CERRADO SOY DYNAMICS WITH FOCUS ON THE 61 PRIORITY MUNICIPALITIES UPDATED FOR CROP YEAR 2019/20 VS. PRODES 2014-2019

Accomplished by:

JOEL RISSO
joel@agrosatelite.com.br
+55 (48) 98856-5670
STUDY AREA | 61 Municipalities (25 + 36)
a) **Study Area**

The territory of the Cerrado biome is 203.94 million hectares, while the area occupied by the 61 SCF municipalities is 33.11 million hectares corresponding 16% of the biome.

b) **Soy in crop year 2019/20**

The soy planted area in the Cerrado in crop year 2019/20 was 18.83 million hectares, with 4.91 million hectares of soy (26%) planted in the 61 SCF municipalities.

c) **Deforestation (PRODES 2014-2019)**

In the Cerrado biome the total deforestation, from 2014 to 2019, was 4.97 million hectares, while in the 61 SCF municipalities it was 1.42 million hectares (29% of Cerrado’s deforestation) during the same period.

d) **Deforestation (PRODES 2014-2019) converted to soy**

The amount of soy in crop year 2019/20 on top of the deforestation observed from 2014 to 2019 was 0.48 million hectares in the Cerrado and 0.31 million hectares in the 61 SCF municipalities (64% of Cerrado’s native vegetation conversion to soy). From 2006/07 to 2013/14, NVC rate to soy was 0.19 Mha/yr, while from 2013/14 to 2019/20 it decreased to 0.08 Mha/yr in the Cerrado.
SOYBEAN EXPANSION ON LAND OTHER THAN SOY | From 2013/14 to 2019/20

Area (Mha)

Cerrado Biome 2013/14-2019/20
- Soy Expansion without deforestation - on pasture: 1.65 (28.7%)
- Soy Expansion without deforestation - on corn, cotton or sugarcane: 1.75 (30.4%)
- Soy Expansion without deforestation - on follow and other Uses: 0.48 (8.3%)
- Soy Expansion with deforestation: 1.88 (32.6%)

61 SCF Municipalities 2013/14-2019/20
- Soy Expansion without deforestation - on pasture: 0.26 (15.8%)
- Soy Expansion without deforestation - on corn, cotton or sugarcane: 0.57 (35.2%)
- Soy Expansion without deforestation - on follow and other Uses: 0.49 (30.1%)
- Soy Expansion with deforestation: 0.31 (18.9%)
Soybean expansion from crop years 2013/14 to 2019/20 and associated land use changes

<table>
<thead>
<tr>
<th></th>
<th>2013/14</th>
<th>2019/20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soy</td>
<td>15.60 Mha</td>
<td>18.83 Mha</td>
</tr>
<tr>
<td>Pasture</td>
<td>1.88 Mha</td>
<td></td>
</tr>
<tr>
<td>Corn, cotton or sugarcane</td>
<td>1.65 Mha</td>
<td>1.37 Mha</td>
</tr>
<tr>
<td>Fallow or other uses</td>
<td>1.75 Mha</td>
<td>1.15 Mha</td>
</tr>
<tr>
<td>Native Vegetation PRODES</td>
<td>0.48 Mha</td>
<td></td>
</tr>
</tbody>
</table>

Cerrado Biome
Soybean expansion from crop years 2013/14 to 2019/20 and associated land use changes

Cerrado Biome without 61 SCF municipalities

2013/14
- Soy: 11.56 Mha
- Pasture: 1.62 Mha
- Corn, cotton or sugarcane: 1.08 Mha
- Fallow or other uses: 1.27 Mha
- Native Vegetation PRODES: 0.17 Mha

2019/20
- Soy: 13.93 Mha
- Fallow or other uses: 1.11 Mha
- Corn, cotton or sugarcane: 0.66 Mha
Soybean expansion from crop years 2013/14 to 2019/20 and associated land use changes

### 2013/14
- **Soy**: 4.04 Mha
- **Corn, cotton or sugarcane**: 0.57 Mha
- **Fallow or other uses**: 0.49 Mha
- **Native Vegetation PRODES**: 0.31 Mha
- **Pasture**: 0.26 Mha

### 2019/20
- **Soy**: 4.91 Mha
- **Corn, cotton or sugarcane**: 0.49 Mha
- **Fallow or other uses**: 0.26 Mha

**61 SCF municipalities**
AGRICULTURAL APTITUDE FOR SOY EXPANSION IN SCF MUNICIPALITIES

Area (Mha)

