

Soft Commodities Forum Progress Report, June 2019:

Building transparent and traceable soy supply chains in Brazil's Cerrado region



About the Soft Commodities Forum

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The Soft Commodities Forum (SCF) is a global platform for leading soft commodities companies, convened by the World Business Council for Sustainable Development (WBCSD) for the purpose of advancing collective action around common sustainability challenges.

The SCF is made up of WBCSD member companies who share a vision of ensuring sustainable agriculture supply chains and working in partnership with government, producers, consumers and civil society to create a safer, more sustainable food system.

The SCF is fully compliant with laws, including antitrust, which prevent any kind of arrangement or sharing of information that would reduce competition on price or on any other parameter of competition.

The SCF consists of Archer Daniels Midland (ADM), Bunge, Cargill, COFCO International, Glencore Agriculture and Louis Dreyfus Company (LDC). It is expected that other WBCSD members will join the SCF as its work expands.















About the June 2019 Report

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The SCF members have committed to a common framework for reporting and monitoring progress on transparent and traceable supply chains for soy in Brazil's Cerrado region. The SCF members will report progress every six months. This is the first time leading global commodity traders are working together in the soy sector on a pre-competitive project to address sustainability risks they all share, but which no single company can resolve alone.

In the June 2019 reports, the SCF member companies report individually on the percentage of soy they source from the Cerrado relative to the total Brazilian volume based on 2018 data (total Brazilian volume is defined as 100 percent per company). They each report the percentage of soy within the Cerrado that is sourced from 25 priority municipalities. Finally, they report the combined percentage of soy coming from the 25 priority municipalities, which is then divided into the percentage that is sourced directly from farmers and the percentage that is sourced indirectly from aggregators, cooperatives and other third parties.

Six reports have been produced, one by each SCF member company. The reports are identical apart from the percentages that are specific to each company as well as each company's soy sustainability journey, which is shared at the end of each report.

Why does this report matter?

By prioritizing 25 municipalities, SCF members are actively identifying where targeted interventions are needed to address native vegetation conversion to soy in the Cerrado. Identifying and reporting on percentages of soy sourced directly or indirectly is important to inform the type of strategy that will be developed. When soy is sourced directly from farmers, supply chains are more transparent, and engagement and monitoring can reach production level. In the case of indirect sourcing, additional actors need to be engaged to improve traceability and implementation at the farm level. By focusing on the priority municipalities, SCF members will work together to protect native vegetation, supporting the adoption of more sustainable production practices and engaging directly with cooperatives, aggregators, and other third parties.

The report was produced with the assistance of Proforest, the SCF technical partner, and with information provided by the Grupo de Trabalho do Cerrado (GTC), also known as the Cerrado Working Group.



Background and Context



1.1 Background and context

Brazil's Soy Sector

Brazil is the second largest soybean producer in the world, behind only the United States, with the soybean crop occupying an area of 35 million hectares. In 2017-2018, total production amounted to 119 million tons and the average yield of Brazilian soybeans was 3,394 kg per hectare.¹

Soy production is of significant economic importance in Brazil. Soy has become the country's most valuable export commodity, overtaking oil and mineral exports, with China (67 percent) and the EU (11 percent) as the major export markets.²

Why focus on the Cerrado?

The Cerrado region of Brazil plays a significant role globally for both people and nature, including climate change mitigation, biodiversity, and freshwater systems. It is also an economic engine for local communities and a production region for exported agricultural commodities. However, the extent and pace of native vegetation loss resulting from agricultural expansion in the Cerrado poses a significant threat to these social, environmental and economic values.

The Cerrado is located in the highlands of Central Brazil and covers about 2 million km² or 21 percent of the Brazilian territory. It represents the second largest biome in South America after the Amazon.³ The total area is equivalent to the size of Germany, France, England, Italy, and Spain combined. While the Cerrado is less well-known than the Amazon as a biodiversity hotspot, it is equally important; Brazil has created official terrestrial protected areas in 8.3 percent of the Cerrado.⁴ The Cerrado is home to over 4,800 species of plants and vertebrates found nowhere else on the planet. The rainfall during the wet season is vital for the region's rivers, which provide habitat for a total of 800 species of fish, nearly 200 of which are found only in the Cerrado.⁵

Since the 1970s, agribusiness has been steadily expanding across the Cerrado biome, contributing to Brazil's emergence as a global leader in agricultural commodity production.



