CHAIN REACTION RESEARCH

SLC Agrícola: Planned Deforestation Could Contradict Buyers' ESG Policies

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This report, which builds on the company profile on SLC Agrícola published by Chain Reaction Research in September 2017, reviews the company's sustainability and business risks in the last year. The initial report showed that from 2011 to 2017, SLC Agrícola cleared 39,887 ha of land of its original vegetation, of which 30,000 ha was classified as Cerrado forest. SLC Agrícola faced potential risks of losing clients with zero-deforestation commitments, as well as an overvaluation of its land portfolio. This update discusses relevant developments that have taken place since.

Key Findings

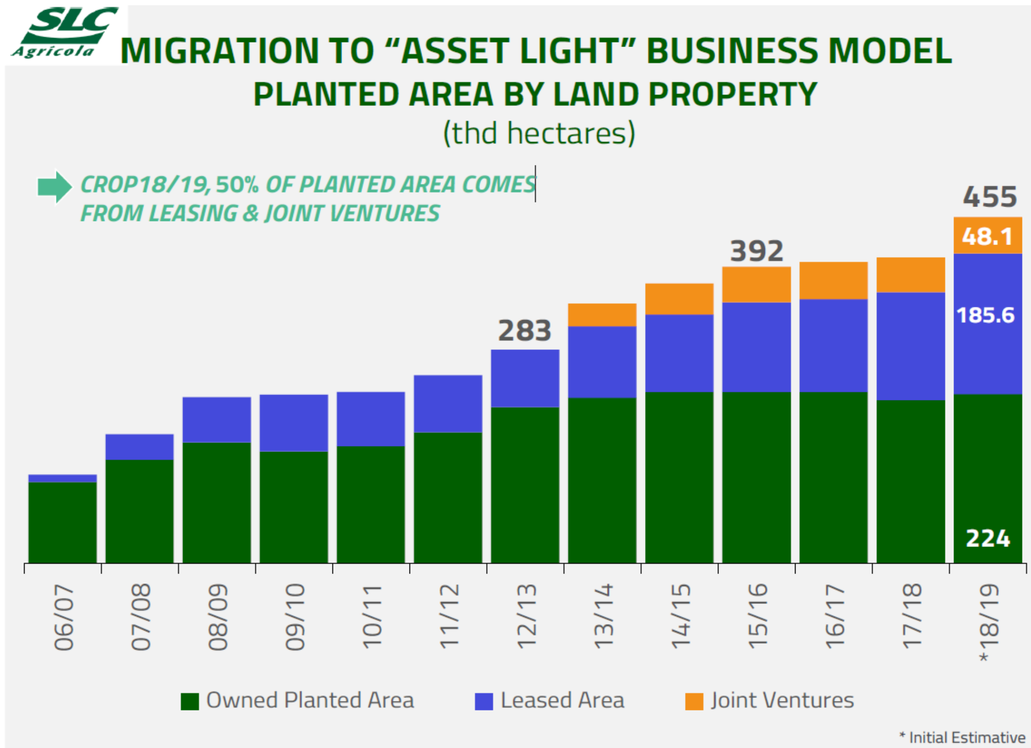
- **SLC Agrícola's business model is moving away from an aggressive growth model based on the transformation of undeveloped land to farmland.** Instead, SLC Agrícola now emphasizes an 'asset light' business model and is reducing its exposure to the less stable production states of Bahia and Piauí. While this shift appears to be motivated by productivity concerns, it could reduce its exposure to deforestation risks**.**
- **However, SLC Agrícola has requested environmental licenses for clearing 16,938 ha of land.** This could result in deforestation at its Parnaíba, Palmeira, Parceiro, Parnaguá, and Palmares farms. The planned transformation at Fazenda Parceiro on the border of Bahia and Piauí may lead to the clearing of 6,698 ha Cerrado forest types.
- **At Fazenda Parnaíba in Maranhao, planned land clearing would total 4,775 ha.** This farm is part of SLC Agrícola's participation in Lidl's sustainable Soy Initiative, aimed to supply certified sustainable and non-GMO soy. After the announcement of this partnership, SLC Agrícola split Fazenda Parnaíba into two separate farms. The lion's share of planned deforestation would take place at the newly formed Fazenda Palmeira, outside of the scope of the Lidl partnership. This restructuring may enable SLC Agrícola to enter sustainability partnerships, while also continuing to deforest native Cerrado vegetation.
- **SLC Agrícola's planned deforestation and lack of zero-deforestation commitment exposes the company to a number of business risks.** Various retailers and consumer goods companies, including SLC Agrícola's business partner Lidl, support the Cerrado Manifesto. Soy traders Bunge, Louis Dreyfus, Amaggi, Cargill and ADM adopted and strengthened zero-deforestation commitments in 2017/18.
- **Its planned deforestation could raise concerns with equity investors.** In Q4 of 2017, the Norwegian Government Pension Fund divested from SLC Agrícola, possibly over deforestation risks. An investor group with USD 6.3 trillion assets under management has launched a collaborative engagement over deforestation with companies in the soy supply chain.
- **Its appreciated share price could face challenges as a result of deforestation risks.** Land divestment, stronger harvests, the Lidl contract and the U.S.-China trade war have contributed to the share price moving from a discount to a premium versus the Net Asset Value. The business risks related to clearing of forests, however, may undermine revenues and EBITDA.