61 SCF Municipalities

**Anthropic**
- Native Vegetation: With aptitude in TI, UC (exception APA) and Q - not available
- Native Vegetation: With aptitude in APP and RL - not available
- Anthropic: With aptitude in APP and RL - to recover
- Anthropic: With aptitude in TI, UC (exception APA) and Q - residual areas

<table>
<thead>
<tr>
<th>Description</th>
<th>Area (Mha)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Vegetation: With aptitude in TI, UC (exception APA) and Q - not available</td>
<td>0.33</td>
<td>2.7%</td>
</tr>
<tr>
<td>Native Vegetation: With aptitude in APP and RL - not available</td>
<td>0.06</td>
<td>0.5%</td>
</tr>
<tr>
<td>Anthropic: With aptitude in APP and RL - to recover</td>
<td>4.94</td>
<td>40.3%</td>
</tr>
<tr>
<td>Anthropic: With aptitude in TI, UC (exception APA) and Q - residual areas</td>
<td>4.91</td>
<td>40.0%</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Description</th>
<th>Area (Mha)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>61 SCF Municipalities Native Vegetation</td>
<td></td>
<td>57.3%</td>
</tr>
</tbody>
</table>

APP – Areas of Permanent Protection; RL – Legal Reserve; TI – Indigenous Land; UC – Conservation Units; APA – Area of Environmental Protection; Q - Quilombolas
AGRICULTURAL APTITUDE FOR SOY EXPANSION IN SCF MUNICIPALITIES: ONLY FOR SOY FARMS

**Soy Farms Anthropic**
- Soy Farms: 1.64 Mha (27.7%)
- Native Vegetation: 1.00 Mha (31%)
- Anthropic: 1.06 Mha (32%)
- With aptitude: 1.16 Mha (35%)
- Without aptitude: 0.05 Mha (2%)

**Native Vegetation**
- Soy Farms: 0.11 Mha (1.8%)
- Anthropic: 0.23 Mha (3.9%)
- With aptitude: 0.00 Mha (0.0%)
- Without aptitude: 0.00 Mha (0.0%)

**Legend**
- Native Vegetation: With aptitude in TI, UC (exception APA) and Q - not available
- Anthropic: With aptitude in APP and RL - to recover
- Anthropic: With aptitude in TI, UC (exception APA) and Q - residual areas

**Notes**
- APP – Areas of Permanent Protection
- RL – Legal Reserve
- TI – Indigenous Land
- UC – Conservation Units
- APA – Area of Environmental Protection
- Q – Quilombolas

**Between Soy Farms Anthropic**
- Native Vegetation: 3.96 Mha (66.6%)
- Anthropic: 1.8%
In the 61 SCF municipalities of the Cerrado Biome a total of 306,538 hectares of soy in 2019/20 (91% of it within the MATOPIBA) were on top of native vegetation deforested from 2014 to 2019 (6 years); in no SCF municipalities a total of 174,097 hectares of soy in crop year 2019/20 were on top of native vegetation deforested from 2004 to 2019.
In the 25 SCF municipalities of the Cerrado Biome a total of 199,627 hectares of soy in 2019/20 (97% of it within the MATOPIBA) were on top of native vegetation deforested from 2014 to 2019 (6 years); in no SCF municipalities a total of 281,007 hectares of soy in crop year 2019/20 were on top of native vegetation deforested from 2004 to 2019.
SOY OF CROP YEAR 2019/20 IN DEFORESTATION BY YEAR (PRODES 2001-2019) AND TOTAL ANNUAL DEFORESTATION

61 SCF Municipalities

- Soy of crop year 2019/20 in deforestation by year
- Annual Deforestation not converted to soy 2019/20
SOY OF CROP YEAR 2019/20 IN DEFORESTATION BY YEAR (PRODES 2001-2019)

61 SCF Municipalities

Soy of crop year 2019/20 in deforestation by year
SOY OF CROP YEAR 2019/20 IN DEFORESTATION BY YEAR (PRODES 2001-2019) AND TOTAL ANNUAL DEFORESTATION

81.1% (15.08 million hectares) of soy in crop year 2019/20 was planted on land deforested prior to 2001
81.1% (15.08 million hectares) of soy in crop year 2019/20 was planted on land deforested prior to 2001
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