1.2 Background and context

The Cerrado has the largest area of farm and ranch land in Brazil, accounting for 88 Mha, or 44 percent, of the total agricultural area. It produces about 40 percent of Brazil's beef, 84 percent of its cotton, more than 50 percent of its soybeans, and 44 percent of its corn.⁶ Soy in the Cerrado covers 17.8 million hectares, representing 8 percent of the 204 million hectares of the Cerrado.⁷

As a result of robust economic activity, nearly half of the biome's native vegetation has been lost.⁸ Under the Brazilian Forest Code, in addition to the permanent preservation of areas such as riparian buffers and other sensitive ecosystems, landowners in the Cerrado are required to maintain 20 to 35 percent of their properties as legal reserve.⁹ The conversion of native vegetation has declined significantly in recent years – 2017 had the lowest conversion rate in the region since 2000 while productivity grew over the same period.¹⁰ There are at least 25.4 million hectares of already converted land in the Cerrado that is suitable for agriculture, and improvements to agricultural productivity are compatible with the protection of forests and native vegetation, providing the opportunity for more sustainable production in the future.¹¹

How SCF Members are Protecting Native Vegetation in the Cerrado

By gathering supply chain data and reporting at regular intervals, SCF members are taking an important joint step toward better transparency and traceability of soy produced in the Cerrado. This applies, in particular, to soy purchased from cooperatives, aggregators and other third parties, which tends to be less traceable than soy purchased directly from producers where sustainability practices can be verified. By reporting every six months, SCF members are committed to improving the transparency and traceability of their supply chains in the Cerrado, promoting better sustainability practices across the region, and achieving measurable reductions in native vegetation conversion over time.

The SCF member companies are also participating in the GTC to develop common definitions, to design appropriate financial incentives, and to outline actions which should be taken. The GTC was established by a multistakeholder coalition to develop terms of agreement between producers, industry, consumer organizations and civil society, as well as an action plan for eradicating deforestation and conversion of native vegetation in Brazil's Cerrado biome.



Priority Municipalities



2.1 Methodology for selecting the municipalities

The SCF members and Proforest worked to determine a methodology that would utilize the latest available data to determine municipalities in the Cerrado with high native vegetation conversion to soy and where SCF members could have the greatest positive impact. As part of December 2019 report, SCF members and Proforest will develop a process and set of criteria to update the list of priority municipalities.

For the June 2019 reports, the approach called for SCF members to account for the municipalities within the Cerrado from which they source soy (either directly or indirectly) and to collate this data to determine those municipalities where at least two members are sourcing soy and it is evident that soy expansion has been driving recent native vegetation conversion. The following methodological approach was used to determine the 25 priority municipalities that are the focus of SCF members' June 2019 reporting:

- Focus on Cerrado biome: From the 5,570 municipalities in Brazil, those with their territory completely included within Cerrado biome¹² were selected.
- Where planting soy is a relevant land use type: From those municipalities, those with planted soy area in 2017¹³ larger than 5,000 hectares were selected.
- Where soy is driving conversion of native vegetation: From those municipalities, the top 30 for soy planted in 2017¹⁴ on areas of native vegetation converted after 2014¹⁵ (in absolute number of hectares) were selected and ranked.

 Where potential for collective action is higher: From those municipalities, the 25 with largest area of soy planted in 2017 on areas of native vegetation converted after 2014 (in hectares) ¹⁶ and with higher overlap of SCF members¹⁷ were selected.





The prioritization criteria

5,570 municipalities in Brazil

Territory is 100% in Cerrado biome

Area planted with soy in 2017 was larger than 5,000 ha (IPAM-IBGE)

A schematic to demonstrate how the prioritization methodology was applied to determine the 25 priority municipalities. Full details of the municipalities are listed in the Appendix.

Top 30 for soy planted in 2017 (Agrosatelite) in areas of natural vegetation converted after 2014 (PRODES) in hectares

> Higher conversion to soy AND higher overlap of SCF companies

25 Priority municipalities



2.2 About the priority municipalities

Based on the methodology presented, the SCF selected 25 municipalities in the Cerrado biome as priorities for engaging, monitoring and reporting. The map shows municipalities' location and the table presents general information on soy and native vegetation conversion for each municipality.

