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This company profile builds on work by Rede Social de Justiça e Direitos Humanos (REDE). This includes a forthcoming academic report, as well as an unpublished fieldwork report. The sustainability risk analysis has been shared with SLC Agrícola before publication. Comments were received via email on xxx, and have been incorporated in the final text.

SLC Agrícola farms

Name	State	Ha owned	Ha planted
Perdizes	Mato Grosso	28,837	23,329
Paiaguás	Mato Grosso	34,257	63,561
Planorte	Mato Grosso	23,439	31,225
Pamplona	Goiás	18,188	20,392
Planalto	Mato Grosso do Sul	17,437	20,503
Planeste	Maranhão	23,326	49,458
Parnaíba	Maranhão	47,213	58,245
Parnaguá	Piauí	23,420	8,315
Paineira	Piauí	12,040	Leased to 3 rd party
Parceiro	Bahia	36,664	11,588
Paladino	Bahia	21,898	19,417
Palmares	Bahia	16,167	24,644
Panorama	Bahia	10,374	21,793
Pioneira	Bahia	19,469	27,973
Piratini	Bahia	25,356	13,377

Source: [SLC website](#); [SLC Presentation for Investors](#); [Data on the appraisal of SLC Agrícola's property portfolio](#)

SLC Agrícola: Cerrado Deforestation Poses Risks to Revenue and Farmland Assets

September 18, 2017

SLC Agrícola is Brazil's largest publicly traded farming company, founded in 1977. It operates 15 large farms, spread across six Brazilian states - Mato Grosso, Goiás, Bahia, Piauí, Maranhão and Mato Grosso do Sul. This includes activities in the Matopiba region (comprising of the states of Maranhão, Tocantins, Piauí and Bahia), sometimes referred to as the "newest agricultural frontier" in Brazil. It actively purchases, clears and transforms land in the Cerrado biome for industrialized soy, corn and cotton production. The Cerrado biome, a vast tropical savanna, is an environmentally sensitive area where deforestation rates are high. WWF and others recognize the Cerrado as the biologically richest savanna in the world, home to hundreds of endangered species and traditional communities. As the source of rivers and waterways, the Cerrado functions as a vital source of water for many of Brazil's largest cities.

Key Findings

- **SLC Agrícola has a diversified business model, that aims to produce value from both commodity production and land appreciation.** SLC Agrícola owns 323,000 hectares (ha), of which 86,765 ha is held through its real estate joint venture SLC LandCo. SLC LandCo's business model includes a focus on acquisition and transformation of Cerrado savanna into productive farmland. The transformation process requires the clearing of Cerrado forests.
- **Since 2011, SLC Agrícola has expanded its landbank with 99,531 ha. SLC Agrícola purchased and expanded farms in the Matopiba region.** These farms contained large strands of undeveloped Cerrado savanna. In line with its strategy of real estate gain, SLC Agrícola transformed undeveloped land into farmland.
- **From 2011 to 2017, SLC Agrícola cleared a total of 39,887 ha of land of its original vegetation.** For over 30,000 ha, this vegetation is classified as Cerrado forest by Brazil's Ministry of Environment. These areas have also been recognized for their high biodiversity value by the Round Table on Responsible Soy (RTRS). SLC indicates that another 42,000 ha is still to be developed. SLC farms are located in areas where illegal land grabbing ('grilagem') is common, and SLC Agrícola's business partners have faced legal charges.
- **SLC faces potential risk of losing access to clients and an overvaluation of its land portfolio resulting from its sustainability impacts.** At least 20 percent of SLC Agrícola's revenue comes from clients with public zero-deforestation commitments. While market appetite for commodities from recently deforested land is reduced, vegetation cover does not appear to be a factor in land valuation models.
- **SLC risks losing half of its profits if its main customers put pressure on deforestation issues.** However, SLC Agrícola's share price, which now has a 49 percent discount versus the Net Asset Value, has upside potential from increasing confidence should the company commit to zero-deforestation.

SLC Agrícola

SLC (Schneider Logemann Company) Agrícola is the largest publicly traded farming company in Brazil, founded in 1977, initially as a producer of tractors. Today it has operations in soy, cotton and corn. It operates 15 large farms, spread across six Brazilian states - Mato Grosso, Goiás, Bahia, Piauí, Maranhão and Mato Grosso do Sul. SLC Agrícola owns a total of 323,000 ha. Some of its land is used to grow two crops per year. Including this second crop, it has planted 394,000 ha, of which 230,142 ha with soybeans.

SLC Agrícola has a diversified business model. Its three lines of business include:

- Agricultural production on owned and developed land: SLC primarily grows soy, cotton and corn using industrial and precision agriculture.
- Agricultural production on leased land: The company also leases land from neighboring landowners to maximize the use of its installed production capacity.
- Acquisition of raw land for transformation and sale: Through its subsidiary SLC LandCo, a partnership with the private equity fund Valiance, SLC aims to capture the real estate appreciation of newly acquired land.

SLC Agrícola is listed on the BM&FBOVESPA, with a 49 percent free float. 51 percent of its shares are held by the Grupo SLC, controlled by the Logemann family.

SLC Agrícola is a member of the [Round Table on Responsible Soy \(RTRS\)](#), the multi-stakeholder initiative that promotes responsible production, processing and trading of soy. In 2011, SLC Agrícola received RTRS certification for two of [its farms, totaling 34,600 ha](#).

SLC LandCo

In 2012, SLC Agrícola entered into a long-term partnership with British private equity fund Valiance Asset Management Limited to form SLC LandCo. As part of the deal, Valiance committed capital injections of [USD 239 million](#) in exchange for a [49.4 percent share](#) in SLC LandCo. To date, Valiance has only acquired an 18.77 percent share equaling USD 53 million.

