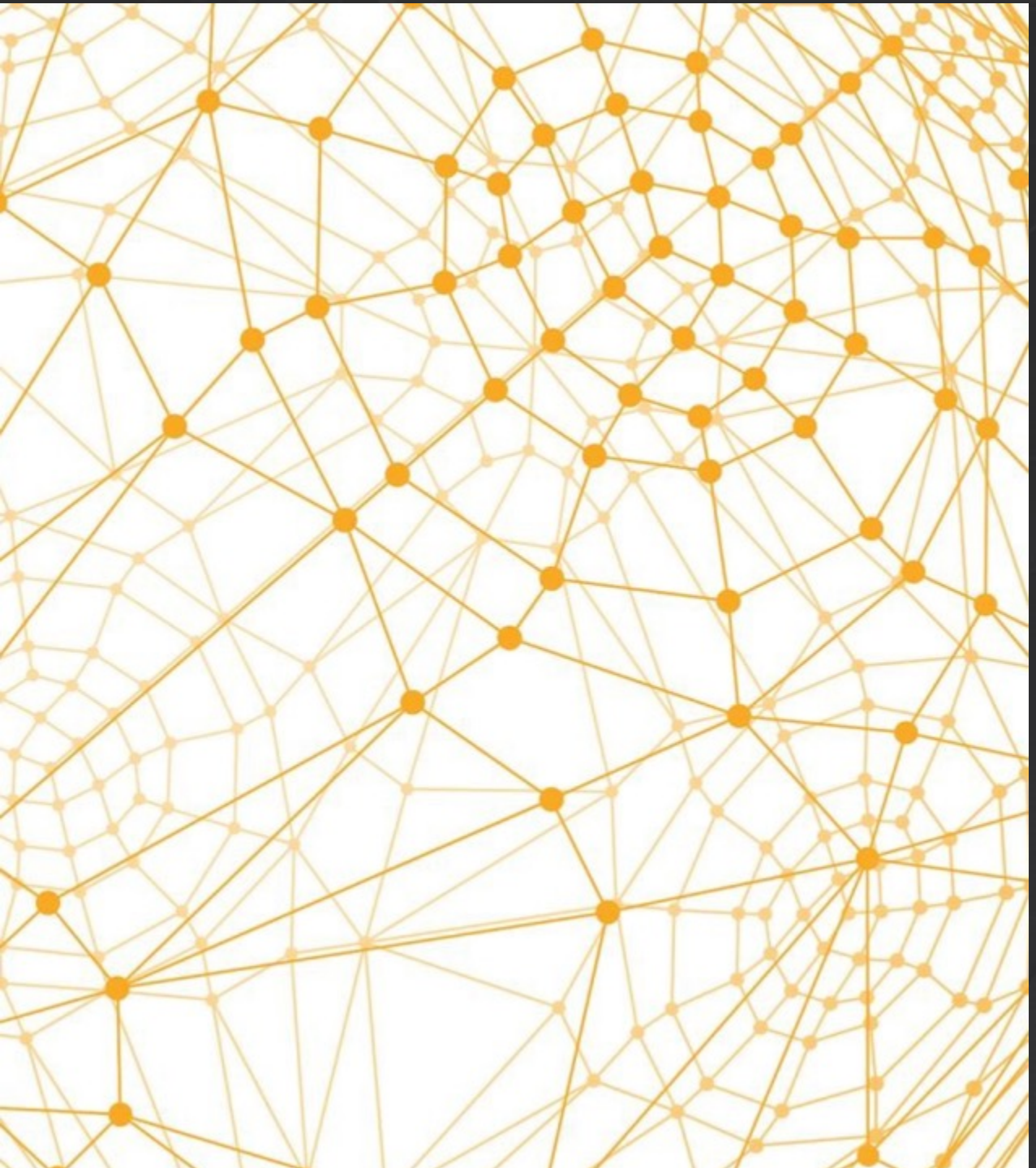
CTC | CENTRO DE TECNOLOGIA CANAVIEIRA

CTC Business Review

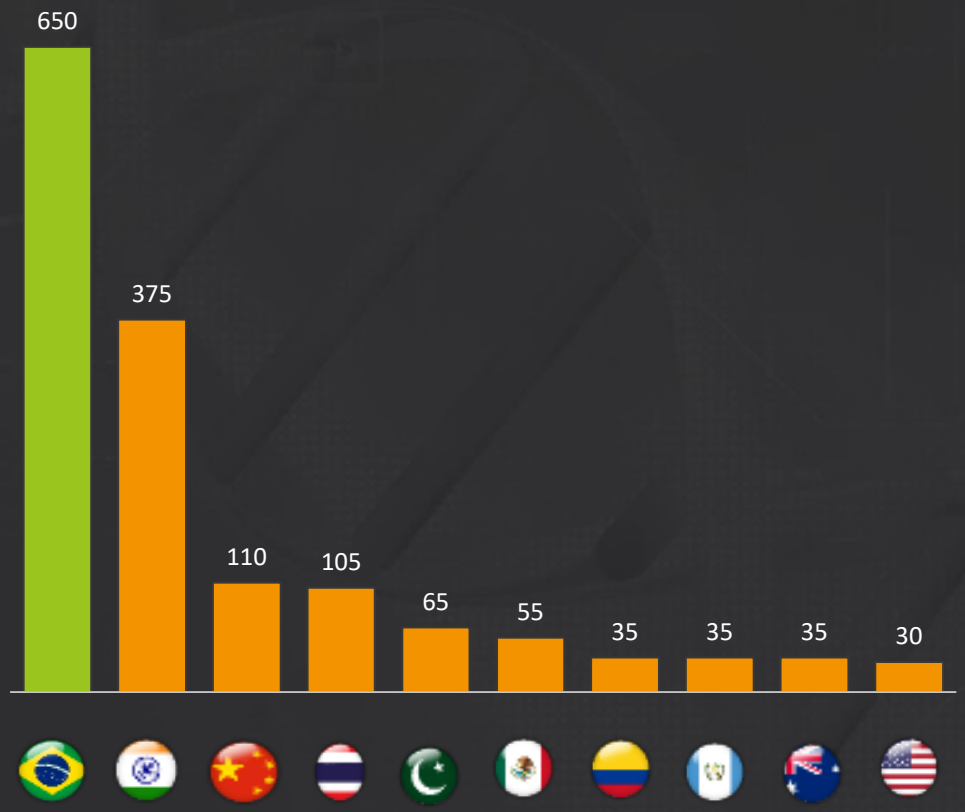


CTC | CENTRO DE TECNOLOGIA CANAVIEIRA

Cutting Edge Biotechnology Solutions to Reignite Brazil's Sugar & Ethanol Sector

