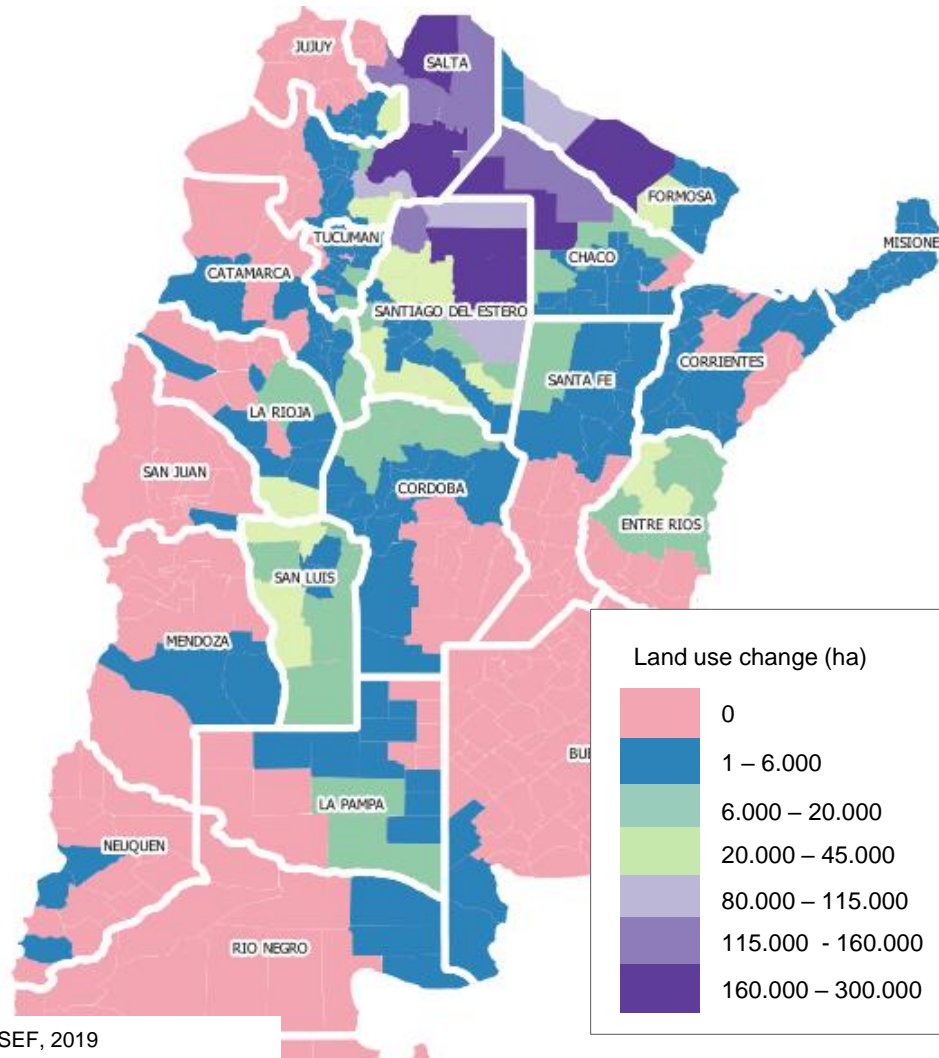
# Argentina

Sourcing Profile and

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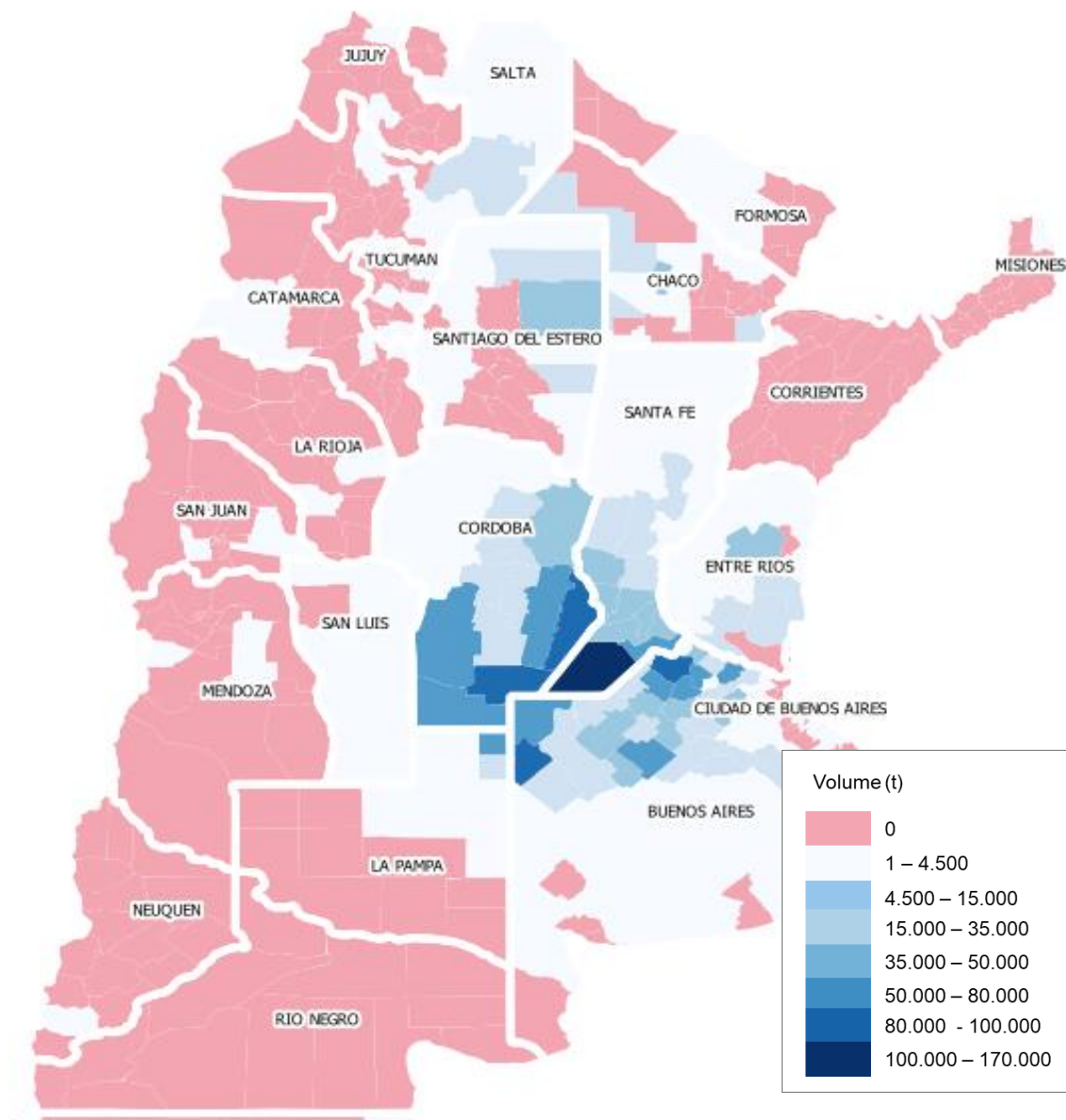
## Summary of the methodology LDC Research adopted for analyzing deforestation risks