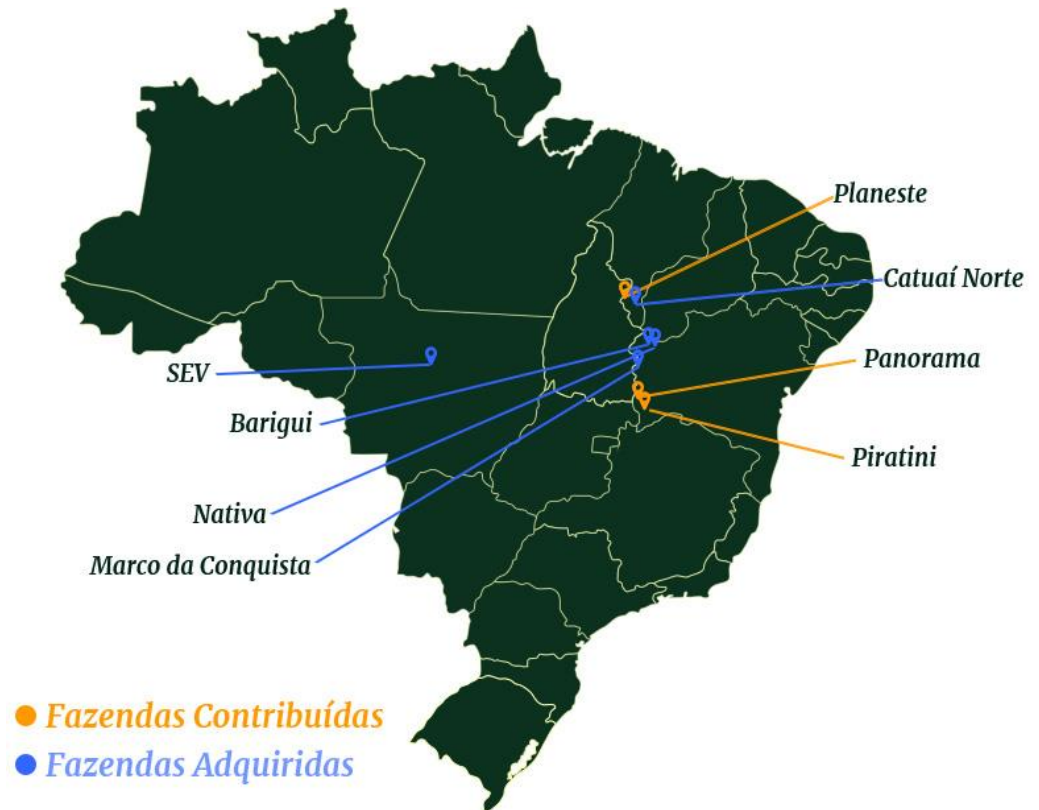
As shown in Figure 1 (below), SLC LandCo's portfolio is 86,765 ha. SLC LandCo aims to "[monetize the value of its land portfolio and add new productive farmland through land transformation](#)". The land portfolio of SLC LandCo includes sections of farms in the Matopiba region (comprising of the states of Maranhão, Tocantins, Piauí and Bahia), as well as one farm in Mato Grosso (Figure 2 below). Matopiba is sometimes referred to as the "[newest agricultural frontier](#)" in Brazil. This area originally consisted of savanna grasslands with rich biodiversity, as well as being the home of traditional communities.

Figure 1: SLC LandCo properties.
Source: SLC 2016 Annual Report.

Farm Name	State	Total Area (ha)	Area in SLC LandCo Portfolio (ha)
Perdizes	Mato Grosso	42,145	13,288
Panorama	Bahia	24,626	10,374
Piratini	Bahia	30,286	25,355
Palmares	Bahia	32,320	5,434

Parnaíba	Maranhão	68,010	10,200
Planeste	Maranhão	38,916	23,325
Parceiro	Bahia/Piauí	42,189	3,680
Total		278,492	86,765

Figure 2: SLC LandCo farm locations. Source: SLC Agrícola.



SLC LandCo’s land portfolio includes land that is not under production. Three of the farms in its portfolio include 20 to 30 percent undeveloped land:

- Panorama: 25.4 percent
- Piratini: 30.0 percent
- Planeste: 20.7 percent.

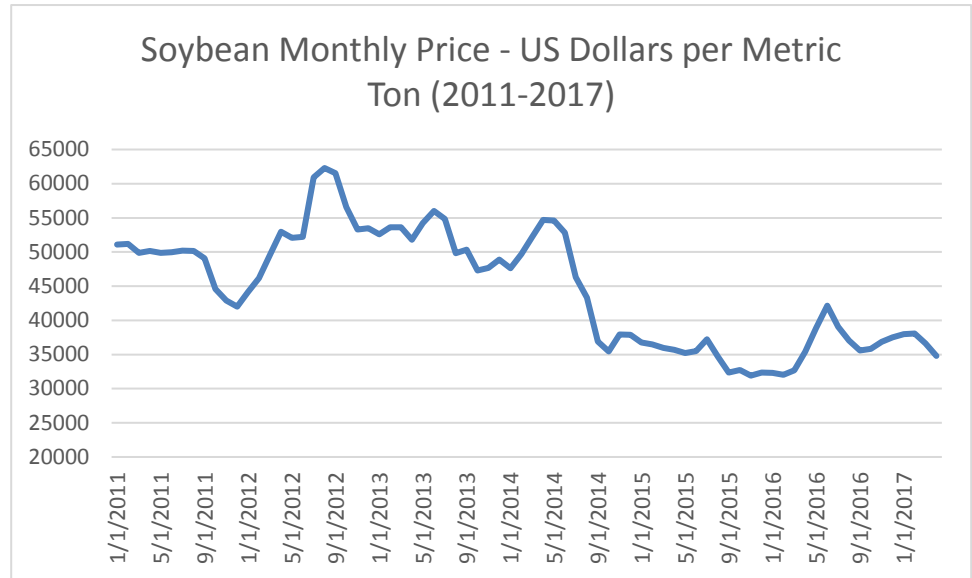
This land that is not under production is held as Legal Reserves or are Permanent Preservation Areas under Brazil’s Forest Code. SLC Agrícola in some instances rents land from SLC LandCo’s portfolio, against the value of all lands in operation, determined annually.

SLC Agrícola’s sustainability impacts

Since 2011, SLC Agrícola has expanded its landbank with 99,531 ha. This increase comes from the purchase of two farms in Piauí (Fazenda Paineira and Fazenda Parceiro) in 2011 and one farm in Mato Grosso (Fazenda Perdizes) in 2012, as well as an expansion of Fazendas Planeste and Parnaíba in Maranhão in 2013. These farms were already partially developed at the time of purchase, but also contained large strands of undeveloped Cerrado savanna. In line with its strategy of real estate gain, SLC announced plans to transform undeveloped land into cropland at the time of