Worldwide, 1.8 Billion Tons of Sugarcane Is Produced Every Year On 27 Million Hectares, Being Brazil The # 1 Producer.

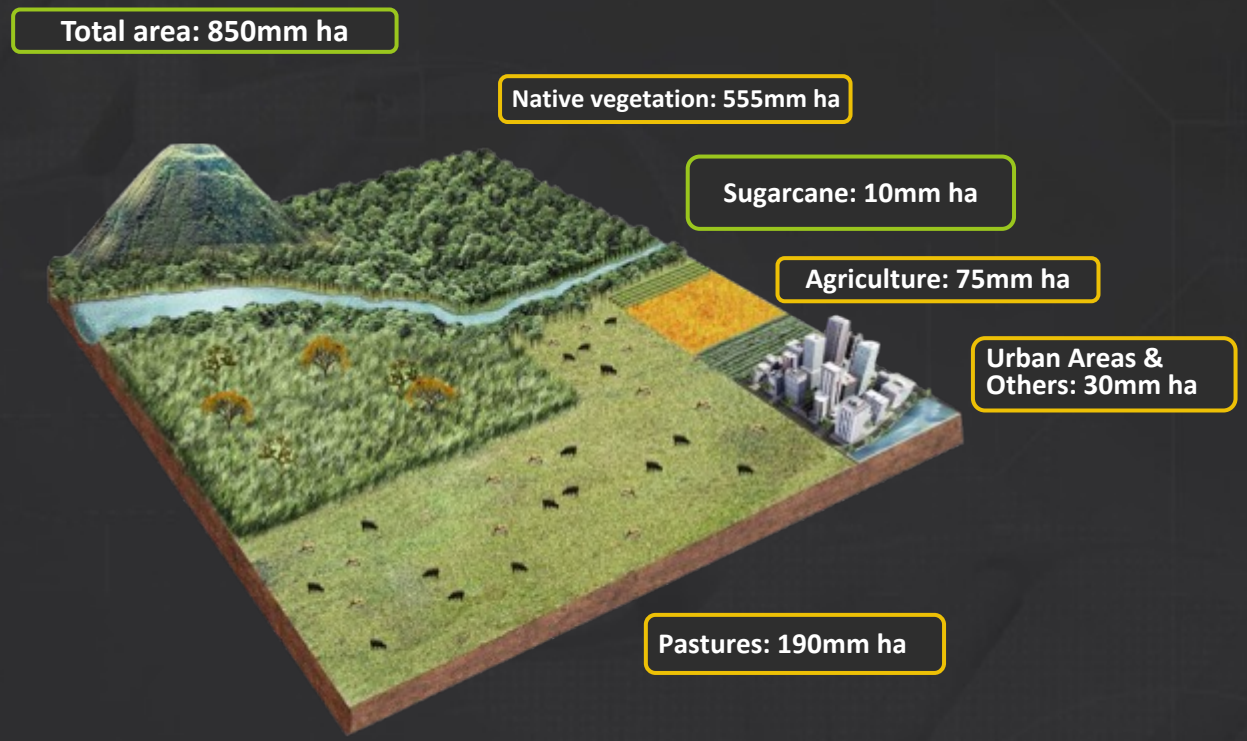
Top-Ten sugarcane producers (mm MT)