23 of the 25 municipalities are in the region known as MATOPIBA, which comprises the portion of the Cerrado biome in the Maranhão, Tocantins, Piauí and Bahia states. It is considered the greatest national agricultural frontier of the present time (currently, Matopiba corresponds to 12 percent of Brazil's soy production).¹⁸ The other 2 municipalities are in Mato Grosso state, the largest soy producing state in Brazil (Mato Grosso state corresponds to more than 25 percent of Brazil's soy production).¹⁹

State	Number of SCF priority municipalities
Maranhão	4
Tocantins	10
Piauí	4
Bahia	5
Mato Grosso	2

The total area of the 25 municipalities is 17,789,098 ha, which is approximately the size of England or Florida, and accounts for 8.74 percent of Cerrado total area. Together, the 25 municipalities planted 2,447,911 ha of soy in 2017, which is 7 percent of total soy planted in Brazil that year and represents almost 10 percent of soy expansion from 2013 to 2017.





The 25 priority municipalities

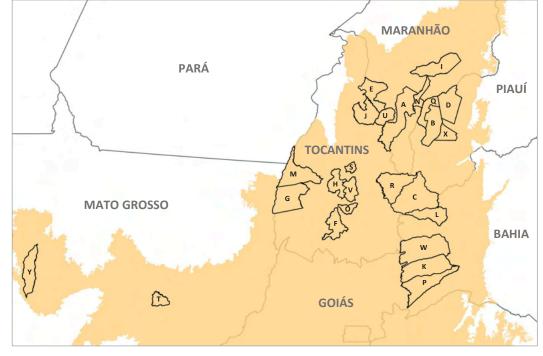
Municipality	State	Map location
Balsas	Maranhão	А
Baixa Grande do Ribeiro	Piauí	В
Formosa do Rio Preto	Bahia	С
Uruçuí	Piauí	D
Carolina	Maranhão	E
Peixe	Tocantins	F
Lagoa da Confusão	Tocantins	G
Porto Nacional	Tocantins	Н
Mirador	Maranhão	I
Goiatins	Tocantins	J
Correntina	Bahia	К
Riachão das Neves	Bahia	L
Pium	Tocantins	Μ

Municipality	State	Map location
Sambaíba	Maranhão	Ν
Santa Rosa do Tocantins	Tocantins	0
Jaborandi	Bahia	Р
Ribeiro Gonçalves	Piauí	Q
Mateiros	Tocantins	R
Aparecida do Rio Negro	Tocantins	S
Planalto da Serra	Mato Grosso	Т
Campos Lindos	Tocantins	U
Monte do Carmo	Tocantins	V
São Desidério	Bahia	W
Currais	Piauí	Х
Campos de Júlio	Mato Grosso	Y



2.3 Map of priority municipalities





Priority municipalities

A Balsas

В

C

D

- Baixa Grande do Ribeiro
- Formosa do Rio Preto
- Uruçuí
- Carolina
- F Peixe
- G Lagoa da Confusão
- H Porto Nacional
- Mirador
- J Goiatins
- K Correntina
- Riachão das Neves
- M Pium
- N Sambaíba
- O Santa Rosa do Tocantins
- P Jaborandi
- Q Ribeiro Gonçalves
- R Mateiros

S

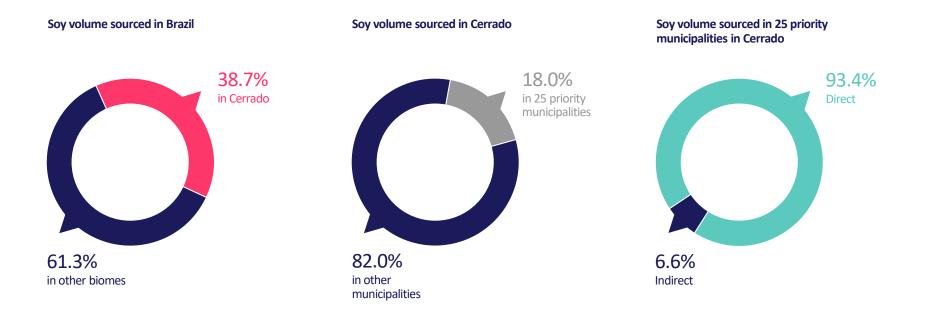
- Aparecida do Rio Negro
- Planalto da Serra
- U Campos Lindos
- V Monte do Carmo
- W São Desidério
- X Currais
- ' Campos de Júlio



Company Data



Soy Sourcing Data





Next Steps



Next Steps

The SCF members have committed to reporting every six months on the first 25 municipalities as well as additional municipalities identified as priorities for each reporting cycle. Over time, the SCF expects that the rate of native vegetation conversion will diminish in the targeted municipalities as a result of concerted action and the adoption of improved sustainable land management practices.