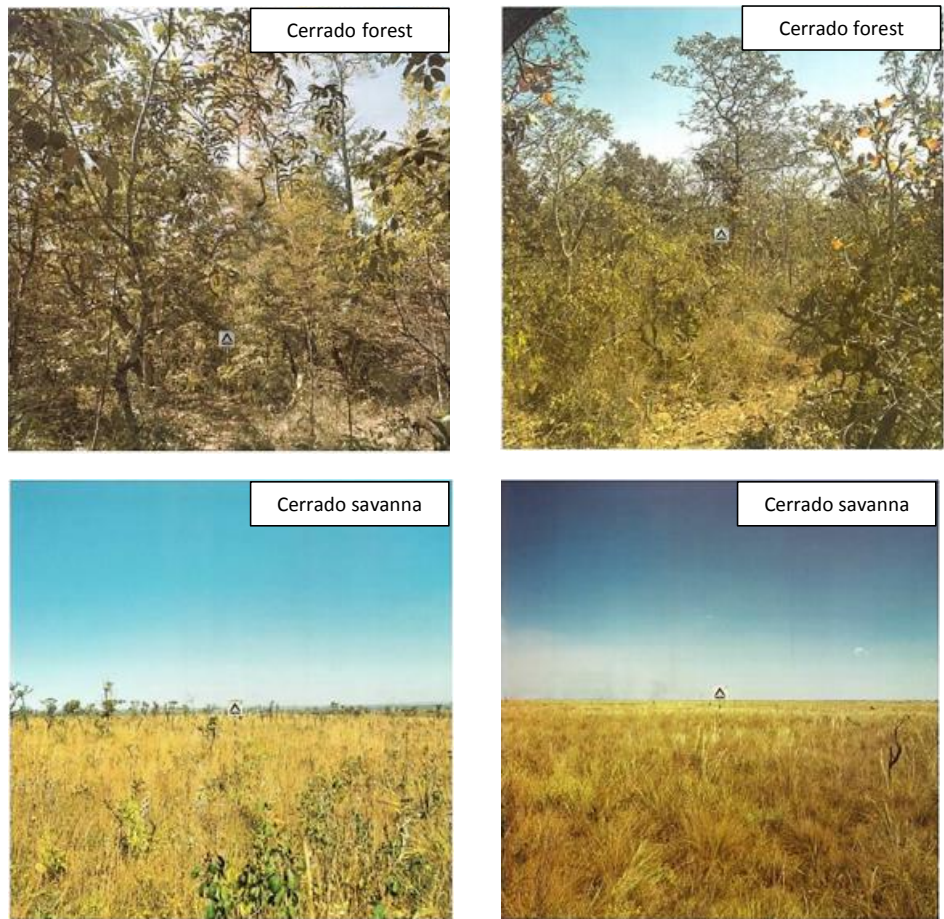
purchase of these farms. This transformation required the deforestation of Cerrado savanna.

Figure 3: Soybean Monthly Prices 2011 to 2017 (USD/metric ton).
Source: Index Mundi.



From 2011 to 2017, SLC Agrícola’s planted area increased by 148,568 ha. While soybean prices USD / metric ton have trended lower 2011 to 2017 (Figure 3 above), soy planted area doubled from 114,158 ha to 228,704 ha.

Figure 4: Examples of native vegetation cover in Cerrado.
Source: MMA.



According to Landsat analysis, **a total of 39,887 ha has been cleared of its original vegetation.** 75 percent of this vegetation falls under the definition of forests, as

applied by Brazil's Ministry of Environment. Figure 4 (above) shows some examples of native Cerrado vegetation cover (above). These areas have also been recognized for their high biodiversity value by the RTRS. SLC indicates that another 42,000 ha is still to be developed.

Figure 5: SLC Agrícola's landbank and planted area (2011 to 2017).
Source: SLC data on the appraisal of SLC Agrícola's property portfolio and SLC planted area.

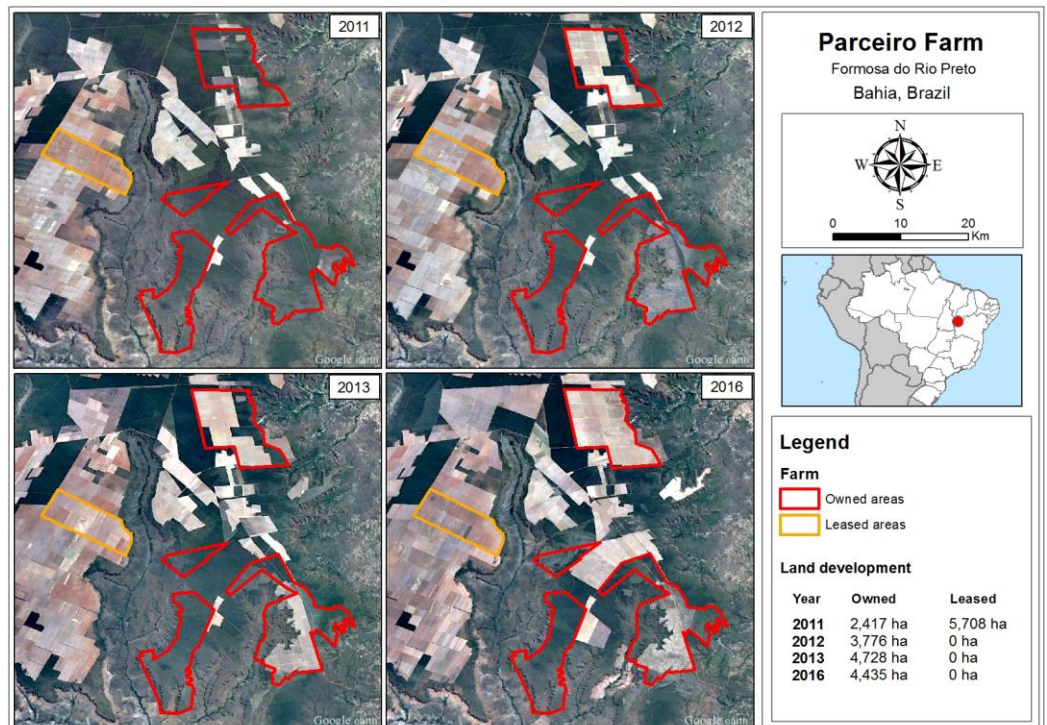
Year	Total Landbank	Planted Area (ha)
2011/12	222,998	247,834
2012/13	295,485	282,473
2013/14	290,952	343,568
2014/15	304,031	370,026
2015/16	308,719	377,259
2016/17	322,529	396,402

From 2011 onwards, the drop in soy prices coincided with increased expansion by SLC. SLC Agrícola's total landbank as well as its planted area increased by 44.6% and 59.9% respectively between 2011 and 2017 (Figure 5 above). When land is deforested, it takes 5 to 10 years for the soil to reach the medium productivity necessary for the land to accumulate capital (REDE 2017, forthcoming). Additionally, the acquired land includes sections that are kept undeveloped as legal reserves. The continuous land expansion impacts the social and economic dynamics of the local communities in the direct vicinities.

Fazenda Parceiro

Fazenda Parceiro is located in the state of Bahia, at the border with Piauí. SLC Agrícola purchased the farm in 2011 and started operations in 2012. The farm's total area is 42,092 ha, with 32,983 ha wholly owned by SLC Agrícola, 3,680 ha owned by SLC LandCo, and 5,526 ha leased from a third party. For the 2015/2016 marketing year ending September 30, 2016, SLC Agrícola primarily grew soy.