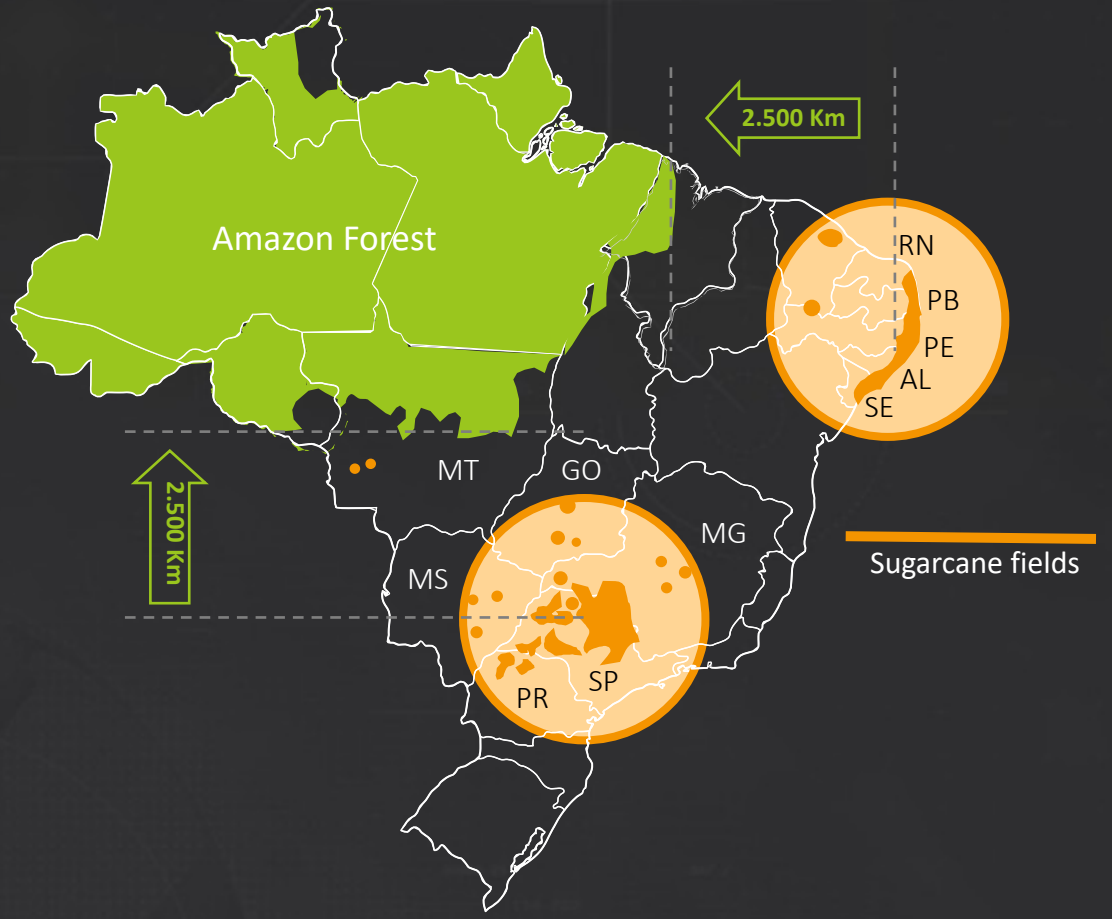
Fonte: Brazil Ministry of Agriculture, Food and Agriculture Organization of the United Nations, USDA, U.S. Department of Energy