SLC Agrícola Shifts Business Strategy to 'Asset Light' Model

SLC Agrícola's business model is moving away from an aggressive growth model based on the transformation of undeveloped land to farmland. Instead, in its recent investor presentation, SLC Agrícola now emphasizes an 'asset light' business model. In 2017, CRR discussed how SLC Agrícola's diversified business model aimed to produce value from both commodity production and land appreciation. With the new business model, the company indicates it prioritizes soy production on farms leased from third parties (50 percent planted area on leased and joint venture land in 2018/19), the sale of farms, and the outsourcing of harvesting activities.

Figure 1: SLC's planted area on owned, leased and joint venture farms

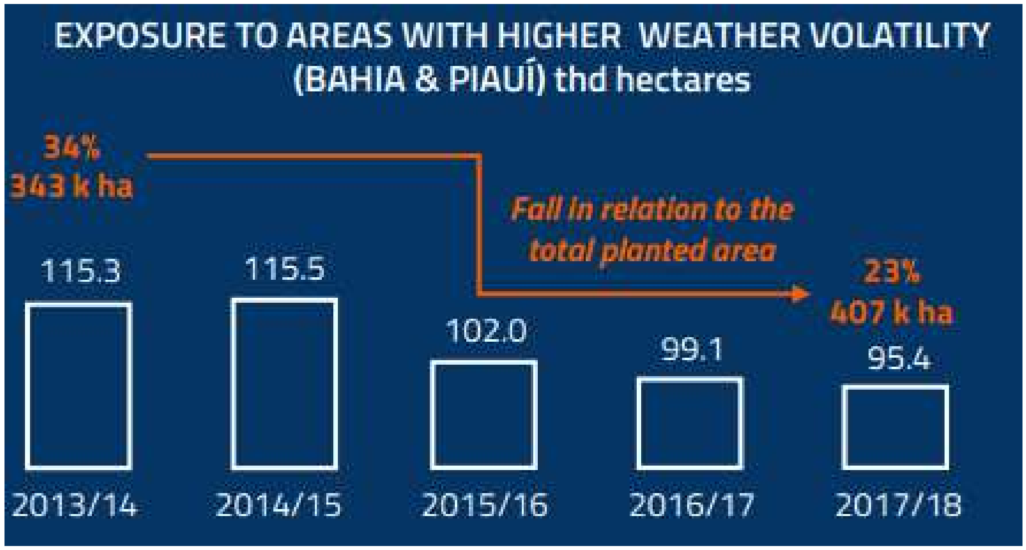
Source: SLC Agrícola. Farming at Its Best (September 2018)



SLC Agrícola is increasingly shifting its output to the more stable production regions in the Midwest of Brazil, reducing its exposure to the states of Bahia and Piauí. Recognizing the higher weather volatility, the company reports a relative drop in total planted area in these two states from 34 percent in 2013/14 to 23 percent in 2017/18. Instead, SLC Agrícola is increasingly planting soybeans on mature farmland that has seen more than three years of harvesting. According to the company, this shift increases the yield potential.

Figure 2: SLC Agrícola's reduced exposure to Bahia and Piauí

Source: SLC Agrícola. Farming at Its Best (September 2018)



While the change in corporate strategy appears to be motivated mostly by productivity concerns, it could reduce SLC Agrícola's exposure to deforestation risks. Should the company complement the shift to more mature farms and stable production regions with a zero-deforestation policy, the company could mitigate its deforestation-related business risks.

New Land Lease Agreement and Farmland Sale

In 2017/18, SLC Agrícola increased its planted area by 7,365 ha to a total of 404,446 ha. A bigger increase is expected for the 2018/2019 crop season, as the company estimates a total planted area of 454,998 ha.

The company recently entered a lease agreement with Reichert Agropecuária Ltda for an area of 26,133 ha. It will incorporate this land into a new farm unit called Fazenda Pantanal. This farm is located between the states of Mato Grosso do Sul and Goiás.

SLC Agrícola's owned land portfolio decreased from 323,226 ha to 311,619 ha because of the sale of 11,607 hectares of land for BRL 176.7 million (USD 47.7 million) in December 2017. SLC Agrícola sold 6,176 hectares of Fazenda Paiaguás in the municipality of Diamantino, Mato Grosso, and 5,428 hectares of Fazenda Parceiro in the municipality of Corrente, Piauí. It did not disclose the buyers. The consolidated net income from these transactions was BRL 80.2 million (USD 21.6 million).

Figure 3: SLC Agrícola land portfolio as of August 14th, 2018.

