



CANE

Terra has been growing sugar cane and producing sugar since 1838, when the Harel brothers acquired the Belle Vue sugar estate in the north of Mauritius.

Today we have around 6,000 hectares of agricultural land, and we operate one of the most modern sugar producing factories on the island with a processing capacity of 336 tonnes of cane per hour. In a typical year, the mill processes around 875,000 tonnes of sugar cane and produces 93,000 tonnes of sugar. We also jointly manage two sugar estates and factories in Côte d'Ivoire.




Our purpose is to be a global player in growing cane and manufacturing sugar, with a particular focus on specialty sugars.




CANE BUSINESS MODEL

VALUE DRIVERS		CONTEXT AND OUTLOOK
Revenue Driver (Price) Market demand and pricing	Commodity business shaped by supply and demand dynamics in the global sugar market, as well as local pricing determined by the Mauritius Sugar Syndicate (MSS).	<ul style="list-style-type: none"> With low global sugar prices below profitability levels, an adjustment of the supply and demand dynamics through Government policy support is vital for industry survival; Mauritius as a relatively small global producer continues to face a number of market obstacles with little structural reform. The sugar price has levelled out with slight recovery, yet still remains a risk of not reaching break-even point; the newly formed Government in Mauritius has shown positive signs of engagement with the industry.
	Securing a price premium through distinct offering of specialty sugars.	<ul style="list-style-type: none"> Mauritius has specialised in the manufacture of a wide range of specialty sugars, appealing to discerning customers and many agro-industrial ventures as healthier ingredients for finished food products; products are all marketed by the MSS which has become a reference for these unrefined specialty sugars.
Cost Driver (Price) Material cost efficiencies	Efficiency gains in our growing and milling activities.	<ul style="list-style-type: none"> We have adopted a predominantly defensive strategy aimed at driving operational efficiencies in both our Belle Vue and Côte d'Ivoire operations. We benefit from our state-of-the-art technology and skills in the mechanisation of cane growing and harvesting. Our most significant costs relate to labour, followed by repairs and maintenance, fuel and fertilisers; activity-based costing exercises undertaken in our fields, mills and garage enable further optimisation and we are on track to achieve our 2022 cost of production / tonne target. We foresee significant cost increases with the newly introduced Workers' Rights Act 2019 in Mauritius. We continue to review possible growth opportunities internationally that harness our recognised technological and process skills.

MATERIAL RISKS

- Payment of adequate price for *bagasse*.
- Continuing volatility in global sugar prices and changing global trade dynamics resulting in uncompetitive sugar in the global market.
- High cost of production along with decreasing supply of cane causing reduced productivity.
- Susceptibility to the uncertainties of changing weather and climate affecting the cane yield.
- Failure of plant equipment causing disruption of operations.
- Presence of combustibles (cane, *bagasse*, sugar) or electrical equipment causing a fire outbreak.
- Inability to reach a consensus on conditions and benefits of workers during negotiation leading to strike or labour dispute.
- Interruption of electricity and steam supply by Terragen stopping production.

CAPITAL	MATERIAL INPUTS (2019)	ACTIVITIES TO SUSTAIN VALUE	MATERIAL OUTCOMES (2019)
PEOPLE 	<p>Terra Milling employees 144 permanent & 258 temporary.</p> <p>Terragri employees 290 permanent & 131 temporary.</p>	<ul style="list-style-type: none"> Delivered training on ISO 45001: 2018 (Health and Safety) to the new leadership team of Terra Milling. Firefighting skills training delivered in Terragri (Agriculture). Executive and leadership development coaching programmes ongoing. Introduced physical and mental exercises to employees to mitigate stress and other psychosocial hazards. 	<p>Injury rate 53 (↗42%)</p> <p>Accident rate Terra Milling: 60 (↗25%) Terragri (Agriculture): 27 (↘4%)</p>
MANUFACTURED 	<p>Agricultural and milling equipment</p>	<ul style="list-style-type: none"> Annual maintenance and critical spares kept in stock. Regular inspection by consultants and monitoring of equipment during operation through computerised system (SCADA). Fire safety and protection procedures in place. User access rights on operator terminals and regular server backups; access to USB ports disabled to enhance cyber-security. 	
NATURAL 	<p>Land under cane cultivation 5,147 Ha (↘0.9%)</p> <p>Water consumed 5.6 M m³ (↗4%)</p> <p>Liquid mineral fertilisers 1,546 T (↘1%)</p> <p>Steam from Terragen 931,467 GJ (↗15%)</p>	<p>Sugar cane milled 918,923 T (↗22%)</p> <p>Organic fertilisers 13,917 T (↘1%)</p> <p>Solid fertilisers 457 T (↘56%)</p> <p>Diesel 1,085 m³ (↗58%)</p>	<p>Own cane harvested 388,715 T</p> <p>Specialty sugar produced 88,095 T (↗7.6%)</p> <p>CO₂ produced (from diesel) 2,825 T (↘36%)</p> <p>Oil used 4 m³ (↘7%)</p> <p>Vehicle tyres used 15 T (↘4%)</p>