Sugarcane Is Produced On 1% Of Brazil's Landmass And Cultivated Thousands Of Miles From The Amazon Forest.

Land Use in Brazil



Brazil's Sugarcane Producing Regions

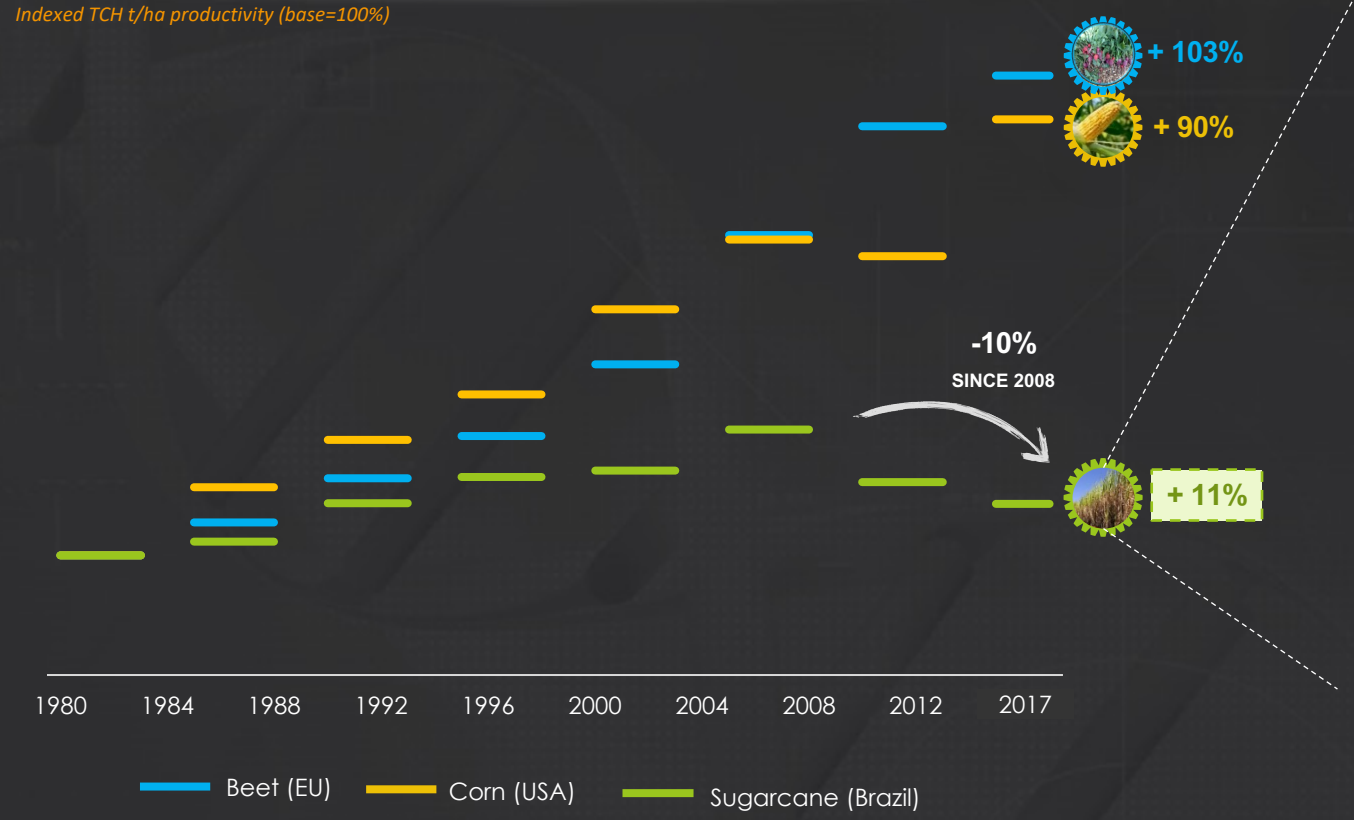


Fonte: UNICA; EMBRAPA, IBGE, Rede AGRO

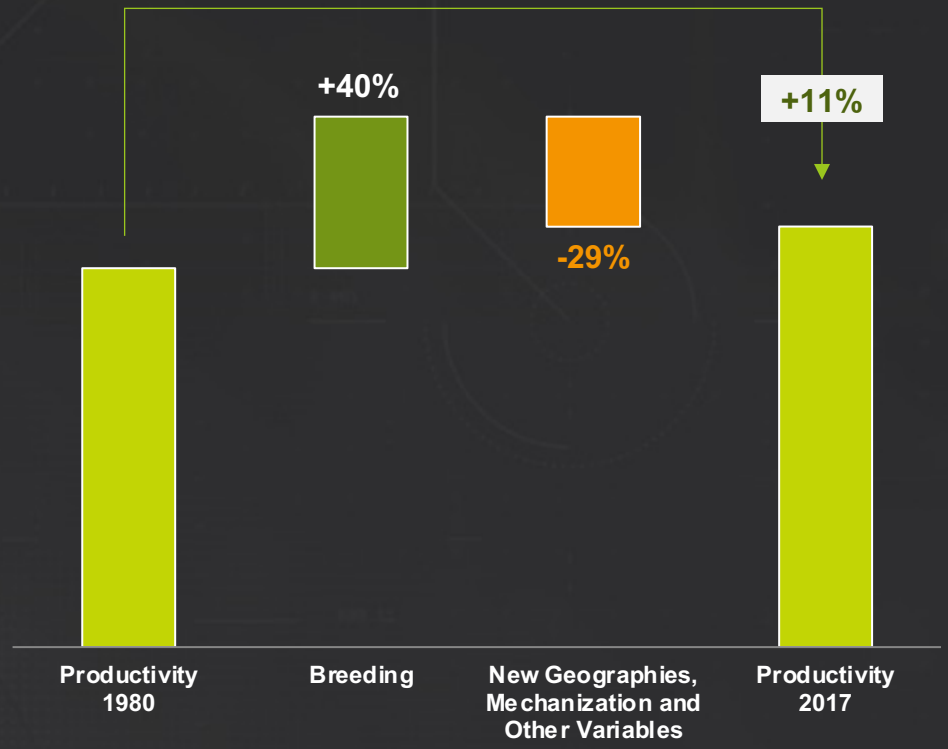
Biotech and Improved Crop Management Have Already Turbocharged The Productivity of Other Crops

