CERRADO SOY DYNAMICS WITH FOCUS ON THE 61 PRIORITY MUNICIPALITIES UPDATED FOR CROP YEAR 2021/22 vs. PRODES 2014-2021

Accomplished by:

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STUDY AREA | 61 Municipalities

SCF 61 municipalities
States
Other municipalities
Cerrado Biome – IBGE 2019
SUMMARY OF THE RESULTS | 2021/22

a) Study Area
The territory of the Cerrado biome is 198.46 million hectares, while the area occupied by the 61 SCF municipalities is 33.10 million hectares corresponding 16.7% of the biome.

![Graph showing the area of Cerrado Biome and 61 SCF Municipalities](image)

b) Soy in crop year 2021/22
The soy planted area in the Cerrado in crop year 2021/22 was 21.43 million hectares, with 5.55 million hectares of soy (25.9%) planted in the 61 SCF municipalities.

![Graph showing soy area in Cerrado and 61 SCF Municipalities](image)

c) Deforestation (PRODES 2014-2021)
In the Cerrado biome the total deforestation, from 2014 to 2021, was 6.67 million hectares, while in the 61 SCF municipalities it was 1.90 million hectares (28% of Cerrado’s deforestation) during the same period.

![Graph showing deforestation in Cerrado and 61 SCF Municipalities](image)

d) Deforestation (PRODES 2014-2021) converted to soy
The amount of soy in crop year 2021/22 on top of the deforestation observed from 2014 to 2021 was 0.884 million hectares in the Cerrado and 0.543 million hectares in the 61 SCF municipalities (61.5% of the native vegetation converted to soy in the Cerrado).

![Graph showing deforestation converted to soy in Cerrado and 61 SCF Municipalities](image)
SOYBEAN EXPANSION ON LAND OTHER THAN SOY | From 2013/14 to 2021/22

Area (Mha)

- Soy Expansion without deforestation - on pasture: 3.22 Mha (39.3%)
- Soy Expansion without deforestation - on corn, cotton or sugarcane: 0.88 Mha (10.8%)
- Soy Expansion without deforestation - on follow and other Uses: 2.25 Mha (27.5%)
- Soy Expansion with deforestation: 1.83 Mha (22.4%)

- Soy Expansion without deforestation - on pasture: 0.62 Mha (27.9%)
- Soy Expansion without deforestation - on corn, cotton or sugarcane: 0.64 Mha (29.1%)
- Soy Expansion without deforestation - on follow and other Uses: 0.54 Mha (24.6%)
- Soy Expansion with deforestation: 0.41 Mha (18.3%)

Cerrado Biome 2013/14-2021/22

61 SCF municipalities 2013/14-2021/22
Soybean expansion from crop years 2013/14 to 2021/22 and associated land use changes

- Soy: 15.54 Mha in 2013/14, 21.43 Mha in 2021/22
- Pasture: 3.22 Mha in 2013/14, 1.22 Mha in 2021/22
- Fallow or other uses: 2.25 Mha in 2013/14, 1.07 Mha in 2021/22
- Corn, cotton or sugarcane: 1.83 Mha in 2013/14, 1.07 Mha in 2021/22
- Native Vegetation PRODES: 0.88 Mha in 2013/14

Cerrado Biome
Soybean expansion from crop years 2013/14 to 2021/22 and associated land use changes

11.52 Mha
2013/14

Cerrado Biome without 61 SCF municipalities

2020/21
15.89 Mha

1.60 Mha
Pasture

2.81 Mha
Fallow or other uses

1.22 Mha
Corn, cotton or sugarcane

0.34 Mha
Native Vegetation PRODES

0.98 Mha
Fallow or other uses

0.62 Mha
Corn, cotton or sugarcane
Soybean expansion from crop years 2013/14 to 2021/22 and associated land use changes

- **2013/14**
  - Soy: 4.02 Mha
  - Fallow or other uses: 0.64 Mha
  - Corn, cotton or sugarcane: 0.62 Mha
  - Native Vegetation PRODES: 0.54 Mha
  - Pasture: 0.41 Mha

- **2020/21**
  - Soy: 5.55 Mha
  - Corn, cotton or sugarcane: 0.45 Mha
  - Fallow or other uses: 0.24 Mha

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

Area (Mha)

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

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

Area (Mha)

**Soy Farms**

- Anthropic: With aptitude in APP and RL - to recover
- Native Vegetation: With aptitude in APP and RL - not available
- Native Vegetation: With aptitude in TI, UC (exception APA) and Q - not available
- Without aptitude

**With aptitude - available**

**Soy**

**without aptitude**

APP – Areas of Permanent Protection; RL – Legal Reserve; TI – Indigenous Land; UC – Conservation Units; APA – Area of Environmental Protection; Q - Quilombolas
In the 61 SCF municipalities of the Cerrado Biome a total of 543,506 hectares of soy in 2021/22 (93% of it within the MATOPIBA) were on top of native vegetation deforested from 2014 to 2021 (8 years); in no SCF municipalities a total of 340,249 hectares of soy in crop year 2021/22 were on top of native vegetation deforested from 2014 to 2021.
55% (3.03 million hectares) of soy in crop year 2021/22 was planted on land deforested prior to 2001
55% (3.03 million hectares) of soy in crop year 2021/22 was planted on native vegetation converted prior to 2001.
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78.8% (16.89 million hectares) of soy in crop year 2021/22 was planted on land deforested prior to 2001.
78.8% (16.89 million hectares) of soy in crop year 2021/22 was planted on land deforested prior to 2001
SOY EXPANSION WITH NVC FROM 2013/14 TO 2021/22 IN SCF MUNICIPALIES
Differences observed from crop year 2020/21 to 2021/22

1) **In terms of soy area:**
   a) Soy area in the Cerrado in crop year 2020/21 was 19,963,483 hectares and in crop year 2021/22 it was 21,433,719 hectares, an increase of 1,470,236 hectares (7.4%);  
   b) Soy area in the SCF municipalities in crop year 2020/21 was 5,246,698 hectares and in crop year 2021/22 it was 5,547,972 hectares, an increase of 301,274 hectares (5.7%);

2) **In terms of deforestation:**
   a) Deforestation in the Cerrado in 2020 was 790,518 hectares and in 2021 it was 853,146 hectares;  
   b) Deforestation in the SCF municipalities in 2020 was 230,497 hectares and in 2021 it was 232,498 hectares;

3) **In terms of NVC to soy:**
   a) NVC to soy in the SCF municipalities in crop year 2020/21 on deforestation observed in 2020 was 27,955 hectares; while NVC to soy in the SCF municipalities in crop year 2021/22 on deforestation observed in 2021 was 52,605 hectares showing a significant intensification of direct NVC to soy in crop year 2021/22;  
   **From 2013/14 to 2021/22**
   In the Cerrado biome NVC to soy was 883,755 hectares; while in the SCF municipalities it was 543,505 hectares.
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