Source: SLC Agrícola Management report 2018/Q2

Farm	State	Owned	SLC LandCo	Leased	Joint Ventures	Under Control	Total Planted Area
Pamplona	GO	17,911		3,857		21,768	19,144
Planalto	MS	15,006		1,635		16,641	21,002
Planorte	MT	23,454				23,454	31,177
Paiaguás	MT	28,124		15,81		43,934	67,174
Perdizes	MT	28,846	13,276			42,122	23,718
Pioneira	MT				19,462	19,462	26,497
Panorama	BA		10,373	14,253		24,626	21,751
Paladino	BA				19,417	19,417	19,417
Piratini	BA		25,356			25,356	7,436
Palmares	BA	16,195	831	16,145		33,171	24,827
Parnaíba	MA	31,398	10,200	27,139		68,737	64,916
Planeste	MA		22,785	16,632		39,417	54,495
Parceiro	BA	27,556	3,680	11,088		42,324	13,585
Paineira	PI	12,892				12,892	–
Parnaguá	PI	23,736				23,736	8,308
Total		**225,118**	**86,501**	**106,559**	**38,879**	**457,057**	**404,446**

After the sale, on December 31, 2017, Deloitte valued SLC Agrícola's land portfolio at BRL 3.602 billion (USD 972 million), which equals an average of BRL 11,559 (USD 3,120) per ha. The materialized selling price of the farms of BRL 15,220 (USD 4,107) per ha is 31 percent higher than the average valuation of SLC Agrícola's current land portfolio. In October 2011, the company bought 12,936 ha at the Parceiro farm for BRL 47,335,600 (USD 12.7 million), equaling BRL 3,659 (USD 987) per ha.

Figure 4: SLC Agrícola land portfolio appraisal

Source: SLC Agrícola Management reports (2017Q3, 2017Q4, 2018Q2)

	SLC land portfolio (ha) (Own land and LandCo)	Value land portfolio (BRL)	Average price (BRL)/ha
Before land sale (September 2017)	323,226	3,774,570 (USD 1,013,818)	11,678* (USD 3,136)
After land sale (31 December 2017)	311,619	3,602,261* (USD 967,491)	11,559 (USD 3,104)
Materialized price/ha of sale Parceiro farm			15,220 (USD 4,088

* Data derived from independent value appraisal by Deloitte, as reported by SLC.

Planned Deforestation of 4,775 ha at Certified Fazenda Parnaíba, Restructuring of Farms

SLC Agrícola has requested environmental licenses for the clearing of an additional 16,938 ha of land on its Parnaíba, Palmeira, Parceiro, Parnaguá, and Palmares farms. This action indicates further land transformation in the future**.** At Fazenda

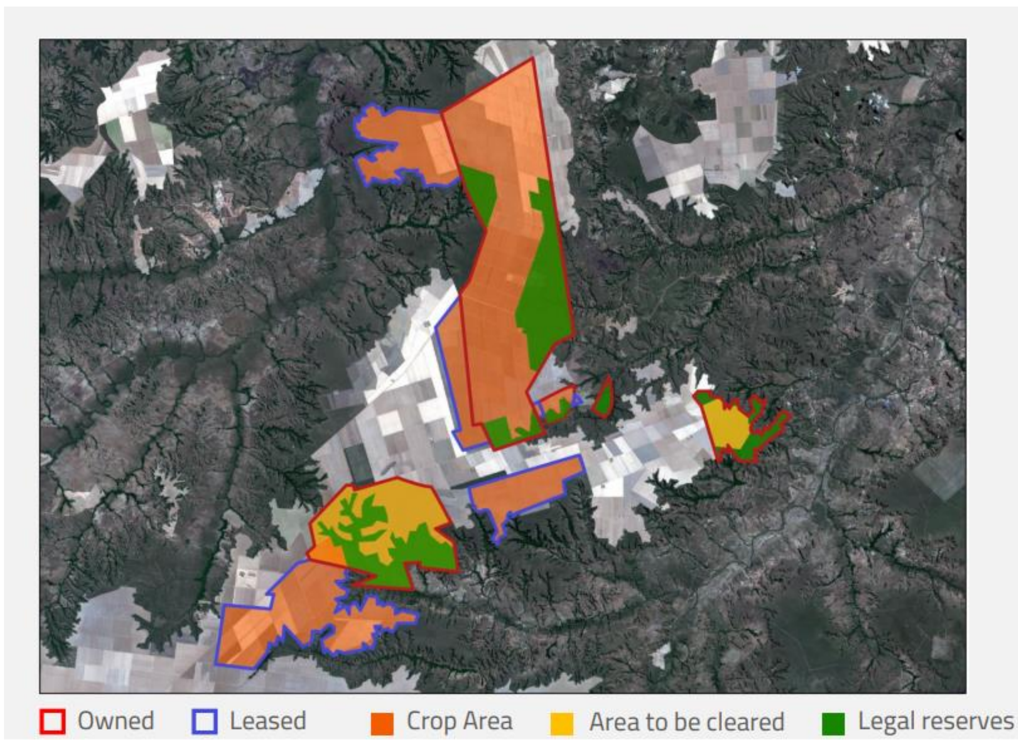
Parnaíba and Fazenda Palmeira (Maranhão), SLC Agrícola's plans to develop new areas would result in the clearing of 4,775 ha of native Cerrado vegetation.