Advances in Breeding Partially Offset by Losses from Expansion and Mechanization

Sugarcane Has Lagged Other Competing Crops



Sugarcane Productivity Evolution in Brazil



Source: FAO / IBGE

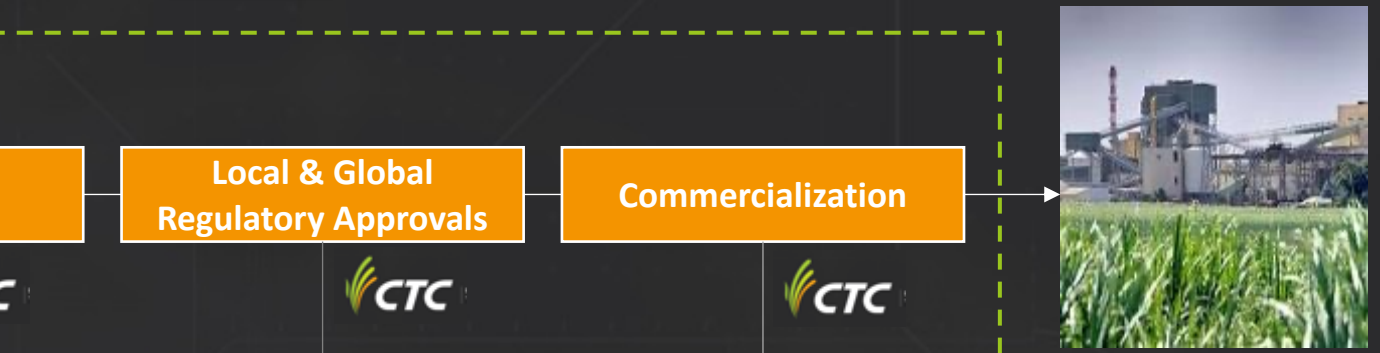
Major ag biotech companies have historically focused on global row crops