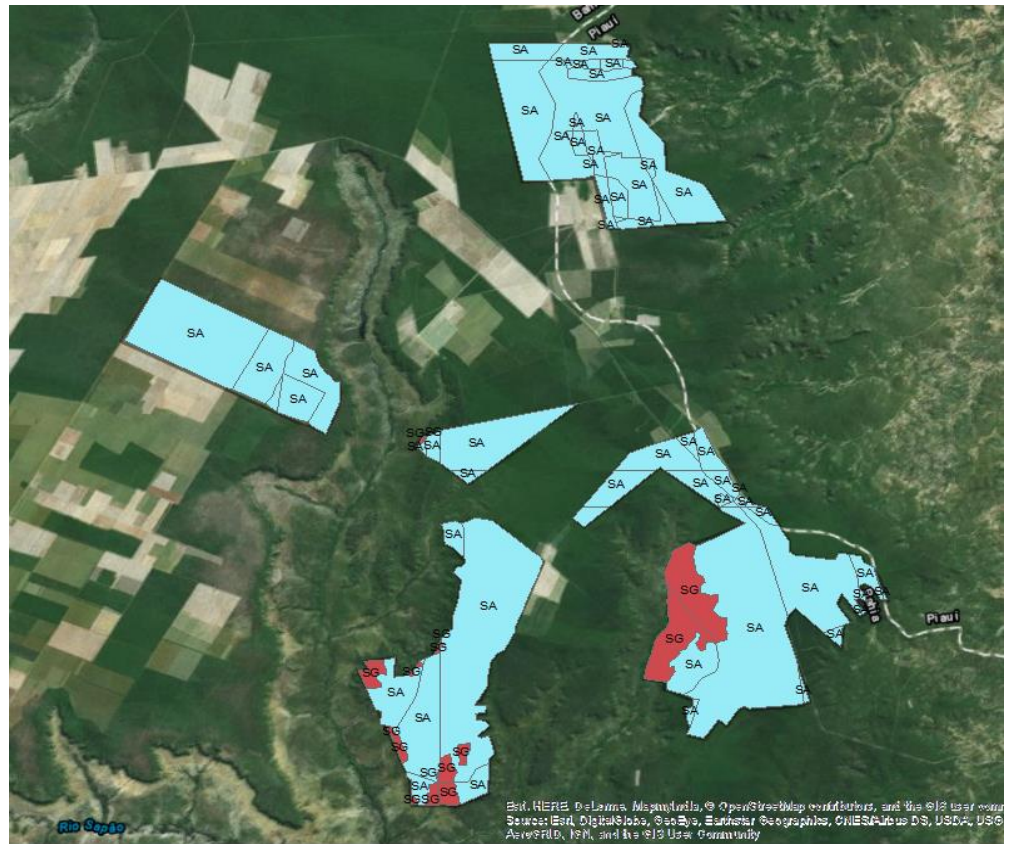
Figure 6: Deforestation at Fazenda Parceiro 2011 to 2016.



As shown in Figure 6 (above), between 2011 and 2014, SLC deforested 15,356 ha of previously undeveloped Cerrado at Fazenda Parceiro. The vegetation maps produced (Figure 7 below) as part of Brazil's Forest Reference Emissions Level (FREL) in the Cerrado Biome categorize the original vegetation as 93 percent Cerrado forest (FREL category: wooded savanna) and 7 percent grassland (FREL category: woody-grass savanna). All land development since 2011 has taken place on forested land.

In its macro-scale maps that the RTRS developed as part of a guide for responsible expansion for Brazil, these lands were identified as biodiversity hotspots where “stakeholders agree there should be no conversion of native vegetation to responsible soy production”. In response to a draft version of the report, SLC indicated that it does not intend to certify Fazenda Parceiro under RTRS and that all clearings in line with current legislation and due legal acts.

Figure 7: Original vegetation at Fazenda Parceiro. SA = Wooded Savanna; SG=Woody-grass savanna. Source: MMA.



As of December 2016, 42.8 percent (18,004 ha) of the farm remained unplanted. According to SLCs 1Q17 financial statements, 10,227 ha (SLC Agrícola: 9,162 ha; SLC LandCo: 1,115 ha) was in the process of transformation, whereas an additional 8,228 ha (SLC Agrícola: 6,698 ha; SLC LandCo: 1,530 ha) was in the “licensing phase”.

Fazenda Parnaguá

Fazenda Parnaguá is located in Santa Filomena, in the southern part of Piauí. SLC Agrícola purchased the farm in 2008. At this time, sections of the farm were productive, while larger parts were still undeveloped. The farm has a total area of 24,603 ha, 100 percent directly owned by SLC Agrícola. Soy production first started in the 2012/2013 marketing year ending September 30, when 2,630 ha were planted. In 2015/2016, SLC had planted 8,414 ha of soybeans.

for responsible expansion for Brazil, these lands were identified as biodiversity hotspots where “stakeholders agree there should be no conversion of native vegetation to responsible soy production”. In response to a draft version of the report, SLC indicated that it does not intend to certify Fazenda Parnaguá under RTRS and that all clearings were in line with current legislation and due legal acts. In response to a draft version of this report, SLC indicated that it conducts extensive due diligence on both the land it purchases as well as the seller. It only acquires land if more than 40 different documents (titles, licenses, certifications, etc.) are collected and their validity is assessed.

Fazenda Paineira

Fazenda Paineira is a 12,040 ha farm located in the south of Piauí. SLC Agrícola purchased the farm in 2011 for USD 22.06 million (BRL 68.6 million) and owns all the land on this farm. In 2015, the company leased this farm to a third party, citing that “considering that at the moment it was not possible to increase the scale of Paineira Farm, it was decided to lease the above mentioned area.” The region had suffered from a period of reduced rainfall at the time of the deal.

As of August 2015, the farm is leased by soybean company, Agropecuária Celeiro. According to SLCs press release, the lease agreement stipulates a payment of 8 soybean bags (60 kg) per developed hectare per year, and an initial one soybean bag per hectare per year for the undeveloped Cerrado, as per clearing of the area.

As shown in Figure 10 (below), after the lease was signed, land was aggressively cleared and planted at Paineira. **In 2016, 2,514 ha were deforested.** As shown in Figure 11 (below), the vegetation maps produced as part of Brazil’s Forest Reference Emissions Level (FREL) in the Cerrado Biome categorize the original vegetation as 100 percent Cerrado forest (100 percent wooded savanna).

Figure 10: Deforestation at Fazenda Paineira.