The SCF members will work together to develop targeted interventions to support sustainable intensification and tackle native vegetation conversion in the priority municipalities, alongside and in collaboration with relevant local stakeholders.

Several complementary channels have already been identified and, in the coming months, SCF members will determine where best to focus time and resources to achieve the greatest impact in improving sustainable soy production in the Cerrado. These channels may include:

- Mapping initiatives for potential partnerships in addressing soydriven native vegetation conversion, including continued collaboration with the GTC, as well as initiatives already under implementation by SCF members such as landscape and jurisdictional approaches.
- Referring to the Accountability Framework for guidance on consistent definitions, industry norms and good practices.
- Supporting financial incentives for landholders through partnerships in the soy value chain and with financial institutions, donors and funds.
- Building on SCF members' individual commitments and current activities to set goals and define strategies for collective action. Commitments can cover the avoidance of native vegetation conversion, protection of human rights, and performance against the targets of the Sustainable Development Goals.



Archer Daniels Midland's Soy Sustainability Journey



ADM Soy Sustainability Journey

On May 7, 2015 ADM announced its Commitment to No Deforestation and to build traceable and transparent agricultural supply chains that protect forests worldwide. The commitment included provisions related to no deforestation, no expansion on peat and no exploitation with a focus on our palm and soy supply chains. The no exploitation provisions were in line with ADM's Commitment to Respect Human Rights, published in 2014, aimed at ensuring that our suppliers and their contractors respect workers' rights and comply with all applicable local, national and international laws governing working conditions. Both commitments include strict prohibitions against the use of child labor, forced labor and bonded labor, and include several other guidelines to protect workers and communities from exploitation.

Since that time, ADM has been working intensively on implementing the commitment in our soy supply chain in South America. As part of our soy sustainability journey, we have conducted a comprehensive collection of procurement data to determine volumes by country and by supplier type back to 2014. We then progressed to municipality level traceability. In 2018, we took the next step to increase traceability through the use of satellite monitoring technology. We began obtaining polygons (farm maps) of our direct suppliers for the priority municipalities identified for ADM by The Forest Trust. We continue to work with farmers to obtain polygons to further expand our database. Soy purchases which come direct from the farmer are fully traceable to the farm of origin.

Aligned with the Soft Commodities Forum (SCF) definition of priority municipalities, we have determined that less than 0.5% of our total soy supply in Brazil comes from indirect sources in those municipalities. This gives us a high level of transparency and ability to monitor for land use change. Information on our monitoring and verification and supply chain transformation efforts can be found in our semi-annual progress reports published at

https://www.adm.com/sustainability/sustainabilityprogresstracker/soy/progress.



Soy Progress Report Action Plan: Milestones and Status

N⁰	Торіс	Milestones	Status
1	Traceability	Collect digital farm boundaries (polygons) of direct suppliers in: a) Priority municipalities in MATOPIBA. b) Paraguay c) Mato Grosso, Brazil	 a) 100% complete in H1 2018 b) 30% complete in H2 2018 c) 90% complete in H2 2018
2	Monitoring and Verification	Geospatial land conversion/ soy planting monitoringa) Proactively track and understand the origin of soy.b) Verify any grievances or complaints within our soy supply chainPublicly post the outcome in the Grievances and Resolutions log.	a) 100% complete for H1 2018 polygons.b) Ongoing - Please check <u>here</u>.
3	Supplier Engagement and Transformation	 a) Engage with suppliers/farmers within the municipalities being monitored. b) Require CAR from direct suppliers in Brazil as part of all new pre-financing contracts.* c) Communicate No Exploitation/Human Rights Policy to all direct soy suppliers in Brazil. d) Communicate/explain the No Deforestation Policy to suppliers in critical areas 	a) Ongoing communicationb) Completec) Ongoing communicationd) Ongoing communication. Direct engagement when
		 where deforestation is still an issue. e) Continue participating in multistakeholder initiatives such as the SCF, CWG, PNUD's Matopiba Coalition. f) Using TNC's Phase I report, open dialogue with supplier groups in Bahia (Brazil) and begin implementing transformation plans for them. g) Continue efforts with A Todo Pulmon in Paraguay to support grower efforts to recover and improve forested areas. 	 grievances or non compliance occurs. e) Ongoing f) 3rd party was hired to engage suppliers who were assessed in phase I. g) A Todo Pulmon visited over 100 suppliers' farms to assess the conditions of their forested areas.