	Corn	Soybean	Cotton	Sugarcane
Global Production Area [1]	*192MM ha*	*125MM ha*	*33MM ha*	*26MM ha*
1st GM Variety Introduced	*1997 (Yieldgard)*	*1996 (RR)*	*1996 (Bollgard)*	*2017 (CTC20BT)*
CTC	○	○	○	●
BAYER / MONSANTO	●	●	●	○
syngenta	●	●	●	○
CORTEVA agriscience	●	●	●	○
BASF We create chemistry	○	●	●	○

CTC emerges as the only player with technology, infrastructure and know-how to significantly drive sugarcane productivity up

Extremely Long Time-to-Market Has Precluded Global Ag Biotech Players From Focusing On Sugarcane Genetics

CTC is the only player present throughout the biotechnology value chain



Entry Barriers

Long time and high cost of developing sugarcane varieties imposes high time-to - market for new competitors

World-class R&D professionals, state-of-the-art infrastructure and nationwide field testing facilities

Strong and long-term IP protection with high local and global regulatory standards to approve products

+50 years of accumulated customer intimacy leveraged by highly qualified commercial team

CTC's Plan Of Integrating Different, Existing Technology Platforms Should Substantially Improve Sugarcane's Performance

Development of new, higher yielding varieties...

Protected against insects, weed and diseases…

And planted with synthetic seeds.

GM Sugarcane Offers Superior Crop Protection, Higher Yields and Lower Consumption of Land, Water, Ag Chemicals, Fuel and Other Resources

Borer Resistance

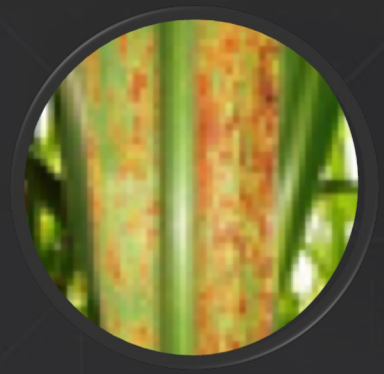
GM | Conventional

Herbicide Tolerance

Conventional | GM

Genome Editing Will Release Further Sugarcane Potential, Overcoming Key Agronomical, Environmental and Physiological Barriers.

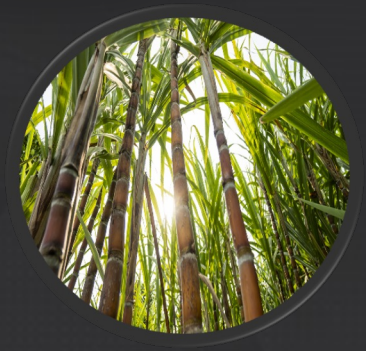
CTC Genomics



Diseases

Drought

Photosynthesis



Architecture

Sugar Content

Sugarcane Seeds: Innovative Technology to Address Main Planting Issues

Main Issues Of Current Planting System

High Consumption of Sugarcane (16-20 tons/ha)

