

Developing indicators within Trase

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What is Trase?

A data-driven transparency initiative that maps the international trade of agricultural commodities that drive tropical deforestation.

- **Trase Supply Chains**
- **Trase Insights**



Exporter: **Brazil** | Importer: **All countries** | Commodity: **Soybeans** | Year: **2020**

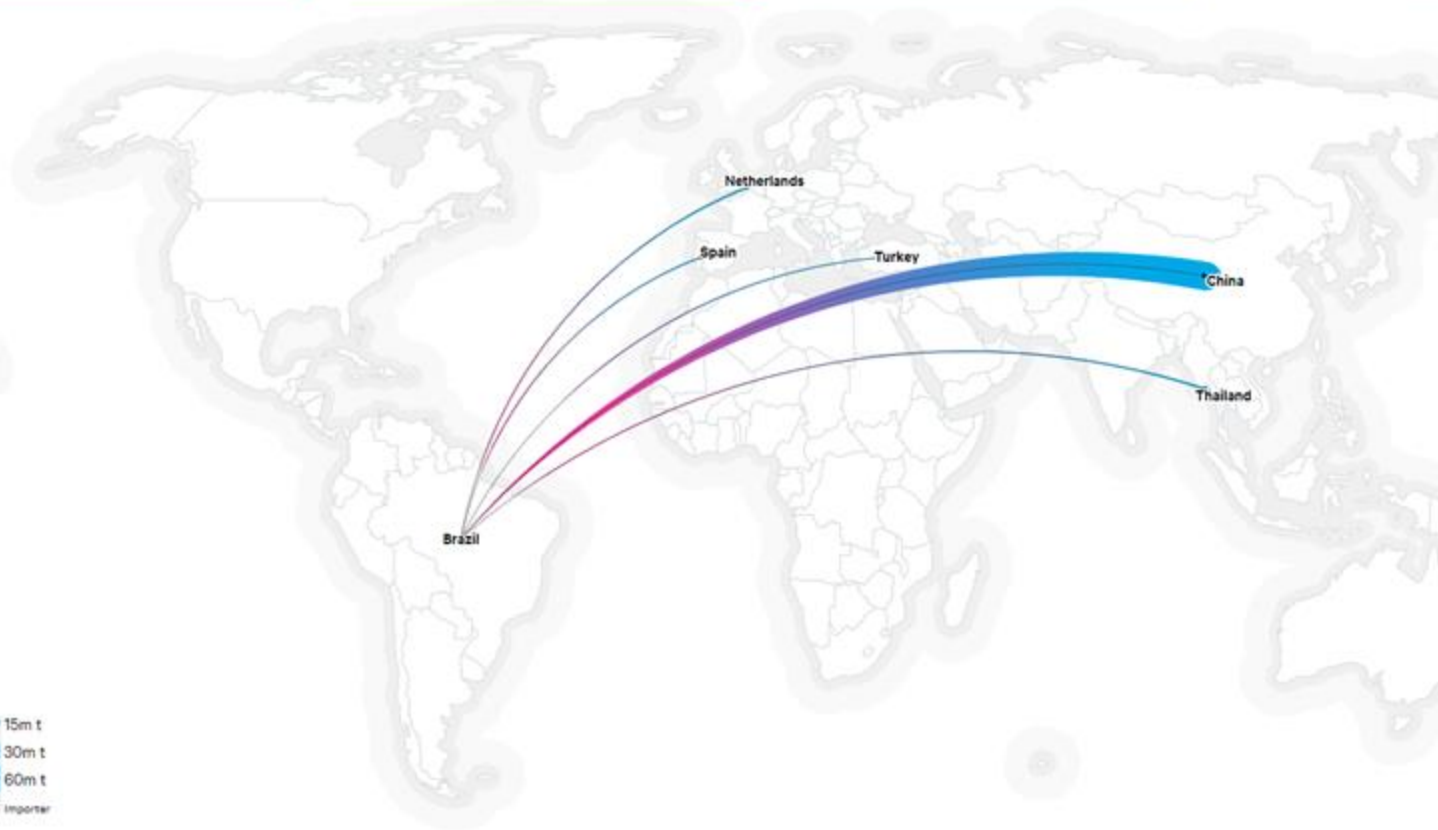
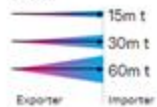
Measure

- Value
- Weight



Share of global soybeans trade

Scale



Trase maps the middle part of the supply chain

Connects consumer markets and trading companies to sourcing regions and associated deforestation impacts in these regions