CAPITAL	MATERIAL INPUTS (2019)	ACTIVITIES TO SUSTAIN VALUE	MATERIAL OUTCOMES (2019)
SOCIAL AND RELATIONSHIP 	<p>Quality relationships with key stakeholders including: MCIA, MSS, Terragen, planters, employees and trade union representatives, and service providers.</p>	<ul style="list-style-type: none"> Launched a Culture and Engagement Journey for employees. Workers' council meets twice a year and 96% of workers are unionised. Clear communication and collaboration with Terragen to maintain electricity and steam supply; vertical integration enables stability and growth. Active chairing of the MSS by the Managing Director of Terra; active engagement with government stakeholders and assisting MSS to strengthen the branding and marketing of Mauritius' premium specialty sugars, and exploring new market opportunities. 	<p>Employee turnover rate 24% (2018: 4%)</p> <p>Days lost to strike action 0</p> <p>Deferred tax credit MUR 10.8 M</p>
INTELLECTUAL 	<p>International certifications, including BRC, GMP, Halal and C-TPAT.</p> <p>Application of HACCP Codex Alimentarius.</p> <p>A registered SEDEX B member and subject to annual third-party audit on local and international labour laws, health, safety and environmental regulations, and business ethics.</p>	<ul style="list-style-type: none"> Renewal of certificates and customer second party audits to ensure safety of product and system, social and environmental compliance. Improving efficiencies across our growing and milling operations. New technologies and software adopted for precision farming. Initiated 'lean management' principles in collaboration with the National Productivity and Competitiveness Council (NPCC) and continuing with Kaizen process. 	<p>Continuous improvement in farming and manufacturing techniques.</p> <p>Production cost (agriculture) MUR 14,300/T (↘4%)</p> <p>Production cost (milling) MUR 5,300/T (↘15%)</p> <p>Cane processing 305 T/hr (=)</p>
FINANCIAL 	<p>Cane cluster total equity (Jan 2019) MUR 7,681.3 M</p> <p>Total borrowings MUR 897.0 M</p> <p>Capital expenditure MUR 149.2 M</p>	<ul style="list-style-type: none"> Actively managed the financial performance through weekly executive meetings, monthly management meetings and regular Board meetings 	<p>Turnover MUR 1,026.4 M (↗23%)</p> <p>Loss MUR 269.8 M (↘16%)</p> <p>Cane cluster total equity (Dec 2019) MUR 6,557.7 M</p>

THE OPERATING CONTEXT

MATERIAL ISSUE IMPACTING VALUE CREATION OUR RESPONSE

Sustaining supply from small-scale cane producers – Around 42% of our cane is produced by Terra, the remaining is produced by large (38%) and small (20%) growers, thus making us reliant on a regular supply of cane from independent small-scale cane producers. With the price of sugar remaining low and the difficulty in securing labour, some farmers are leaving the sector and there is generally low interest in the younger generation to work in the fields. This year, the volume of cane secured from planters was 395,000 tonnes, similar to last year and 478,000 ten years ago.

To ensure a regular flow of cane to our mill, we are placing a strong focus on reviving the interest of existing and prospective independent cane planters. We have a team that works with and advises small farmers on harvesting, weeding and transporting the cane. We continue to work with authorities to identify opportunities to appropriately motivate the next generation of planters.

Water availability – 60% of our fields are directly dependent on local rainfall, and thus susceptible to the uncertainties of changing weather and climate. In terms of irrigation for the remaining 40% of our fields, we face increasing competition from other users as the economy grows in the water-scarce north of Mauritius.

