Challenges to map commodity supply chain at detailed level

Osvaldo Pereira

Research Associate

Tomas Carvalho

Data Scientist



Agenda

- Trase subnational supply chain mapping;
- Where do actors buy from?
- Assessing risk for storage facilities;
- Why mapping risk at asset level for field engagement?





Trase supply chain mapping

- Trase offers the highest level of spatial detail connection companies with producing countries at the most detailed jurisdictional level;
- Based on a method that allows for the **spatially explicit mapping** of international trade linking localities (e.g. **municipalities**) to countries of destination;













Supply chain mapping approach

Goal: the supply chain must represent the entire market for any country/exported commodity, i.e. all actors, producing locations



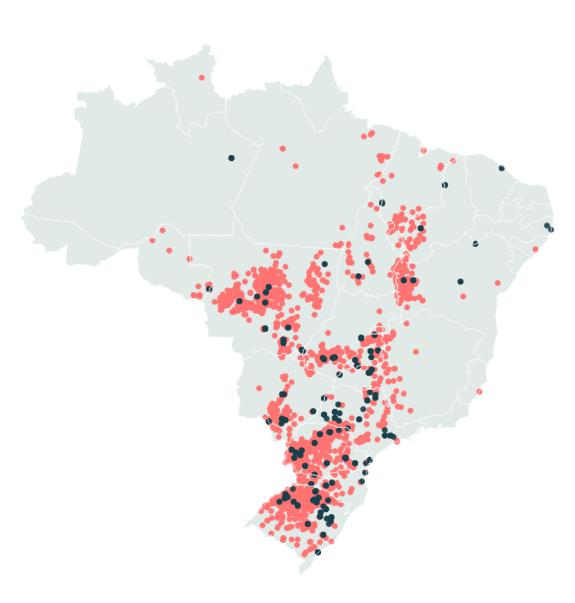


In-country asset information

An asset is a physical or material resource that relates to the production, storage or processing of a commodity

Brazilian Soy

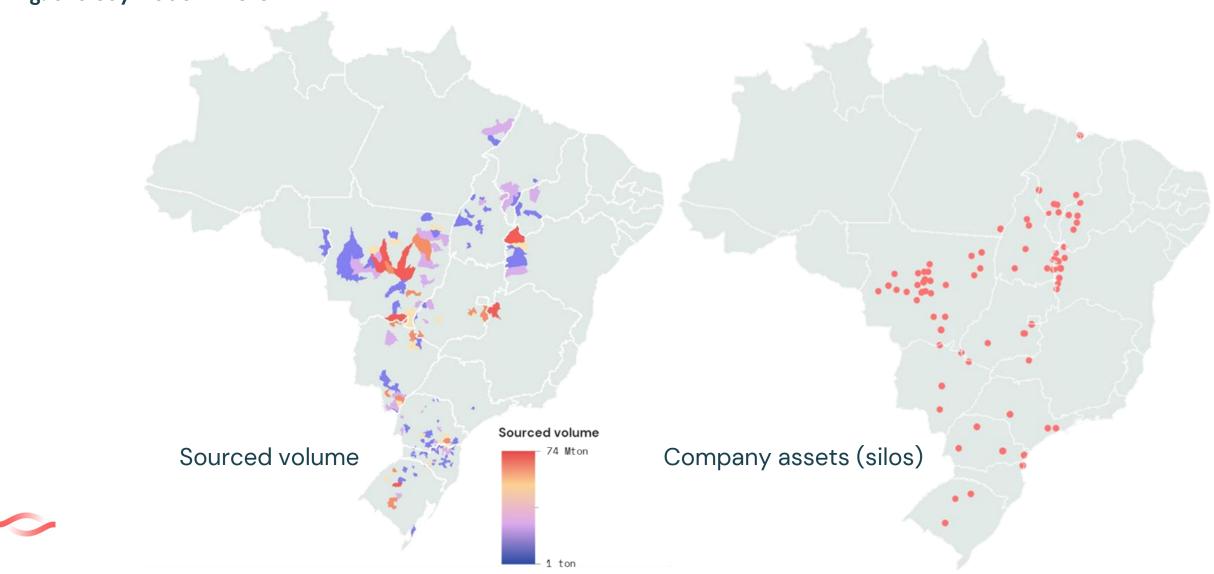
- Silos
- Crushing facilities
- Refining facilities





Where do actors buy from?

