TRACKING CATTLE SUPPLY CHAIN IN BRAZIL BY LINKING PUBLIC SYSTEMS (CAR+GTA)

Raoni Rajão
Cattle production and deforestation

Farms registered in MT at the EU Trade Control and Expert System

At least 17% of the beef exported to the EU is linked to deforestation (Rajão et al, 2020)
Options

- 1) Private Certification

- 2) Full transparency of CAR/GTA raw data

- 3) Governmental tracking system
1) Private Certifications

Evaluation of the Fulfillment to the "Public Livestock Commitment"

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Total non-conformities</th>
<th>% of non-conformities to the total purchases in the base year</th>
<th>% of non-conformities to the total purchases in the sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchases of raw materials from properties on which deforestation was detected after October 2009</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Purchases of raw materials from properties that overlap on Indigenous Lands</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Purchases of raw materials from properties blocked for being located on Environmental Conservation Units</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Purchases of raw materials from properties blocked for being located on the MTE List</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Purchases of raw materials from properties embargoed for being located on the IBAMA List</td>
<td>1</td>
<td>0.001</td>
<td>0.01</td>
</tr>
<tr>
<td>Purchases of raw materials from properties blocked for other criteria provided for in the commitment and not described above (specify)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
1) Private Certifications

Meat giants selling to UK linked to Brazil farms in deforested Amazon reserve

Greenpeace report shows cattle indirectly sold to JBS, Marfrig and Minerva came from protected Serro Ricardo Franco park
1) Private Certifications

- **Advantages:**
  - Private certifications already adopted by large companies
  - Little political resistance

- **Disadvantages:**
  - High cost for individual producers and small meatpackers
  - Lack of transparency increases risk of fraud and market mistrust
2) Full transparency of CAR/GTA raw data

Information Flow

Indirect supplier

Direct suppliers

GTA

GTA+CAR raw data

Academia/NGOs, etc

Private Monitoring

Certifiers

Retailers

Meatpacker
2) Full transparency of CAR/GTA raw data
2) Full transparency of CAR/GTA raw data

- Advantages:
  - Solution already adopted by Public Attorneys, Researchers and NGOs
  - Independent evaluation of companies

- Disadvantages:
  - Need complex data matching (CPF, farm name with errors etc.)
  - Disclose producers' names and commercial information (n. of head of cattle sold/bought)
3) Governamental tracking system

- Indirect supplier
- Direct suppliers
- GTA+CAR
- Private Monitoring
- Certifiers
- Meatpacker
- Retailers

Information Flow
3) Governmental tracking system

- Governmental system that links the GTA, CAR and Invoice and Packaging
- Query based CAR property code:
  - Location of the property
  - Embargoes, fines, suppression permits
  - List of suppliers (CAR code)
3) Governamental tracking system

Example:

<table>
<thead>
<tr>
<th>Nome da Fazenda</th>
<th>Inscrição Estadual</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESTANCIA TREIS J</td>
<td>286069300</td>
</tr>
<tr>
<td>FAZ ALTA FLORESTA</td>
<td>286863804</td>
</tr>
<tr>
<td>FAZ ANANDA DA WN</td>
<td>286340720</td>
</tr>
<tr>
<td>FAZ CACHOEIRA</td>
<td>287700178</td>
</tr>
<tr>
<td>FAZ NOSSA SENHORA DA MUXIMA</td>
<td>287605469</td>
</tr>
<tr>
<td>FAZ SAO JUDAS TADEU</td>
<td>287929426</td>
</tr>
<tr>
<td>FAZENDA AGROBATA</td>
<td>285965476</td>
</tr>
<tr>
<td>FAZENDA ALIANCA , 26939</td>
<td>286082195</td>
</tr>
<tr>
<td>FAZENDA CAMPO ALEGRE QUINHAO 1</td>
<td>286066416</td>
</tr>
</tbody>
</table>
3) Governamental tracking system

Example:

<table>
<thead>
<tr>
<th>CAR property number:*</th>
<th>PA-1500602-7FB1CFFF2FBC4BC99EE8565C2BFE931</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area:*</td>
<td>4480 ha</td>
</tr>
<tr>
<td>Deforestation authorization:*</td>
<td>None</td>
</tr>
<tr>
<td>Deforestation (INPE):**</td>
<td>2018: 800 ha 2019: 700 ha</td>
</tr>
</tbody>
</table>
| Restrictions at property-level:* | Embargoed area (54%) Infringement: Destroy or damage forests or other forms of vegetation  
Overlap (30%) Conservation Unit |
| Cattle suppliers:      | PA-1502764-C755EF716A0545AA97A8A357AF58E565C2BFE931  
PA-1507300-385FF0D8F07544FE80F645A7658743FD  
PA-1507300-FB84B59B9AFB4089ECA440B354925E4  
PA-1500602-6D5E338CCD3541F6899B249F3BDB057B  
PA-1507805-AC9026B128A1452C99A6D1F26D30FF9D  
PA-1502764-A34CFABB82674870953A1F49E83C8CD  
PA-1503606-824E4C2B92514B9A25DB4729DD54732  
PA-1507300-FAC50FCAD354D378DEFF179249215C63  
PA-1508159-E2A870AFCD364F90982270C8C44910E |

* Information already public via SICAR
** Information in public datasets but not integrated
## 3) Governamental tracking system

**Example:**

<table>
<thead>
<tr>
<th><strong>Agro Verde</strong></th>
<th>CAR property number:* PA-1500602-479D0AED4A1452C99A6D1F26D30FF9D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area:*</td>
<td>4480 ha</td>
</tr>
</tbody>
</table>
| Deforestation authorization:* | 2010-14: 250 ha  
                          | 2015-19: 300 ha                                                                 |
| Deforestation (INPE):** | 2016: 550 ha                                                                  |
| Restrictions at property-level:* | None                                                                 |
| Cattle suppliers: | PA-1502764-C755EF716A0545AA97A8A357FAAEE1B2  
                          PA-1507300-385FF0DBF07544FE80F645A7658743FD  
                          PA-1507300-FBB4B59B9AFB40889ECA440B3549254E  
                          PA-1500602-6D5E338CCD3541F68998249F3BDB057B |

* Information already public via SICAR
** Information in public datasets but not integrated
3) Governmental tracking system

- **Preferable solution**

- **Advantages:**
  - No additional cost to the individual rancher
  - Combines existing public data (GTA, CAR, embargoes etc.)
  - Does not expose producer’s personal (i.e. name, cpf, etc.) and commercial data
  - Possible to apply also to soy supply chain

- **Challenges:**
  - Requires the introduction of CAR property number when issuing the GTA and invoices
Thanks for your attention
raja@ufmg.br