Acknowledgements



Acknowledgements

The SCF would like to thank Proforest and Grupo de Trabalho do Cerrado for their support.

About Proforest

Proforest is a leading non-profit group that supports companies, governments and other organizations to implement their commitments to the responsible production and sourcing of agricultural commodities and forest products, such as palm oil, soy, sugar, beef, timber, and others. Five offices in four continents form the group (UK, Malaysia, Brazil, Ghana, and Colombia). Through a combination of programs and consultancy services, Proforest provides technical support, capacity building, solution development and process facilitation.

As technical partners of the Soft Commodities Forum, Proforest is providing advisory support and technical inputs for the development of a common monitoring and reporting framework, also ensuring there are links to wider sustainability and deforestations discussions. As part of this process, Proforest is part of a confidentiality agreement to maintain compliance with antitrust laws.

About the Grupo de Trabalho do Cerrado (GTC)

The shared objective of the GTC is to 'Eradicate, in the shortest timeframe possible, deforestation in the Cerrado Biome, reconciling the production of soy with environmental, economic and social interests', where deforestation ('desmatamento') is defined by the GTC as the conversion of native vegetation.

The organizations who are members of the GTC are:

- Industry Members: Abiove, ADM, Amaggi, ANEC, Bunge, Cargill, Cofco, Glencore, Louis Dreyfus Company
- Civil Society Members: Earth Innovation Institute, Imaflora, IPAM, TNC, WWF
- Producer Organizations: Sociedade Rural Brasileira
- Governmental and Financial Institutions: Banco do Brasil, INPE, MAPA, MMA, Serviço Florestal
- Consumer Goods: Carrefour, Walmart



References and footnotes

- 1. Brazil Soy Statistics 2019, Companhia Nacional de Abastecimento, 2019 (<u>Conab</u>) <u>https://www.conab.gov.br/info-agro/safras</u>
- 2. Brazil Soy Export Analysis, May 2019, Associação Brasileira das Indústrias de Óleos Vegetais (ABIOVE)
- 1/06/2019 Word Wide Fund For Nature (WWF) website, <u>http://wwf.panda.org/knowledge_hub/where_we_work/cerrado/</u>
- Critical Ecosystem Partnership Fund (CEPF), "Ecosystem Profile: Cerrado Biodiversity Hotspot," April 2016 Updated February 2017. <u>https://www.cepf.net/sites/default/files/cerrado-ecosystem-profile-en-updated.pdf</u>
- Françoso, R. D., Brandão, R., Nogueira, C. C., Salmona, Y. B., Machado, R. B., and Colli, G. R. 2015. Habitat loss and the effectiveness of protected areas in the Cerrado Biodiversity Hotspot. Natureza Conservação 13(1):35–40. doi:10.1016/j.ncon.2015.04.001
- 6. Geospatial Analysis of the Soy Dynamic in Cerrado Biome 2014-2017, GTC Cerrado Taskforce
- 7. Ibid
- 15/5/2019 Fact Sheet Cerrado Study, Geospatial Analysis of Soy Dynamics in the Biome, Study commissioned by Brazilian Association of Vegetable Oil Industries (ABIOVE), in partnership with The Nature Conservancy (TNC) using Agrosatélite
- Rene Beuchle et al., "Land Cover Changes in the Brazilian Cerrado and Caatinga Biomes from 1990 to 2010 Based on a Systemic Remote Sensing Sampling Approach," Applied Geography 58 (2015): 116–127.
- 10. Geospatial Analysis of the Soy Dynamic in Cerrado Biome 2014-2017, GTC Cerrado Taskforce
- 106/2019 Word Wide Fund For Nature (WWF) website https://www.wwf.org.br/informacoes/english/?61582/Twenty-three-Global-Companies-Pledge-to-Helping-Tackle-Soy-Driven-Deforestation-in-Brazils-Cerrado
- 12. Municipalities boundaries, official data (shapefile), IBGE, 2015 Brazilian Institute of Geography and Statistics ftp://geoftp.ibge.gov.br/organizacao_do_territorio/malhas_territoriais/malhas_municipais/municipio_2015/Brasil/BR/
- 13. Cerrado biome boundaries, shapefile: Mapbiomas, adapted from IBGE, 2016 http://mapbiomas.org/pages/database/reference_maps
- 14. Soy planted area (ha) per municipality in 2017 table: Agricultural Municipal Production (IPAM-IBGE) https://sidra.ibge.gov.br/pesquisa/pam/tabelas