We undertook a detailed assessment of water-related risks and opportunities facing the business and we continue to implement measures to optimise our water consumption and ensure better utilisation of effluents for irrigation.

Continuing volatility in global sugar prices – In 2019, the price of sugar remained very low despite a slight recovery, continuing to negatively impact on global sugar producers outside tariff-protected countries. In Mauritius, the price of sugar ex-syndicate increased from MUR 8,700 per tonne in 2018 (the lowest in history) to MUR 11,384 per tonne in 2019. This remains considerably lower than the price of MUR 17,000 per tonne required to sustain operations.

Discussions are continuing between growers, millers, the MSS, and Government; the outcome of these negotiations remains to be seen. With low sugar prices anticipated at least for the short term, we have maintained a strong focus on enhancing efficiencies across our growing and milling operations and have made significant progress in reducing the cost of production.

Challenging sugar trade dynamics – The global sugar market was profoundly affected by the European Union's abolition of sugar quotas in October 2017, which contributed to a global supply surplus and resulting lower sugar prices. The global sugar market is also impacted by strong protectionist measures in many sugar-producing countries, such as in Europe and India where producers are given subsidies, and the fact that Brazil, historically the largest sugar producer, mainly produces for their own internal use and for the production of ethanol for energy, with surplus being sold onto the global market. This results in very different pricing competitors to Mauritius.

With high competition for specialty sugars in European markets, greater focus will be placed on emerging markets such as China and India. The Mauritian government has signed an agreement with China to start exporting sugar there in 2021. We are working actively with the MSS to assist them in strengthening the branding and marketing of Mauritian sugar, and to identify new market opportunities particularly in our distinctive specialty sugars. We believe that the longer-term fundamentals for sugar remain strong, particularly given growing consumer demand in emerging markets and for healthier, unrefined sugars that command a price premium.

Structural challenges in the Mauritian sugar sector – The Mauritian sugar sector has some unique features, including a highly-regulated labour environment and a centralised organisation, the MSS, responsible for the marketing and sale of all locally-produced sugar. With revenue being centrally controlled, we can only focus on new products and reducing our cost of production. Given that it is very difficult to mechanise on mountain flanks or on small fields, our industry remains very labour intensive. In the context of a sector that has already comparatively high labour costs, the Worker's Rights Act, which came into force in Mauritius in October 2019, further negatively impacts the sector's global competitiveness. We foresee significant costs increases in relation to the remuneration orders.

Given the cross-roads that the industry finds itself at – with the challenging trade and price dynamics in the global sugar market, and with the substantial contribution of sugar to the Mauritian economy – the industry has submitted a proposal for structural reform, driven by the MSS and Business Mauritius. Suggested measures to enhance local competitiveness include: reviewing the current regulatory context for labour; providing better reward for the sector's renewable energy sources (*bagasse*); and ensuring that millers receive fair return from the Sugar Insurance Fund Board (SIFB). In terms of *bagasse*, the government has established a specialised committee to work on the subject with Ministries of Agriculture, Finance and Energy.

CANE (CONT'D)

OUR 2019 PERFORMANCE

In the context of low sugar prices, this has continued to be a challenging year for the business. The Cane cluster posted total losses of MUR 269.8 million, compared to losses of MUR 322.0 million in 2018. We incurred losses both in our Mauritian operations (MUR 140.8 million) and at our associate company in Côte d'Ivoire, *Sucrivoire*, in which Terra holds a 25.5% stake (The share of loss from *Sucrivoire*, amounted to MUR 129.0 million (against losses of MUR 45.7 million in 2018).)

For the crop 2019, Terra Milling processed 919,615 tonnes of canes, including 136,234 tonnes of canes from Medine factory area (2018: 751,121 tonnes). This resulted in 52,563 tonnes of sugar accruing to the Group (2018: 47,193 tonnes), with 20,586 tonnes attributable to milling operations (2018: 17,475 tonnes) and 31,977 tonnes to growing operations (2018: 29,718 tonnes). Terra Milling produced 94,711 tonnes *tel quel* of raw sugar (2018: 80,480 tonnes), and therefrom 88,095 tonnes of specialty sugars (2018: 81,907 tonnes). The average sucrose content stood at 11.85% (2018: 12.02%). On the growing operations side, the extraction rate stood at 10.43% (2018: 10.82%) with an average yield of 8.37 tonnes of sugar per hectare (2018: 7.95 tonnes).