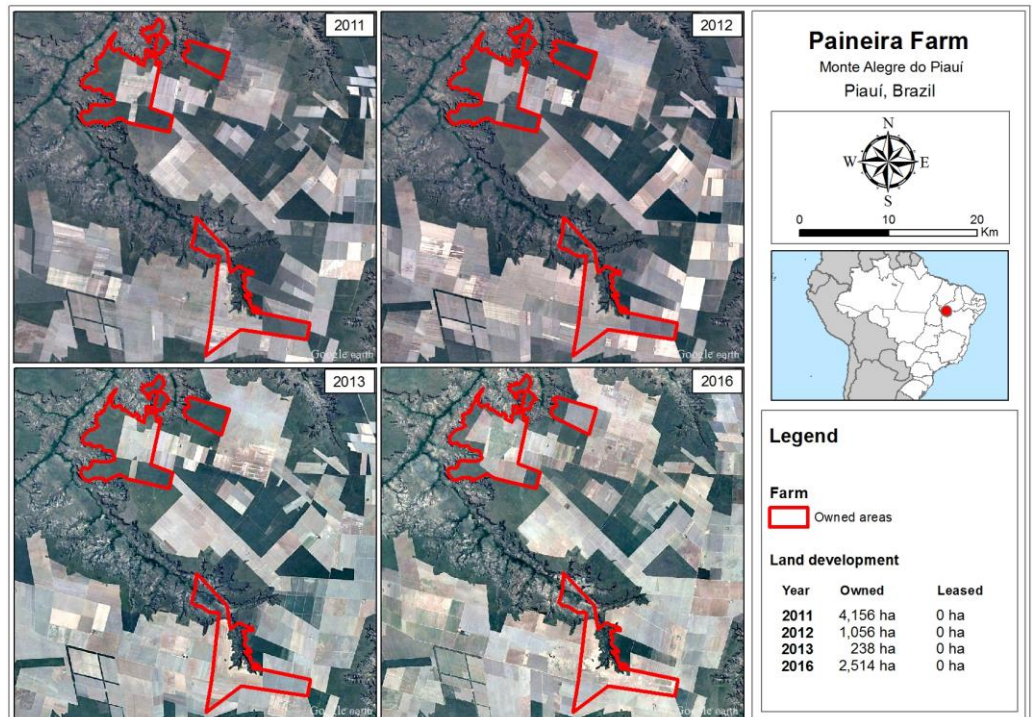


Figure 11: Original vegetation cover at Fazenda Paineira. SA = Wooded Savanna. Source: MMA.



SLC indicated that all land clearings were carried out in line with current legislation, authorizations and environmental licenses. It also indicated that the properties were acquired respecting the land law and an exhaustive due diligence process to prove the origin and ownership, and that its agricultural practices follow the most rigorous standards established by Brazilian legislation.

Fieldwork conducted by the Brazilian organization Rede Social de Justiça e Direitos Humanos (REDE) in April 2017 shows that at least four communities around Fazenda Paineira report social and environmental impacts from the farm and that they are subject to land grabbing. Communities around the undeveloped legal reserve at the north of the farm reported harassments, threats of forced removal and lost access to grazing grounds as the area was fenced off. This land is not intended for agricultural production, but rather to meet the reserve stipulations in the Forest Code. Land had been purchased through the process of *grilagem* and has been a source of conflict both within the community as well as with the farm management. These communities also reported pesticides sprayed by airplanes, increased erosion, large amounts of dust from the newly deforested area, and drying-up of swamps.

Communities in the vicinity of productive parts of Fazenda Paineira also reported a variety of adverse impacts. Among others, they faced health and environmental impacts related to pesticide use. Communities complained about illnesses and groundwater pollution and indicated that rivers turn bright red during certain seasons. Furthermore, communities reported a loss of biodiversity, including the extinction of bees which has halted honey production and pollination of fruit trees, and the disappearance of wild animals effectively ending local hunting activities in the area (REDE 2017, unpublished fieldwork report).

In response to a draft version of this report, SLC states its operations are developed following the best agricultural practices for ground conservation and that it positions its productive area as to avoid river contamination. It furthermore refutes that it contributed to loss of biodiversity or species extinction.

Fazenda Piratini

Fazenda Piratini is located in the south of Bahia, and began its operations in the 2008/09 crop season. SLC grows both soy and cotton at this farm. It has a total area of 30,355 ha. Of this area, 25,355 ha are owned by SLC LandCo, whereas 5,000 ha are leased.

As shown in Figure 12 (below), in 2015, SLC cleared 10,617 ha at this farm. As shown in Figure 13 (below), the vegetation maps produced as part of Brazil’s Forest Reference Emissions Level (FREL) in the Cerrado Biome categorize the original vegetation as 44 percent Cerrado forest (FREL category: forested savanna) and 56 percent Cerrado grassland (FREL category: savanna park). Most of the land cleared was originally grassland, but some areas did contain forested savanna. In its macro-scale maps that the RTRS developed as part of a guide for responsible expansion for Brazil, these lands were identified as biodiversity hotspots where “stakeholders agree there should be no conversion of native vegetation to responsible soy production”. In response to a draft version of the report, SLC indicated that it does not intend to certify Fazenda Piratini under RTRS and that all clearings were in line with current legislation and due legal acts.

Figure 12: Land clearing at Fazenda Piratini.

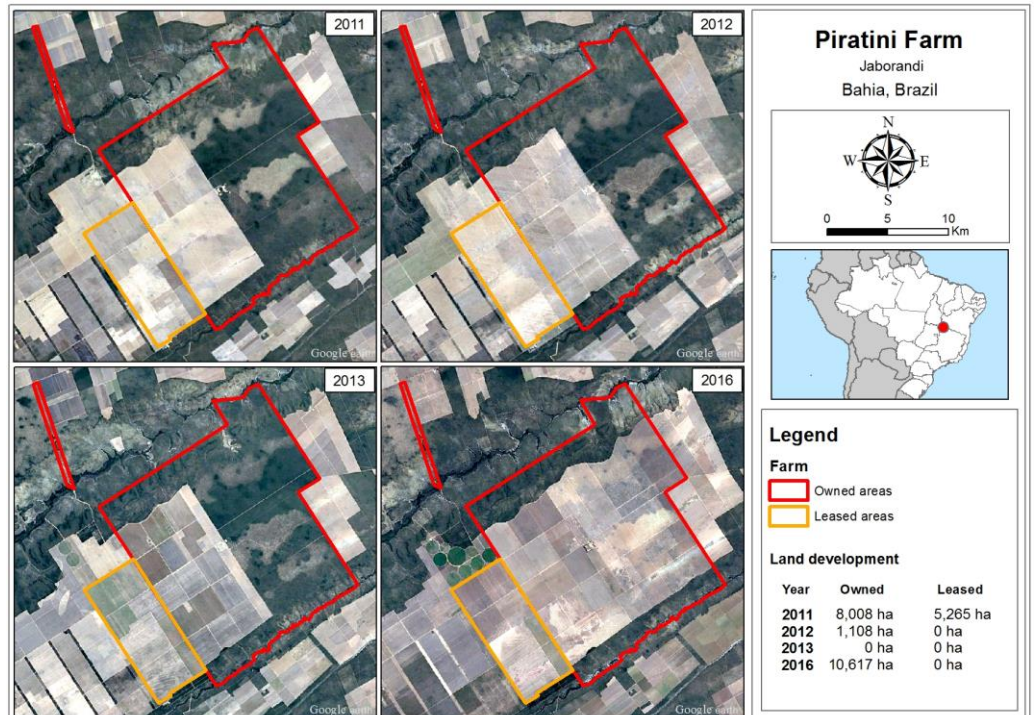


Figure 13: Original vegetation cover of Fazenda Piratini. SP = Savanna park; SD = Forested.
Source: MMA.