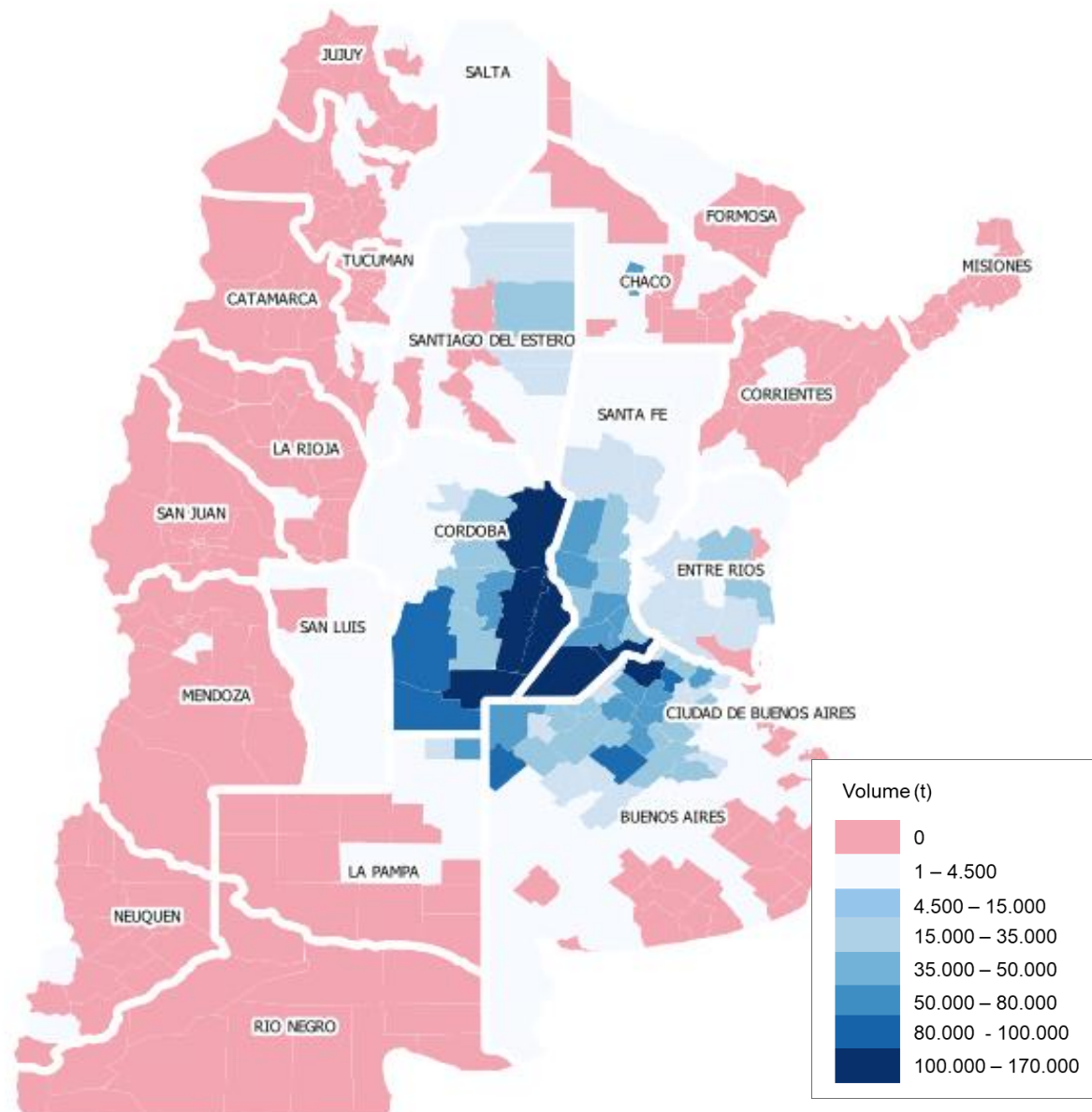
SOURCE: UMSEF, 2019

- Based on the “First National Inventory of Native Forest” (PINBN). The classification takes in to account FAO’s FRA 2000. The document is published by Argentina’s UMSEF (Unidad de Manejo del Sistema de Evaluación Forestal).
- The satellite images for the study are from the LANSAT 7 satellite, which has a resolution of 30m.
- The map adds forest land and other native vegetation:
  - Forest land: tree cover over 20% with trees that exceed 7m