In Mauritius: Driving efficiency and innovation

We continued with our internal reorganisation to drive down the costs of production across our operations and activities and, as far as possible, to reduce our break-even price. We made very pleasing progress this year in further reducing costs, on par with our 2022 vision. Given the structural challenges in the Mauritian sugar sector and rising costs in the industry, this in itself was a big achievement. We delivered marked cost reductions through a number of field innovations, including precision farming and the application of more efficient machinery. We expect to save up to 20% of fertilisation costs and meet our target by 2021. We made further advancements towards precision agriculture with the purchase of a new drone, which takes pictures of the fields on a weekly basis. This assists us in spotting weeds to prevent infestation, deficiencies in the soil and gaps in the fields. We implemented a comprehensive operation management software called CanePro. We also bought a new planting machine from Argentina, which has reduced the number of runs in the field from four to one. It remains essential for our business to be agile and to find such innovative solutions, while upskilling our staff in the process.

In 2019, we invested MUR 20.0 million in automation projects (as part of an investment plan of MUR 60.0 million over a three-year period), this has already yielded positive changes in the mill performance and improvement in efficiencies.

This year, the mill operated on average 19.4 hours per day and crushed an average of 5,929 tonnes of canes (2018: 18.9 hours and 5,734 tonnes). The extraction rate of the mill improved to 97.41 (2018: 97.20), while the milling rate was 305.8 tonnes per hour (2018: 303.4 tonnes). Through our efficiency initiatives and combined with a greater volume with Medine canes, our cost of production at the mill for the 2019 crop amounted to MUR 5,300 per tonne (2018: MUR 6,200 per tonne).

We also managed to save MUR 20.0 million in operating cost on the growing activities, compared to 2018. We have made significant progress along our supply chain resulting in cost optimisation and efficiency gain and anticipate being at par with targets set out in our Vision 2022.

We also made valuable progress on research and development relating to organic sugar, identifying 175 hectares to be converted to organic cane over the next three years. Although growing organic cane is not difficult, our challenges in this process include weed control, risk of cane fire, and the co-habitation of vegetable production with organic cane, as well as the one of non-organic cane grown by other planters with Terragri's organic cane. While the major challenge will be in the milling side of our activities, the three-year period it takes to achieve certification gives us ample time to find organic substitute for chemicals. In our growing activities organic fertilisers will be easier to identify. To achieve the Mauritius Chamber of Agriculture's vision for 1,500 hectares of land to be converted to organic in the next three years, all growers will need to invest further in their land and Terra is ready to meet this challenge.

The undervaluation of *bagasse*, the main by-product left after cane has been processed for sugar and which is used to produce renewable energy in Mauritius, remains a major challenge for us. While we continue to improve on our operational efficiency, we need the Government to recognise the value of this important energy source. On a more positive note, this year we received MUR 70 million as compensation on the 2018 crop from the Sugar Insurance Fund Board (SIFB). This is a good sign that Government is willing to work with and help the industry.

We started a Culture and Engagement Journey towards the end of 2019 with 25 employees within the Cane cluster, which will continue into 2020. Working in an industry that faces constant financial stress can impact on staff morale, making engagement essential. The culture journey includes a life coach, interactive sessions with homework and monthly meetings. It is geared towards cultivating, harvesting and sustaining a strong culture of being results oriented, a learning and caring organisation. This will be rolled out to all employees within the business.

OUR 2019 PERFORMANCE (CONT'D)

In Côte d'Ivoire: Another disappointing year

This has been another disappointing year for the two sugar estates and factories in Côte d'Ivoire that we manage together with SIFCA, our Ivorian partner. The weather and management posed significant challenges. *Sucrivoire* sold 110,190 tonnes of sugar (comprising 87,574 tonnes of own production and 22,616 tonnes imported), compared to 109,777 tonnes in 2018. This year, production from our factories in Borotou and Zuenoula, which collectively supply half of the sugar produced in the country, amounted to 84,110 tonnes, down from 87,977 tonnes in 2018. The revenue for 2019 was up 0.7% compared to 2018.