SLC Agrícola Operational Risks

The sustainability impacts described above could expose the company to many operational business risks.

Violations of Corporate Clients' Zero-Deforestation Commitments

SLC's client base consists of the large international soy traders, including Cargill Agrícola S.A. (13.8 percent of revenues) and Bunge Alimentos S.A. (6 percent of revenues). Both these traders have made public zero-deforestation commitments and stated time-bound ambitions to exclude deforestation from their supply chains, as have many of the other large soy trading companies.

As seen in the palm oil sector, the scope, definitions used and implementation of zero-deforestation commitments can rapidly evolve to the point where any deforestation poses a risk of being excluded from certain supply chains. Civil society groups are already calling for immediate action by companies that purchase soy and beef to eliminate deforestation and conversion of native vegetation in the Cerrado. Their recommendations go beyond current sourcing practices. As such, any deforestation event should be regarded as inherently containing the business risk of losing customers. The following list of SLC's customers reveals some rapidly evolving trends towards excluding deforestation from their soy supply chains:

Cargill: The company has been working since 2004 to reduce deforestation in the Amazon biome and endorsed the New York Declaration of Forests in 2014. It aims to half deforestation across its supply chains by 2020 and eliminating it by 2030. Following this commitment, Cargill developed Forest Protection Action Plans for

priority supply chains, including soy in Brazil. Its GIS team uses geospatial analysis and satellites to monitor its suppliers' adherence to Brazil's Forest Code. It has also set a sourcing requirement that all suppliers need to incorporate their properties in Brazil's Rural Environmental Registry (CAR).

Bunge: In 2015, the firm committed to eliminate deforestation from its supply chains worldwide. As of May 2017, Bunge has traced between 80 percent to 97 percent of its supply back to farms in the Matopiba region. It has also developed a protocol for satellite monitoring of specific supplier farms to identify any land use change. It is unknown whether any SLC farms featured in this report are included in the monitoring protocol. In September 2017, Bunge and its partners launched a public database to help purchasers assess social and environmental risks of contributing to soybean expansion in the Cerrado.

ADM: In March 2015, **ADM** adopted a No Deforestation, No Exploitation (NDE) commitment in its soy supply chain. This commitment was complemented by the launch of the ADM Responsible Soy Standard, which includes "a broad set of social, environmental, legal and agronomic standards, including their labor practices, water and soil usage, solid waste management, observance of land rights, legal compliance, and the responsible use of fertilizers."

ADM has identified the Cerrado as a high risk biome, and has selected it as a focus geography for implementation of its policy. It is developing a methodology for remote monitoring, with a pilot implemented in the Matopiba region, where a number of the SLC farms discussed in this report are located. It is also incorporating elements of its policy and the remote sensing analysis in its sourcing decisions.

Louis Dreyfus Commodities adopted a cross-commodity NDPE policy in 2015. It has announced that a dedicated soy policy will be rolled out in 2017.

Grupo Amaggi and **COFCO** are both members of the RTRS and have committed to the Soy Moratorium. Grupo Amaggi is also a member of the ProTerra Foundation. Neither Grupo Amaggi nor COFCO have any policies or programs directly addressing deforestation in the Cerrado.

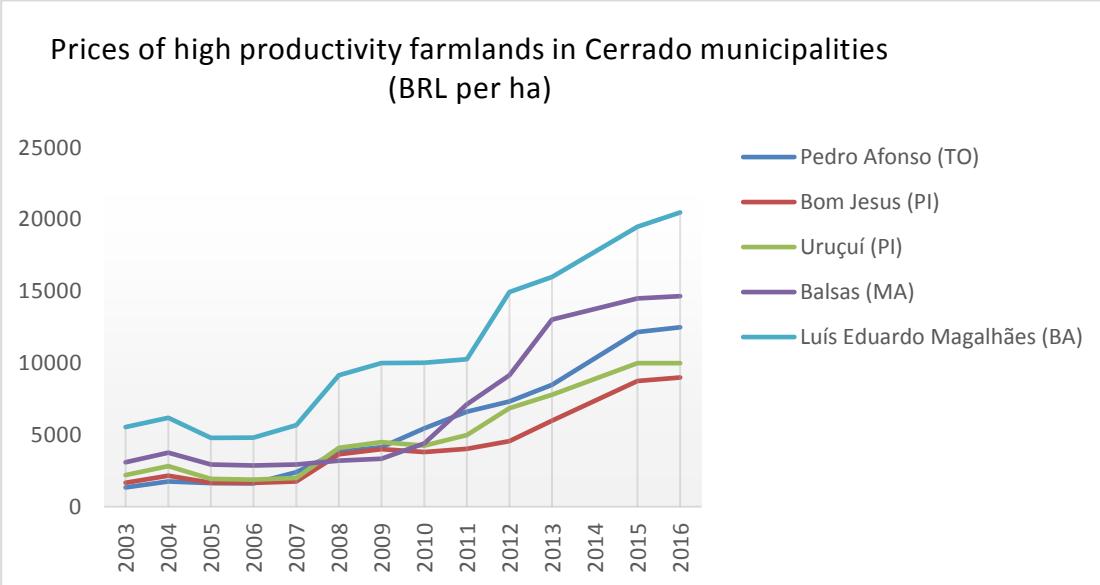
In response to a draft version of this report, SLC indicated that it is comfortable and complying with the standards of its supply chain and clients.

Land Portfolio Overvaluation

Informa Economics FNP reports that land prices in Brazil have nearly quadrupled between 2002 and 2011, after adjusting for inflation. As shown in Figure 14 (below), this increase is seen in the Matopiba region. Land prices rose in parallel with significant drops in soy prices, the major commodity produced in this region. A 2017 academic paper by Mendonca and Pitta attributes this reverse correlation with the entry of international financial capital.