- Soy planted area in Cerrado biome in 2017, shapefile, developed by Agrosatelite, obtained through GTC (Cerrado Working Group) via SCF members that have access to the database. The dataset used was dated April 2019.
- Area of native vegetation converted (ha) per municipality 2014-2017, shapefile, PRODES Cerrado, INPE National Institute for Space Research, <u>http://www.obt.inpe.br/cerrado/downloads.html</u>
- 17. To identify overlap of SCF members in the municipalities, each SCF member indicated confidentially to Proforest and WBCSD if they sourced soy from direct or indirect suppliers registered in each of the 30 municipalities in 2018. Proforest compiled the information and used the results to identify municipalities with highest overlap of SCF members (i.e. where there were 5 or 6 SCF companies present), which were prioritized. Then the five municipalities with lowest conversion of native vegetation to soy from the remaining list were removed, resulting in a total of 25 municipalities.
- <u>https://www.inputbrasil.org/wp-content/uploads/2018/06/CERRADO-CAMINHOS-PARA-OCUPACAO-TERRITORIAL-SUSTENTAVEL-EXPANS%C3%830-DA-SOJA-FINAL.pdf</u>
- 19. https://sidra.ibge.gov.br/home/lspa/brasil



Appendix

Additional information on the 25 priority municipalities

Municipality Name	State Name	Geocode	Total Soy Area Planted in 2017 (Hectares)	Soy Area Planted on Converted Native Vegetation in 2017 (Hectares)	Number of SCF Members Sourcing Soy (Directly or Indirectly)
Balsas	Maranhão	2101400	187,144.00	8,743.19	4
Baixa Grande do Ribeiro	Piauí	2201150	179,358.00	8,495.01	4
Formosa do Rio Preto	Bahia	2911105	405,583.00	7,908.73	4
Uruçuí	Piauí	2211209	134,869.00	7,488.29	4
Carolina	Maranhão	2102804	25,00.00	4,692.89	3
Peixe	Tocantins	1716604	50,000.0	3,878.19	4
Lagoa da Confusão	Tocantins	1711902	40,128.00	3,547.40	4
Porto Nacional	Tocantins	1718204	41,000.00	3,337.56	4
Mirador	Maranhão	2106706	11,100.00	3,310.03	3
Goiatins	Tocantins	1709005	15,700.00	3,180.76	3
Correntina	Bahia	2909307	172,200.00	3,120.94	4
Riachão das Neves	Bahia	2926202	120,200.00	3,004.22	4

Municipality Name	State Name	Geocode	Total Soy Area Planted in 2017 (Hectares)	Soy Area Planted on Converted Native Vegetation in 2017 (Hectares)	Number of SCF Members Sourcing Soy (Directly or Indirectly)
Pium	Tocantins	1717503	10,378.00	2,824.45	4
Sambaíba	Maranhão	2109700	57,445.00	2,785.77	4
Santa Rosa do Tocantins	Tocantins	1718907	36,000.00	2,699.53	4
Jaborandi	Bahia	2917359	94,350.00	2,558.73	4
Ribeiro Gonçalves	Piauí	2208908	77,365.00	2,354.11	3
Mateiros	Tocantins	1712702	43,000.00	2,303.56	4
Aparecida do Rio Negro	Tocantins	1701101	21,000.00	2,208.12	4
Planalto da Serra	Mato Grosso	5106455	20,000.00	2,061.69	5
Campos Lindos	Tocantins	1703842	40,500.00	2,033.47	4
Monte do Carmo	Tocantins	1713601	31,500.00	2,032.39	4
São Desidério	Bahia	2928901	394,016.00	1,977.57	4
Currais	Piauí	2203230	43,295.00	1,966.26	3
Campos de Júlio	Mato Grosso	5102686	196,780.00	1,734.17	6





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