  - Native vegetation: Tree cover of up to 5% with shrubs with a minimum height of 0.5m.
- The analysis is from 2007 to 2018. Land use conversion is categorized by department.
- This analysis does not differentiate between legal and illegal deforestation. All land use change/conversion is captured.

# LDC Argentina origination – 2018/2019

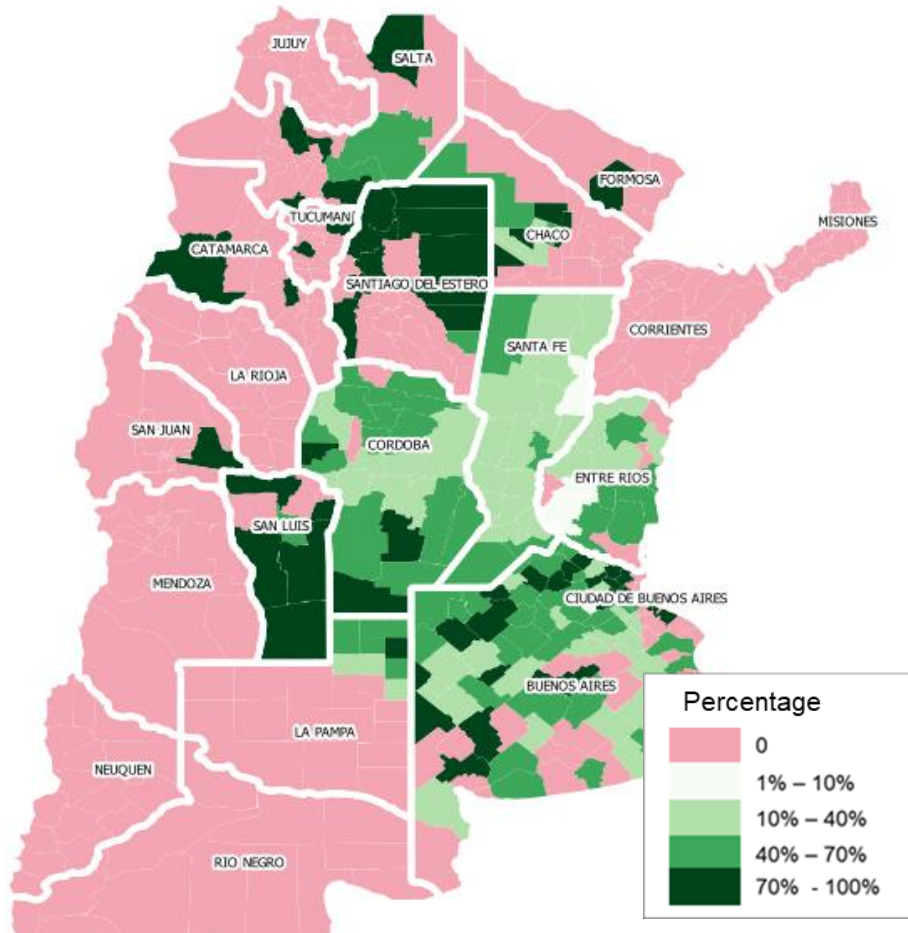


LDC Argentina's 2018/2019 origination is largely in areas of no / very low deforestation.