SLCs land portfolio has also increased in value in recent years. Its total land portfolio was valued at USD 223 million (BRL 693 million) in 2007 and increased to USD 1,203 million (BRL 3,741 million) in 2016. More tellingly, the price per ha rose from USD 2,050 (6,276 BRL) per ha to USD 3,720 (BRL 11,600) per ha over the same period, an increase of 85 percent.

Figure 14: Land prices in Matopiba (2003 to 2016).
 Source: Informa Economics FNP.



The growth of SLC’s land portfolio value can be explained by both market conditions and SLC’s business strategy of purchasing forested land and transforming it into arable cropland. A number of underlying developments make it likely that this trend will not continue indefinitely, and that land becomes overvalued (Chain Reaction Research, forthcoming, September 20, 2017).

1. Expansion moves increasingly into areas with less suitable agronomical conditions due to droughts. Areas with the greatest expansion in recent years, such as western Bahia and Piauí, have also suffered from consecutive years with periods of droughts and consequent harvest losses. SLC has announced it is cutting its cultivated area in the region, in order to “reduce exposure to areas considered to have higher volatility.”
2. The market is showing signs of reduced appetite for soy from recently deforested land, as illustrated by the surge in zero-deforestation commitments. This implies that forested land should be viewed as a less appealing agricultural investment than non-forested sites. There are no signs that land valuation models take forest cover into account to date. This poses the risk of stranded land in a similar fashion as seen in the palm oil sector in SE Asia. Stranded land are a type of stranded assets. These are “assets that have suffered from unanticipated or premature write-downs, devaluations or conversion to liabilities”.

Financial Risk Assessment: Revenue, Equity, Buyer and Asset Risks

SLC Agrícola’s business model is based on growing and selling crops, mainly soybeans, cotton and corn. On top of this, SLC Agrícola targets additional earnings from deforesting land from forest and Cerrado to farm land.

What are the financial risks for investors? In the case of SLC Agrícola, analysis uses a three-factor model to determine which might affect investors:

- A. The impact of a temporary loss of sales to customers which have a zero-deforestation policy. As stated above, Cargill (14 percent of SLC Agrícola sales) targets to halve deforestation in its supply chain by 2020. Bunge and ADM have zero-deforestation policies. Based on the ongoing efforts by downstream clients, SLCs deforestation impacts could in the future result in suspension of trading

relations, also because SLC is a relatively small supplier to each of the large trading houses on a global scale.

- B. The impact of stranded land. As stated above, from 2011 to 2017 SLC Agrícola cleared a total of 39,887 ha of land of its original vegetation of which 75 percent of this vegetation was classified as forest by Brazil’s Ministry of Environment. These areas have also been recognized for their high biodiversity value by the RTRS. SLC indicates that another 42,000 ha is still to be developed. Corporate buyers which have a zero-deforestation policy might pressure SLC Agrícola to take the contested areas out of (future) production.
- C. A change in the cost of capital as several investors might be less willing to invest money (debt and equity) into SLC Agrícola. There are European and US investors in bonds and equity who have zero-deforestation policies in place. These might sell the bonds and equity, or banks might not renew the loans/credit lines.

The factors A and B are related to the same risk, i.e. pressure from several key customers. Factor C is discussed below.

As shown in Figure 15 (below), it is key to understand SLC Agrícola’s valuation versus other farming companies. Compared to BF Holding, Heilongjiang and Limoneira, SLC Agrícola has a lower valuation. However, compared with Adecoagra, also a Latin American crop farmer, SLC Agrícola’s valuation is higher.

Figure 15: SLCs Valuation vs. Peers. Source: Bloomberg, Profundo.

September 6, 2017	P/E (X)	EV/EBITDA (X)	Activity
Adecoagro S.A.	11.8	5.9	Crop farming LatAm
BF Holding/Bonifiche Ferraresi	52.1	28.3	Crops farming Italy
Heilongjiang Agriculture	23.1	15.4	Crops farming, fertilizers, paper China
Limoneira Company	41.3	20.6	Fruits cultivation and marketing USA
SLC Agrícola	14.4	8.2	Crops farming LatAm
Average	28.5	15.6	

Figure 16 (below) shows SLC Agrícola’s financials from 2014 to 2019E.

Figure 16: SLCs Financial Data. Source: Bloomberg, Profundo.

USD million	2014	2015	2016	2017E	2018E	2019E
Net sales	638.7	536.8	479.1	637.4	629.8	662.3
EBITDA	124.6	119.6	61.9	131.8	140.5	147.6
EBIT	81.3	87.0	31.8	101.2	106.9	113.6
Net profit	28.9	37.3	8.6	48.0	56.3	66.2
EPS (USD)	0.30	0.38	0.09	0.49	0.58	0.68
# shares (m)	96.3	98.2	98.0	97.6	97.6	97.5
Net debt & other	434.3	344.3	311.7	312.5	279.9	259.4
Net debt/EBITDA (X)	3.5	2.9	5.0	2.4	2.0	1.8
Valuation Sep. 6, 2017						

P/E (X)				14.4	12.3	10.5
EV/EBITDA (X)				8.2	7.7	6.4

2016 showed relatively weak results. H1 2017 showed a strong recovery in net sales and EBITDA, based on an increase in the value of biological assets. SLC's net debt/EBITDA ratio in 2016 increased to 5.0X because of its weak EBITDA related to lower crop prices. Net debt/EBITDA is expected to improve in from 2017 to 2019E.

Corporate Buyer Pressure: Revenue Loss Might Halve Net Profit

As indicated above, greater than 20 percent of SLC Agrícola's revenues are generated by corporate buyers who have adopted zero-deforestation policies. These corporate buyers could suspend procurement contracts with SLC because of non-compliance.

These traders are dominant in the agricultural supply chain. Their customers cannot easily switch to other suppliers. Consumer retail and staples firms like supermarket chains buying meat and other products could demand zero-deforestation products increasing upstream pressure. In June 2017, Brazilian beef producer JBS lost buyers such as Waitrose and Dominos because of upstream deforestation and human rights violations.

If Cargill, Bunge, and other corporate buyers stop buying from SLC, reducing SLC's accounts receivables by 20 percent, the impact on SLC's sales would be a decline of USD 126 million. As 70 percent of revenues consists of variable costs, EBIT would decline by USD 38 million versus the USD 107 million consensus. Net profit would be USD 27 million lower, or 46 percent below the current 2018E consensus estimate.

As shown in Figure 17 (below), as a consequence of lower earnings, valuations multiples would increase SLCs P/E level in line with international peers. Brazilian equities trade at a discount in current international valuation models due to the Brazil factor. For example, this discount factor is understood as the price of Brazilian corruption. In this case, SLC Agrícola's share price would have a high risk of a temporary decline.