Municipalities of production



Slaughterhouses



Port



Exporter



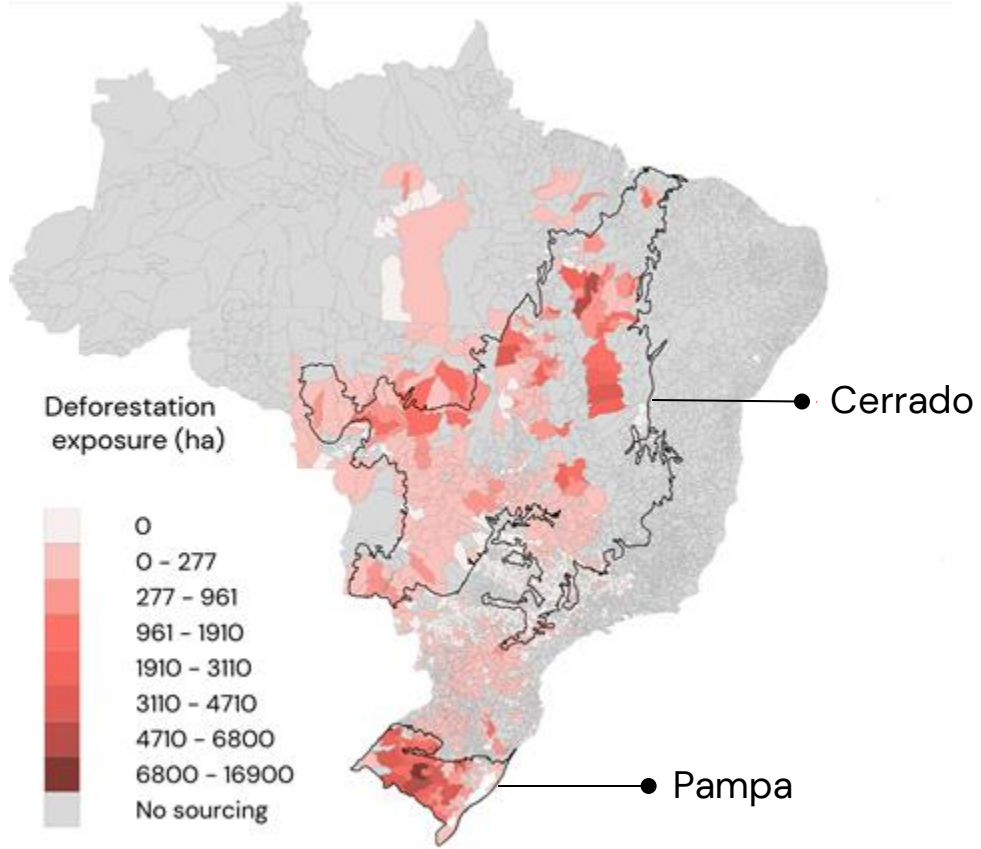
Importer



Port in country of import



China's soy imports from Brazil (2020)



Half of China's deforestation exposure comes from just **30 municipalities**, or **7%** of soy

Five companies are exposed to **57%** of soy deforestation



237,000 ha total

Indicators within Trase

Varies by context but includes e.g.:

- Trade volumes (tonnes) and value (USD) of commodity.
- Area of production.
- Deforested area.
- Gross and net emissions.
- Qualitative flags (e.g. zero-deforestation commitment coverage, Forest500 score)

Other indicators under development:

- Biodiversity (LIFE Score, others?)
- Water
- Social impacts e.g. human rights.



Selection of indicators

- Trase is primarily focused on deforestation-linked commodities, therefore selection of indicators (deforested land, and emissions) explicitly linked to that agenda.
- Central to Trase's data provision/metrics is the idea that where production takes place *really matters*. Metrics need to be responsive/specific to changes across production landscapes e.g.:
 - Suitable for tracking annual changes;
 - Specific to particular cropping systems.
- Biodiversity (beyond deforestation) and social indicators are 'secondary' to our main climate/deforestation concerns (still very important, but trickier to measure!).



Accessing data

- Two key components of our data: a) environmental metrics, b) supply chain data.
- Both have historically been ‘poor’ quality (but improving).
- Deforestation data:
 - Sourced from local/regional datasets (for alignment with local jurisdictions and also typically ‘better’ quality e.g. MapBiomas).
 - We work closely with the international community to integrate/improve data.
- Supply chain data:
 - Transparency is poor overall - limits Trase’s breadth.
 - Information sourced from customs records, bills of lading, tax records, sanitary records, industry disclosure.
 - Often obtained via brokers.



Key challenges

- **Data availability:**
 - Crop-specific land use data is typically poor (with some exceptions).
 - Supply chain data limiting.
 - Generating new results is data intensive (but improving e.g. via GEE).
- **Alignment:**
 - Deforestation definitions vary (we tend to include ‘other wooded land’).
 - Alignment of deforestation data with e.g. FAO FRC is challenging.
 - Different remote sensing products exist.
 - Emissions data requires assumptions about amortization etc.
- **Communication:**
 - Providing the ‘right’ product for biodiversity is a challenge (but important!)
 - Complexity of metric development means that results vary from other platforms due e.g. to source data, definitions, treatment of lags etc.