In February 2018, SLC Agrícola announced its participation in the Lidl Soybean Initiative. For this partnership, it selected Fazenda Parnaíba and Fazenda Planeste in Maranhão to supply certified sustainable soybeans to Lidl. The Lidl Soybean Initiative aims to work with suppliers of sustainable and non-GMO soybeans. The German retailer plans to source a total of 147,000 metric tons of certified soybeans by 2019 for the German, Austrian and Swiss markets. In the initiative's first year, Lidl will source soybeans exclusively from SLC Agrícola's farms. SLC Agrícola will receive a higher price for certified produce sold to Lidl. The initiative is run in collaboration with the Proterra Foundation, which provides certification for non-GMO soybeans. The Parnaíba and Planeste Farms already have ProTerra and Round Table on Responsible Soy (RTRS) certifications.

SLC Agrícola indicated to CRR that it recently split Fazenda Parnaíba into two separate farms: Fazenda Parnaíba and Fazenda Palmeira. Fazenda Palmeira is no longer part of the Lidl partnership and will not be part of the Proterra and RTRS certification program. Of the 4,775 ha native vegetation, 4,130 ha of the land that SLC Agrícola plans to clear are located in what is now Fazenda Palmeira. The planned deforestation of the remaining 645 ha would still take place on the certified Fazenda Parnaíba.

Figure 5: Areas to be cleared at Fazenda Parnaíba and the recently formed Fazenda Palmeira

Source: SLC Agrícola. Farming at Its Best (September 2018) (page 6)



The restructuring of Fazenda Parnaíba could enable SLC Agrícola to enter into sustainability partnerships with clients, while simultaneously continuing to deforest native Cerrado vegetation. Should SLC Agrícola proceed clearing the remaining vegetation, it risks acting contrary to the sustainability objectives of its business partners.

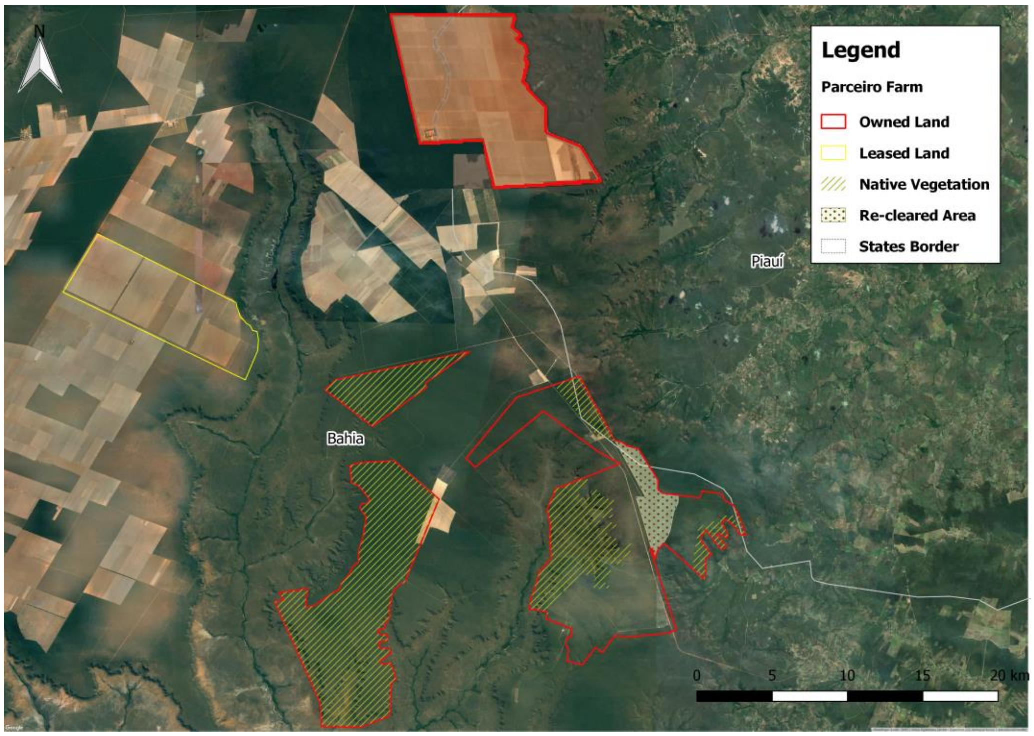
Planned Deforestation of 6,698 ha at Fazenda Parceiro

SLC Agrícola has 6,698 ha of land on Fazenda Parceiro currently under licensing, indicating plans for future transformation of native vegetation. Fazenda Parceiro, which is primarily used for soy production, is located at the border between the states of Bahia and Piauí. On December 31, 2017, SLC Agrícola sold 5,428 ha of land of Fazenda Parceiro, which included the most Northern part of the farm in Corrente Municipality (Piauí). Native vegetation from this part of the farm was cleared from native vegetation in 2014.

The planned transformation could result in the clearing of wooded savanna and woody-grass savanna, the two types of native vegetation at this farm. The clearing would concentrate on the 3 southern portions of land of Fazenda Parceiro, which equals approximately 14,777 ha of forest. About half of the northern part of Fazenda Parceiro was sold in December 2017 and is already fully developed.