OUR STRATEGIC OUTLOOK

Our 2022 Vision for the cluster aims to ensure our continued resilience and growth in the current challenging environment. Our primary focus is on managing those activities where we are currently invested, improving efficiencies and further optimising production, and developing a strong culture of engagement with our staff.

We have prioritised the following areas:

- Driving further efficiency and productivity gains across our operations and workforce, including through control and process automation, maintaining leaner structures at all levels, delivering enhanced productivity specifically in our bagging, workshop and laboratory areas, and improving procurement, stock management and transportation logistics;
- Maintaining a strong focus on embedding a change of culture across the operation and building staff morale;
- Ensuring continuous improvement in our manufacturing techniques through precision agriculture;
- Optimising the production of our specialty sugars, and continuing to collaborate with MSS to enhance the global marketing, pricing and volumes of Mauritian specialty sugars;
- Partnering with others to identify and deliver solutions to motivate and retain small-scale farmers;
- Further improving our water consumption and ensuring better utilisation of effluents for irrigation; and
- Investing in organic sugar production on 175 hectares of land.

On the back of these initiatives we are confident that we will become more competitive, hopefully also supported by Government policy changes that will assist the local sugar sector to be able to play in a more level playing field. The recently elected Government has shown encouraging and positive signs of wanting to address the issues and has established a specialised committee with Ministries

Terra was appointed as technical advisor to improve on competitiveness and efficiency and major steps have been taken, including staff spending time in Côte d'Ivoire on a regular basis to share expertise. Given the Côte d'Ivoire's encouraging GDP growth rate (7.5% in 2019), we still believe that the country offers valuable growth potential. Our short-term objective is to grow sugar production from current levels to around 120,000 tonnes by 2024, to meet internal demand. To do so, however, the operation will need to substantially increase productivity and drive further efficiencies, reducing production costs to international norms. We have earmarked a plan to do this and are actively exploring finance opportunities to drive the necessary improvements.

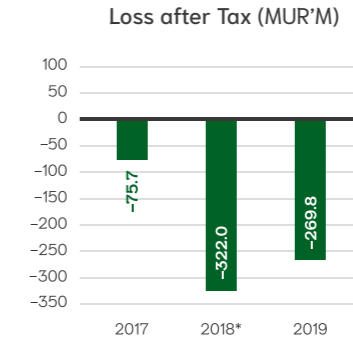
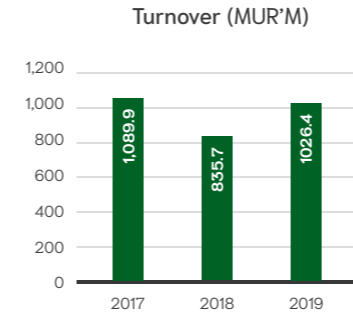
of Agriculture, Finance and Energy to specifically work on proper evaluation for *bagasse*. As an industry, we have also submitted a proposal on what needs to be done for structural reform, driven by the MSS and Business Mauritius.

Labour availability will remain a major challenge. Field work in our hot climate remains very challenging, particularly with the average age of staff now over 55. As we automate our own operations, we will require less people, but we still need a core team. Small planters, on the other hand, need significantly more people and the newly introduced Worker's Rights Act will compound the situation even further. We will continue to work with Government and partners on this issue.

We will continue to be more directly involved in our Côte d'Ivoire's operations and take the steps needed to improve our competitiveness and efficiency. In addition to driving lean techniques across our existing operations, we will continue to explore opportunities for global diversification, harnessing our recognised technological and process skills in those regions that offer the right balance in terms of risk versus the potential return on investment. Our outlook for 2020 remains cautiously positive. Because of the impact of the Covid-19 crisis on access to supplier spare parts to complete the maintenance of the mill and the harvesting equipment, we have started the crop in mid July 2020 instead of end of June. Another risk of the pandemic is the drop in the export capacity of our specialty sugar to our customers. The confinement in the world, the backlog in the ports and the consequent non-availability of containers could slow down our export volumes in the medium term. This in turn could cause a shortage in warehousing space in Mauritius.

CANE (CONT'D)

PERFORMANCE GRAPHS



*: The loss after tax for 2018 has been restated.