Labor Intensive

Phytosanity

Crop Gaps

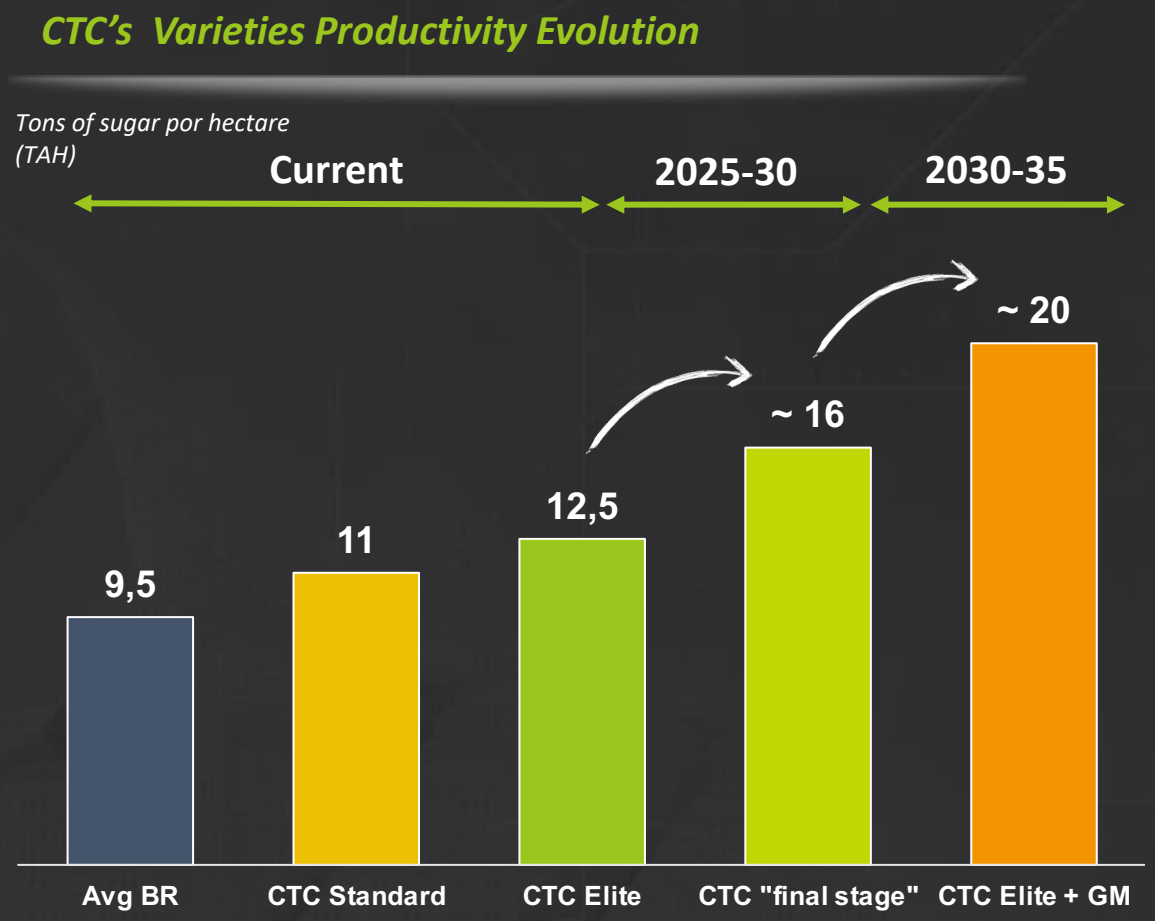
Sugarcane Planting With Seeds

High performance mechanized planting

Healthier, Higher Yielding Fields

- Substantial productivity gains
- Simpler and More Environmental Friendly Planting
- Faster Adoption of New, More Productive Varieties

Throughout The Coming Decades, Sucessive Waves Of Technologies Will Substantially Improve Sugarcane's Productivity



How Does CTC Set Pricing?