Figure 6: Native vegetation at SLC Agrícola's Parceiro Farm (August 2018)

Source: SLC Agrícola corporate website and satellite imagery



Since the publication of the first company profile in September 2017, SLC Agrícola recleared - reclearing refers to the process of clearing new vegetation that grew after clearing of native Cerrado - 1,132 ha of land on Parceiro farm. SLC Agrícola indicated that this land is located in a part of the farm for which SLC Agrícola has a "purchase agreement." It has not yet taken possession of this area. According to SLC Agrícola, the current owner recleared this area, but the company did not provide further details. On its website, the area is listed as owned by SLC Agrícola.

Figure 7: Re-clearing of 1,132 ha of Cerrado land in SLC Agrícola's Parceiro farm between June-August 2018.

Source: Sentinel-2 satellite images, European Space Agency, 2017/2018

June 2018 August 2018

Business Risks Persist Due to SLC Agrícola's Lack of Zero-Deforestation Commitment

Despite SLC Agrícola's business strategy to migrate to an 'asset light' business model, improve its land maturity and reduce its exposure to Matopiba, it continues to plan new clearings, totaling 16,938 ha. SLC Agrícola states that 37 percent of the land it owns is protected, complying with the Brazilian Forest Code that determines that at least 35 percent of land should not be cleared. While its current and planned clearing do not appear to be illegal, SLC Agrícola's lack of commitment to zero-deforestation could expose the company to a set of business risks.

Market access risks

The planned clearing of 4,775 ha of native Cerrado vegetation on Fazenda Parnaíba and the newly created Fazenda Palmeira could violate the commitments of SLC Agrícola's business partner Lidl and other end users of SLC Agrícola's soy. The corporate restructuring of the farm, intended to keep deforestation outside of the scope of responsible sourcing policies, could prove an ineffective deterrent to client action. Both Lidl UK and Lidl Netherlands have signed onto the Cerrado Manifesto, which calls on soy producers and their investors to make zero deforestation commitments in the Cerrado. Lidl UK also committed to a fully sustainable verified soy supply chain in October 2018.

In October 2017, the Cerrado Manifesto also received formal support from the Consumer Goods Forum, whose members likely include end-users of SLC Agrícola produced soy.

Moreover, since the first SLC Agrícola report, various commodity traders have made or strengthened their zero-deforestation commitments:

- Bunge has committed to strengthen its no-deforestation policy by including legal deforestation and a public non-compliance process.

- Louis Dreyfus launched its Soy Sustainability Policy in July 2018, in which it commits to '*the intent to discourage and eliminate conversion of native vegetation.*'
- ADM is also reporting progress on tracing its soy and has indicated its intent to engage with suppliers involved in legal deforestation.
- Cargill has committed to reducing and ultimately eliminating deforestation from their supply chains by 2030. In 2017, it expanded its 'Soya Plus Program' to Matopiba.
- Amaggi has committed to deforestation-free supply chains, has launched a Responsible Soy Standard, and is co-developing a monitoring system for its supply chains with the Earth Innovation Institute.

Financing risks

SLC Agrícola's planned deforestation could also raise concerns with the company's equity investors. In Q4 of 2017, the Norwegian Government Pension Fund divested from SLC Agrícola. The Fund started its initial investment with a value of USD 30.5 million in SLC Agrícola in 2012. At the time of divestment in 2017, the value was USD 26.9 million. The Norwegian Government Pension Fund is one of the largest investors in the world, investing in 9,000 companies in 72 countries. In recent years, the Fund has reacted to companies that it considers having environmental, social, and governance (ESG) risks. For instance, it has divested from 29 palm oil producers. In 2017, the Fund focused on soy-related deforestation in the Cerrado, and plans to exclude companies from its investment portfolio that have deforestation risks.

Moreover, a number of large institutional investors recently signed the Cerrado Manifesto. Signatories include APG, Robeco, Legal and General Investment Management and Green Century Capital Management. These investors, with USD 2.8 trillion in assets, are increasingly recognizing soy-driven deforestation as a material financial risk for their clients.

In addition, large asset managers are collaborating to address deforestation driven by soy and other commodities. In July 2018, the Principles for Responsible Investment and Ceres expanded its Sustainable Forest Initiative to include dialogue with companies in the soy value chain. This investor group includes 32 institutional investors with a total of USD 6.3 trillion assets under management. Members of this initiative include shareholders of SLC Agrícola.

Financial Risk Assessment

The sustainability risk assessment (SRA) revealed the following risks for SLC Agrícola:

- Market access risk related to the deforestation commitments of customers.
- Financing risk related to deforestation commitments of banks and investors in SLC Agrícola. The main example is the Norwegian Government Pension Fund's divestment.

Recent results were strong due to land sale, stronger yields and larger planted area

In 2017, SLC Agrícola's net profit grew sharply due to profits from land divestment, as described above. The company realized a book profit after tax. The planted area grew by 2.8 percent to 403,767 hectares with 57 percent for soybeans, 24 percent for cotton (calculation based on two harvests), 19 percent for corn and 0.6 percent for other crops. Also, yields per hectare improved, leading to a higher gross margin.