USD million	20% Decrease	Deviation	% Change
Net sales	503.8	-126.0	-20%
EBITDA	102.7	-37.8	-27%
EBIT	69.1	-37.8	-35%
Net profit	29.8	-26.5	-47%
EPS (USD)	0.31	-0.27	-47%
# shares (m)	97.6		
Net debt & other	306.4	26.5	
Net debt/EBITDA (x)	3.0		
Valuation Sep. 6, 2017			
P/E (x)	23.2		

Figure 17: SLCs What-IF Scenario.
Source: Profundo.

EV/EBITDA (x)	9.7		
Share price in USD	7.1		

Another effect from a decline in EBIT and EBITDA due to a loss of customers, would be that the Net debt/EBITDA ratio would increase to 3.0.

Corporate Buyers' Zero-Deforestation Policies May Strand SLC Agrícola's Assets

In the scenario that the market does not accept soy from recently deforested land, and SLC would refrain from producing soy from this land (75 percent of the 39,531 ha mentioned above in the period 2011 to 2017), SLC Agrícola's equity value could decrease.

The costs of reverting 75 percent of 39,532 ha can be calculated as follows: assume a price of USD 4,760 (BRL 15,000) per ha equals an equity value reduction of USD 144 million (BRL 445 million). This would mean a 13 percent reduction of the enterprise value of USD 1,078 million (BRL 3.4 billion) per September 6, 2017 and a 20 percent reduction of the equity value of USD 709 million (BRL 2.2 billion).

Investors should note that a major part of the value of a farming company like SLC Agrícola is based on the value of the land. This is also confirmed by a study on Brazilian land transformation by [BTGPactual](#) which sees net asset value (NAV) as the best method to value a stock like SLC Agrícola.

It is fair to observe that currently the SLC Agrícola share price of USD 7.10 (BRL 22.08) per September 6, 2017 is already only half of the last calculated NAV/share of USD 13.80 (BRL 42.80) in the H1 2017 report of SLC Agrícola. This Net Asset Value is based on internal study by SLC Agrícola considering market information updated in June 2016, net of taxes, and the independent appraisal report (Deloitte), net of taxes, updated in June 2016. If the NAV per share would decline by 20 percent, the resulting USD 11.00 (BRL 34.21) per share would still be above its current share price.

The reason for the substantial discount of the share price versus the NAV/share is also due to the SLCs low return on equity (RoE) since 2015, which was 7.0 percent in 2015 and 5.1 percent in 2016.

SLCs Investors and Creditors: Lack Zero-Deforestation Policies

SLC Agrícola is financed by debt and by equity. As shown in Figure 18 (below), SLCs equity contributed the majority of financing as of September 6, 2017.

Category	USD millions	%
Market Cap	708.5	66%
Net Debt	312.5	29%
<u>Other (i.e. Derivatives)</u>	<u>56.8</u>	<u>5%</u>
Enterprise Value	1077.8	100%
Gross debt	456	42%

Figure 18: SLCs Capital Stack:
Source: Bloomberg, Profundo.

Concerning SLC Agrícola's debt, transparency is low. Its financial statements show that BNDES finances 9 percent of the SLC's fixed assets. Rural Credit (distributed by Brazil's leading banks using demand deposits and savings accounts) and Constitutional Funds (distributed by Banco do Nordeste and Banco do Brasil) provide 42 percent of SLC's total 2016 gross debt. The other financing is for working capital and from unpublished external lenders.

The majority of SLC's debt financing is done by local entities. The average interest rate of SLC Agrícola's debt was 12.1 percent in 2016 and 10.7 percent in 2015. Within SLC's group of lenders, deforestation policies are weak or absent. The score on forests of Banco do Brasil is only 30 percent in the Fair Finance Guide Brazil.

As shown in Figure 19 (below), within the group of leading shareholders there are several institutions from Europe and the USA. However, on average their statements on deforestation are absent or weak. SLC Agrícola is majority owned by the family-controlled SLC Participações S.A. which lacks transparency on environmental, social, governance (ESG) policies.

Figure 19: SLCs Shareholders and Forest 500 Scores. Source: Bloomberg, Profundo, Investor Websites, Forest 500. "-" = not scored.

Equity Investors	% of Shares	Deforestation Policies	Forest 500
SLC Participações S.A.	51.0	No	-
Odey AM	9.3	No	-
Kopernik Global Inv	5.2	No	-
Verde AM	2.6	No	-
Dimensional Fund Adv	2.6	ESG, UNPRI	1
Cobas AM	2.2	No	-
Deutsche Bank	1.7	Yes	5
Warburg Invest Kap	1.3	No	-
Norges Bank	1.1	No	-
Vanguard Group	1.0	Start in ESG, but nothing on deforestation	1
BlackRock	0.7	Start in ESG, but nothing on deforestation	2
Heptagon Capital	0.7	No	-
Magallanes Value	0.7	No	-
Sarasin	0.6	G4 guidelines reporting, but nothing on deforestation	-
Banco Bradesco	0.5	Only 20% score on forest in FFG Brazil	2

Conclusion: Material Equity Value Risk but Opportunity for Win-Win

- If key customers, which currently are developing and implementing deforestation policies, would halt their 2018 purchases, this might reduce SLC Agrícola's revenues by 20 percent and net profit by nearly 50 percent. SLC Agrícola's P/E and EV/EBITDA multiples would then move up.

- If key customers would pressure SLC Agrícola to reverting developed land to its original forest status, the value reduction is equal to 13 percent of SLC Agrícola's enterprise value and 20 percent of its equity value/market capitalization.
- However, SLC Agrícola's current share price already has a 49 percent value discount versus the NAV/share (see above: based on SLC's internal study and Deloitte; see SLC's annual and half-year reporting). If the NAV would be reduced by 20 percent due to stranded land, the discount of the share price versus the NAV would still be 35 percent.
- SLC Agrícola is in majority financed by equity based on share prices per September 6, 2017. On average the shareholders have no deforestation policies and their ESG policies are weak or absent. Its creditors have on average also no or weak policies on forest and we only found Brazilian lenders. Non-compliance with ESG policies is not expected to result in changes in weighted average cost of capital (WACC).

In conclusion, the risk to SLC's investors is that the corporate buyers who have executed or are developing zero-deforestation policies decide to adjust their purchasing patterns for compliance with these zero- deforestation policies.

This risk for investors could instead be transformed into an opportunity for SLC Agrícola. Although a halt of production on the contested land would reduce SLC's NAV per share, which is an important determinant in its valuation, compliance with zero-deforestation policies may increase institutional investors' confidence in SLCs management and executives reducing its equity price discount versus its NAV per share.

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