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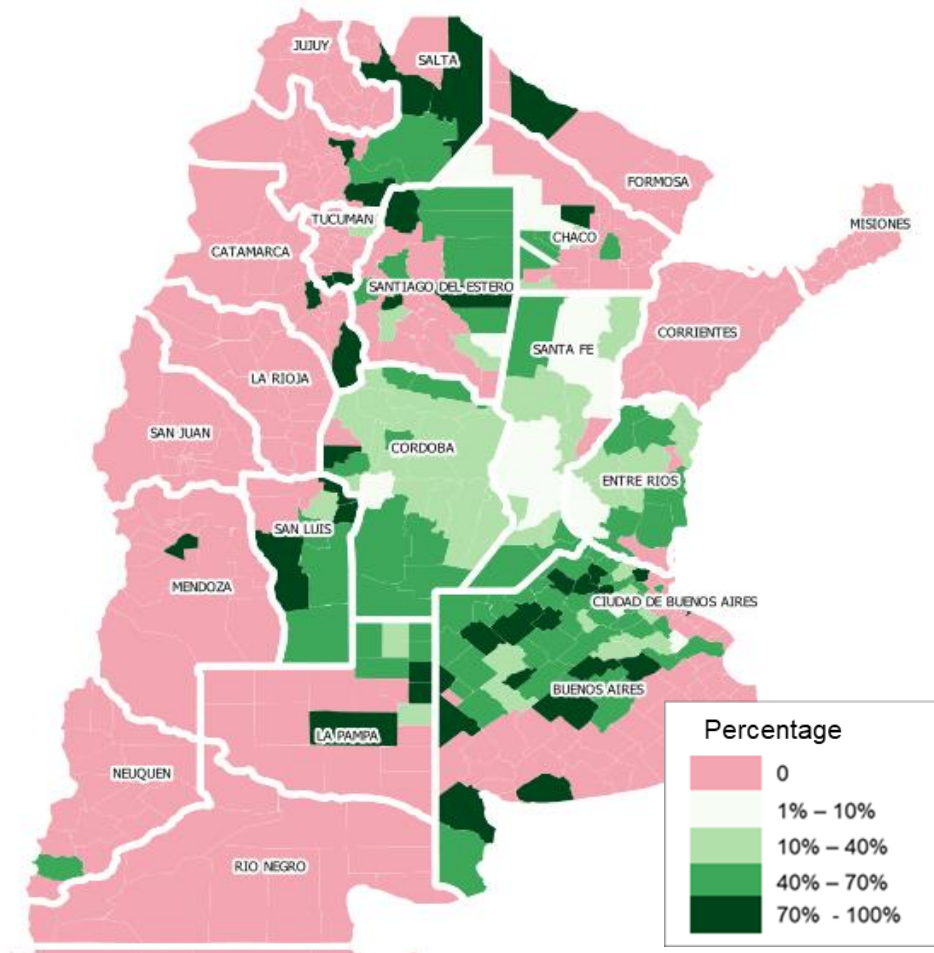
## Volumes of certified volumes originated, as a percentage of total LDC Argentina origination



LDC Argentina's 2018/2019 certified volumes are mapped by department.

These certified volumes (2BSvs/ISCC) have full traceability to farm with verified zero-deforestation (based on a cut-off date of January 1, 2008).

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LDC Argentina's 2019 / 2020 certified volumes are mapped by department.

These certified volumes (2BSvs/ISCC) have full traceability to farm with verified zero-deforestation (based on a cut-off date of January 1, 2008).

LDC sources a high percentage of certified volumes from areas with a higher deforestation-risk.

- 84-90% of LDC Argentina's origination volumes over the previous two campaigns came from verified sources of no-deforestation risk.
- The remaining percentage does not indicate a deforestation risk, but rather shows where there are opportunities to improve traceability to farm.
- The extensive certification programs (covering 45-51% of all LDC Argentina sourcing depending on the year) ensures full traceability to farm.
- LDC Argentina continues to make strides to reach 100% deforestation-free sourcing, as per the programs outlined in LDC's Sustainability Report.