In the first half of 2018, net revenues (in BRL) grew due to a larger planted area and higher yields. This combination led to higher gross profit and higher EBITDA. In local currencies, net revenues increased by 28 percent, EBITDA by 57 percent and net profit by 108 percent. Net debt was eight percent higher in BRL.

Figure 8: SLC Agrícola Key Financials

Source: Bloomberg, Chain Reaction Research; 2 October 2018

USD million	2014	2015	2016	2017	2018F	2019F
Net sales	638.7	536.7	479.3	695.5	619.4	680.7
EBITDA	124.6	119.5	62.0	241.9	171.9	172.3
EBIT	81.3	87.0	31.8	101.2	152.7	142.3
Net profit adjusted	28.9	37.3	8.6	129.7	88.4	79.6
EPS (USD) adjusted	0.3	0.2	0.4	1.3	1.0	0.8
Free cash flow	-44.9	40.6	60.8	60.7	39.1	57.7
Net debt & other	434.3	344.3	311.7	310.6	206.3	199.9
Net debt/EBITDA (x)	3.5	2.9	5.0	1.3	1.2	1.2

Market access risk due to zero-deforestation policies of Lidl and large traders

As mentioned above in the SRA, several commodity traders have made, or are strengthening, their zero-deforestation commitments. The intended forest clearing by SLC Agrícola may bring about a reaction and response from these traders.

In 2017, SLC Agrícola's main clients were Cargill Agrícola and Amaggi LD Commodities, which generated respectively 27.6 percent and 12.1 percent of SLC Agrícola's net revenues (in total 39.7 percent). In first half 2018, SLC Agrícola's clients Cargill Agrícola and Amaggi LD Commodities jointly accounted for 55.6 percent of net revenue. Cargill generated 31.9 percent and Amaggi 23.7 percent. The table below shows how SLC Agrícola's net revenues gradually have become more concentrated from 2015 onwards. Since 2017, Bunge has disappeared from the list of main clients.

In January 2018, Lidl and SLC Agrícola announced their contract on GMO-free soy. Deliveries might have already started in 2017 as the contract is for 2017-19. Potential revenues from the Lidl contract amount to approximately USD 60 million. This amount would mean 10 percent extra net revenues per year. Since these sales are probably executed by one of the large traders, SLC Agrícola's results will not list Lidl separately as a large customer.

Figure 9: SLC Agrícola's main customers as % of net revenues.

Source: Annual report SLC Agrícola 2015, 2016, 2017 and 1H18 Report. NA = not available

	2015	2016	2017	1H18
Cargill	13.8%	12.3%	27.6%	31.9%
Bunge	6.0%	7.8%	NA	NA
Amaggi	NA	NA	12.1%	23.7%
Total	19.8%	20.1%	39.7%	55.6%

Although Cargill and Amaggi aim to reach zero-deforestation in their supply chain in the coming years (Cargill mentions 2030; a reduction of 50 percent in 2025), the forest clearing of 4,775 hectares at SLC Agrícola could push lead to reactions from traders. Traders' downstream customers could also put pressure on them to stop buying from SLC Agrícola. In CRR's report on Cargill of April 26, 2018, it concluded that USD 7-17 billion of Cargill's net revenues (6-15 percent) may be linked to European signatories of the Cerrado Manifesto. The report, however, says that the balance-of-power in the soy chain is oligopolistic, meaning it is challenging to avoid the large traders. These also might see opportunities to sell soy to Southeast Asian downstream companies that have not signed the Cerrado Manifesto.

If Lidl would apply the Cerrado Manifesto signed by the UK and Dutch subsidiaries to the whole company, SLC Agrícola would face market access risk for the 147,000 metric tons of soy sales in the Lidl contract (to be reached in 2019). That could affect USD 60 million in sales (approximately 10 percent of SLC Agrícola's net revenues). When applying a 25 percent EBITDA margin, the loss in EBITDA could total USD 15 million. Based on a WACC of 10 percent, the Discounted Cash Flow (DCF) value of this USD 15 million amount to USD 106 million. **This value-at-risk is equal to eight percent of SLC Agrícola's market capitalization. The risk of losing Cargill and Amaggi could lead to a loss in value of USD 603 million, or about 43 percent of equity value. Lidl, Cargill and Amaggi altogether would bring about a potential value loss of 51 percent of equity value (see table below -- the Lidl sales are categorized separately from Cargill and Amaggi as there is no information about which trader will handle the Lidl sales).**

Figure 10: SLC Agrícola's potential revenue-at-risk and value loss.