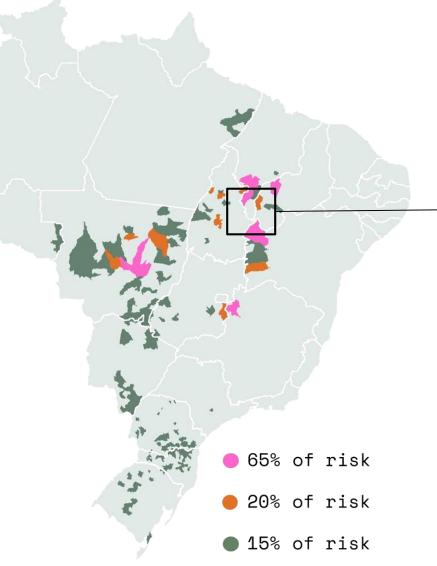
Eg. of a soy trader – 2018



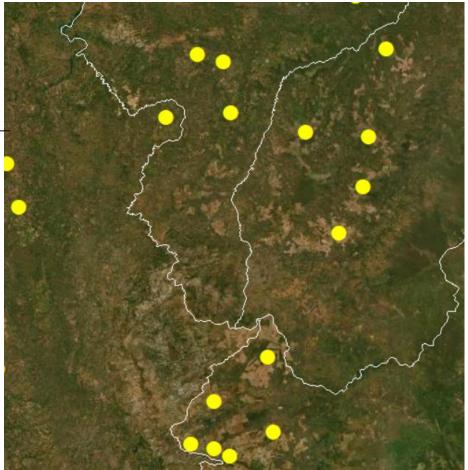
Assessing risk for storage facilities

Company deforestation risk

Where companies are exposed to risk?



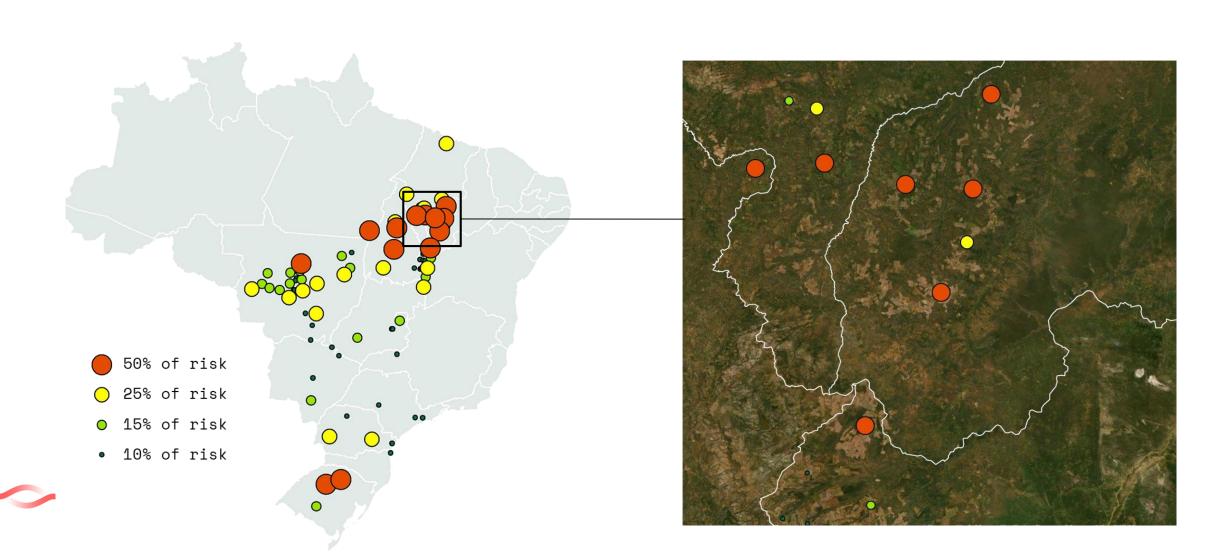
Example of company assets in Matopiba





Assessing risk for storage facilities

Hypothetical example of risk classification by assets of a given company



Why mapping risk at asset level for field engagement?

- The assets (eg.: silos, crushers, slaughterhouses) are the closest "identifiable" connection to areas of production;
- Intermediate actors in the supply chain can improve monitoring and demand more transparency from supplies;
- More granularity for risk assessment;
- So far, asset level risk classification is the closest we can get from production areas for mapping deforestation risk in the supply chain;



Thank you

osvaldo.pereira@trase.earth

tomas.carvalho@trase.earth