	Lidl	Cargill and Amaggi	Total
Revenue-at-risk (USD million) 2018 base	60	344	404
EBITDA margin	25%	25%	
EBITDA-at-risk (USD million)	15	86	101
Weighted average cost of capital (WACC) rate	10%	10%	
DCF value-at-risk (USD million)	105	603	708
Equity value (USD million)	1395	1395	1395
DCF value-at-risk as % of equity value	7.5%	43.2%	50.7%

In total, the size of the EBITDA-at-risk is substantial. It would significantly impact the ratio net debt/EBITDA, important for debt financers. With USD 101 million less EBITDA, the pro forma EBITDA for 2019 would not reach USD 172m, but rather USD 71 million. The pro forma net debt/EBITDA, meanwhile, would rise from 1.2X to 2.8X. Therefore, it is worthwhile for investors to look at who holds this debt and how significant the reaction could be (see section on Financing Risk below).

Stranded assets: The 4,775 ha of native Cerrado at SLC's Parnaíba farm

The planned clearing of the 4,775 ha of native Cerrado vegetation on Fazenda Parnaíba and the newly formed Fazenda Palmeira could violate Lidl policies. Halting this clearing could be a pathway for SLC Agrícola to eliminate this potential risk. The value of this land as productive land is estimated at BRL 73 million (USD 20 million). This is based on the materialized price/ha of the sale Parceiro farm (see above: BRL 15,220), multiplied by 4,775 ha. **This USD 20 million, which equals to 1.4 percent of the current market capitalization, can be considered as potential stranded assets.**

Financing risk: several investors face conflicts with their own policies

SLC Agrícola is primarily financed by equity (based on market values), while net debt and other sources contribute about 20 percent to the total financing.

Figure 11: SLC Agrícola: sources of financing 2 October 2018.

Source: Bloomberg, Chain Reaction Research

Category	USD millions	%
Market Cap/Equity Value	1394.8	80%
Net Debt	294.2	17%
Other (ie Derivatives)	50.7	3%
Enterprise Value	1739.7	100%
Gross debt	429.8	25%

Since CRR's last report on SLC Agrícola, some significant changes occurred in the group of main shareholders.

- SLC Participacoes SA remains the majority shareholder, and Odey has increased its stake slightly from 9.3 percent to 9.7 percent of the shares. The family-controlled SLC Participações lacks transparency on environmental, social and governance (ESG) policies, while **Odey has no deforestation commitments.**
- As mentioned in the sustainability risk analysis, **the Norwegian Government Pension Fund has sold its stake in the company.**
- In August 2018, **Robeco signed the Cerrado Manifesto. The shareholding position of its Luxembourg office seems in conflict with headquarter policies.**
- **Deutsche Bank reduced its shareholder position in SLC Agrícola** (from 1.7 to 0.5 percent). Although Forest500 indicates that Deutsche Bank has a soy policy, the website reveals no official statements.
- **Teacher Insurance & Annuity Association, a new investor (now called Nuveen), does not have deforestation policies for all its asset classes but recently adopted a zero-deforestation policy for its farmland investment fund. The investor is also linked to unsustainable activities in other occasions, such as land-grabbing.**

Figure 12: SLC Agrícola: Main shareholders on 17 September 2017 and 2 October 2018.

Source: Bloomberg

	% of shares (17 Sep 2017)	% of shares (2 Oct 2018)
SLC Participacoes SA	51.0	53.0
Odey AM	9.3	9.7
Kopernik Global Investors	5.2	
Verde AM	2.6	1.8
Dimensional Fund Advisors	2.6	2.7
Cobas AM	2.2	
Deutsche Bank	1.7	0.5
Warburg Invest Kap	1.3	1.3
Norges Bank	1.1	
Vanguard Group	1.0	1.6
BlackRock	0.7	1.2
Heptagon Capital	0.7	
Magallanes Value	0.7	
Sarasin	0.6	0.4
Banco Bradesco	0.5	
SLC Agrícola		1.7
Investec		1.2
Teachers Insurance & Annuity Association (Nuveen)		0.8
Power Corp of Canada		0.8
Robeco Luxembourg		0.4

Gross debt of SLC Agrícola consists completely of bank debt and rural credit:

- Export financing is 55 percent of gross debt, but there are no details on counterparty. The same applies to Working Capital Financing (28 percent of gross debt).
- Rural credits contribute to 11 percent of gross debt. The CRR study on soy companies and their financers says that the rural credit line in the ABC program aims to cut emissions of greenhouse gas from agricultural activities, including a reduction in deforestation. SLC Agrícola's annual report does not provide information about whether its rural credit is under the ABC program.
- The remainder is Mortgage Debt to BNDES. BNDES has a very basic level of environmental responsibility policies.

Rabobank has a financial relationship with SLC Agrícola through hedge contracts in currencies and interest rates. **Rabobank says it is 'involved' in the Tropical Forest Alliance 2020 against deforestation. Rabobank is also member of RTRS.**

At this moment, SLC Agrícola's net debt is relatively limited in relation to its EBITDA. Figure 8 on Key Financials (see above) indicates that for 2019 the net debt/EBITDA may reach only 1.2X. That should be a 'safe' level. However, given the analysis above about the revenue-at-risk and the potential loss of EBITDA, the net debt/EBITDA ratio may rise to 2.8X. **This level could lead to higher costs of capital and consequently negatively affect the value of the company.** A 50 basis-point increase in the cost of Fcapital has the potential to negatively impact the enterprise value by five to ten percent.

High Valuation Leads to More Risk Due to weak ESG Outcome

In CRR's last report on SLC Agrícola, published September 18, 2017, the research concluded that the share price was relatively low versus the Net Asset Value (NAV) per share (which currently stands at BRL 44.1 -- see table below). The share price at that time likely discounted the potential loss of customers and the need to revert land to the original forest status.

From 4Q17 onwards, the share price has appreciated substantially, from BRL 22 early October 2017 to BRL 67 in September 2018 (on 18 October 2018 the share price stands at BRL 55.15). This strong increase could be related to the following:

- The announcement of the sale of 11,604 ha for BRL 177 million (see above).
- Higher-than-anticipated results since the second half of 2017. The strong results were based on higher harvests/yields and more planted area. For the years ahead, analysts are increasingly positive about the likelihood of higher revenues.
- The announcement of the Lidl non-GMO contract likely attracted ESG investors.
- The trade tensions between the United States and China and the announced Chinese trade tariffs on imports of soybeans from the US have led to a significant shift in global soybean trade flows, benefiting Brazilian soy.

The current share price is slightly down from its top, but still substantially above its Net Asset Value (NAV) per share of BRL 44.1. This NAV is calculated based on an independent appraisal report by Deloitte. The NAV differentiates from the book value (BV) per share (BRL 27.3; see figure below) based on the historical costs price (including construction costs and deprecation) in the balance sheet. Based on Deloitte's valuation methodologies, the NAV shows the value of SLC Agrícola's assets after tax if they were sold now, including the legal reserves. Per hectare, the value is BRL 10,275 (USD 2,773), which is below the below the BRL 15,220/ha (USD 4,107) realized for the Parceiro farms. That number, however, was 'before' tax and did not include legal reserve.

The last column in Figure 13 shows that SLC's share price of BRL 55.2 (or USD 14.90; 18 October 2018) translates into the (implicit) value of one hectare of BRL 14,301, or USD 3,860 (after tax, including legal reserve; see last row). If one were to correct for legal reserve and would include productive hectares only, the BRL 55.2 share price would implicitly value one productive hectare on BRL 20,000/hectare, or USD 5,398 (before tax). **This is much higher than recent land sale transactions by SLC Agrícola.**

Figure 13: SLC Agrícola land value based on book value, Deloitte valuation and implicit share price valuation

Source: Chain Reaction Research, SLC Agrícola 2018 Half-year

Per share value 18 October 2018	Book value = BRL 27.3	NAV = BRL 44.1	Share price= BRL 55.2
Book value crop land (BRL m)	1,704		
SLC Agrícola Farms NAV resp. implicit value		2,520	3,507
SLC LandCo Farms NAV resp. implicit value		682	949
Infrastructure (excluding land)	926	926	926
Accounts receivable	87	87	87
Inventories	502	502	502
Biological assets	770	770	770
Cash	454	454	454
Other	-61	-61	-61
Sub-total	4,382	5,880	7,134
Suppliers	-109	-109	-109
Gross debt	-1,571	-1,571	-1,571
Value	2,702	4,200	5,454
Number of shares (million)	98.9	98.9	98.9
Value per share (BRL)	27.3	44.1	55.2
# hectares (including Legal Reserves)	311,619	311,619	311,619
Value/ha (BRL)	5,468	10,275	14,301

Using the NAV per share to value a stock is typical for a company that focuses its business model completely on land (value) appreciation.

However, as described in the profile above, SLC Agrícola is shifting its strategy gradually towards a diversified model of both commodity production and land appreciation. Therefore, investors may prefer to compare SLC Agrícola's valuation versus a peer group that is active in farming. The figure below shows that SLC Agrícola's valuation is in line with the average of this peer group based on three valuation multiples (P/E, EV/EBITDA and P/BV for the year 2018).

Investors might become increasingly aware that the revenues-at-risk may reduce SLC Agrícola's earnings. This reduction in earnings may lead to a relatively high P/E and EV/EBITDA, which could pressure SLC Agrícola's share price downward. As the shift in global soybean trade flows to Brazil has benefited SLC Agrícola's share price, any improvement in U.S.-China relations would add a further downside risk to the share price. However, a reduction in trade tariffs between US and China does not appear imminent.

Figure 14: Valuation peer group 2018F.

Source: Bloomberg 2 October 2018; SLC Agrícola share price BRL 57.4 (USD 14.6). Book value is based on historical cost price including construction costs.

2 Oct 2018	P/E(x)	EV/EBITDA (x)	P/BV (x)	Activity
Adecoagro S.A.	11.7	4.9	1.2	Crop farming Latam
BrasilAgro	5.6	5.5	0.9	Crop farming + land trade Latam
Heilongjiang Agricultur	18.6	14.5	2.5	Crops farming, fertilizers, paper China
Limoneira Company	28.9	17.2	2.9	Fruits cultivation + marketing USA
SLC Agrícola	16.5	9.5	1.9	Crop farming + land trade Latam
Average	16.2	10.3	1.9	
Premium/discount SLC Agrícola	1.4%	-7.9%	0.9%	