Illustrative Example: Premium Varieties

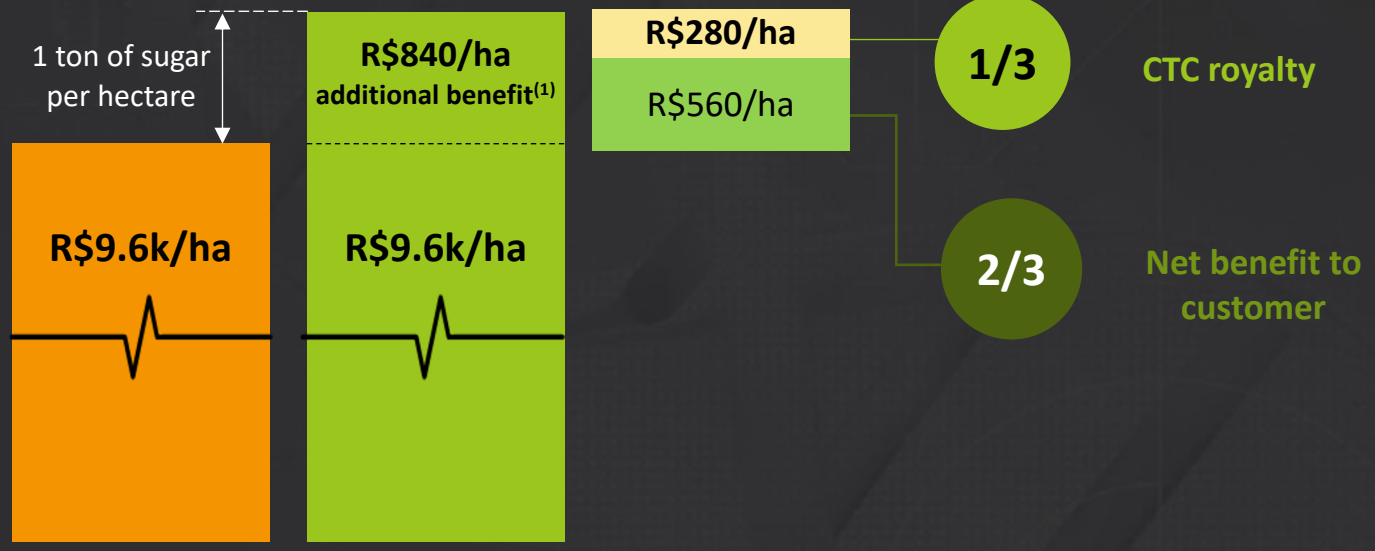
Best available alternative

11.5
tons of sugar/ha

CTC

12.5
tons of sugar/ha

+1.0 ton/ha or +R$840/ha(1)



- **Before its launch, the new variety has its productivity compared to the best alternative in the market.**
- The productivity advantage (tons of sugar/ha) is converted into mill's additional net margin (R$/ha).
- **Royalties equivalent to 1/3 of mill´s additional net margin.**
- Once established, prices do not vary as function of performance or commodity prices and are annually adjusted for inflation (IPCA).
- **Royalties are paid annually for any hectare that has CTC genetics on it.**
- Prices are uniform across all customers

Source: CTC

Notes

1. Additional benefit is calculated based on a pre-set contribution margin based on a 50/50 split between sugar and ethanol

Environmentally Committed Products at the Center of CTC

Estimated accumulated impact between 2020-2035 with CTC's contribution

Savings of 2.8 billion liters of diesel in agricultural operations

1 billion tons CO2 reduction by replacing gasoline with ethanol

Reduction of 80,000 tons of agrochemicals (active ingredient)

Savings of 345 billion liters of irrigation water

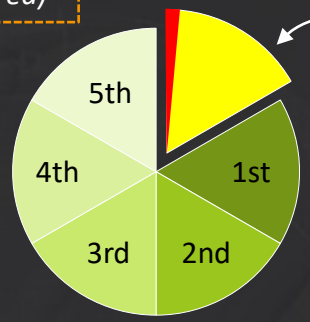
Source:Única, MME- Renovabio, ANA, Embrapa and Company

Continued Market Share Growth Reflects CTC's Higher Quality Products

Planting Cycle

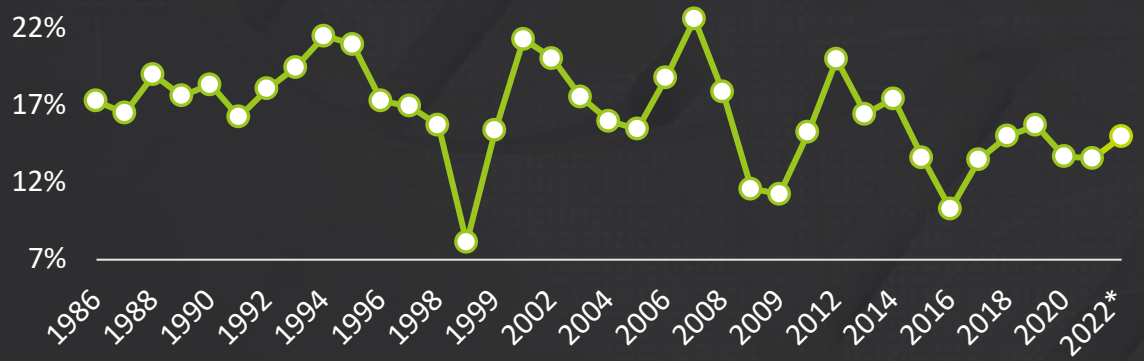
Total Area ~10M ha

*Pre-sprouted seedlings (~**3%** of replanted area)*

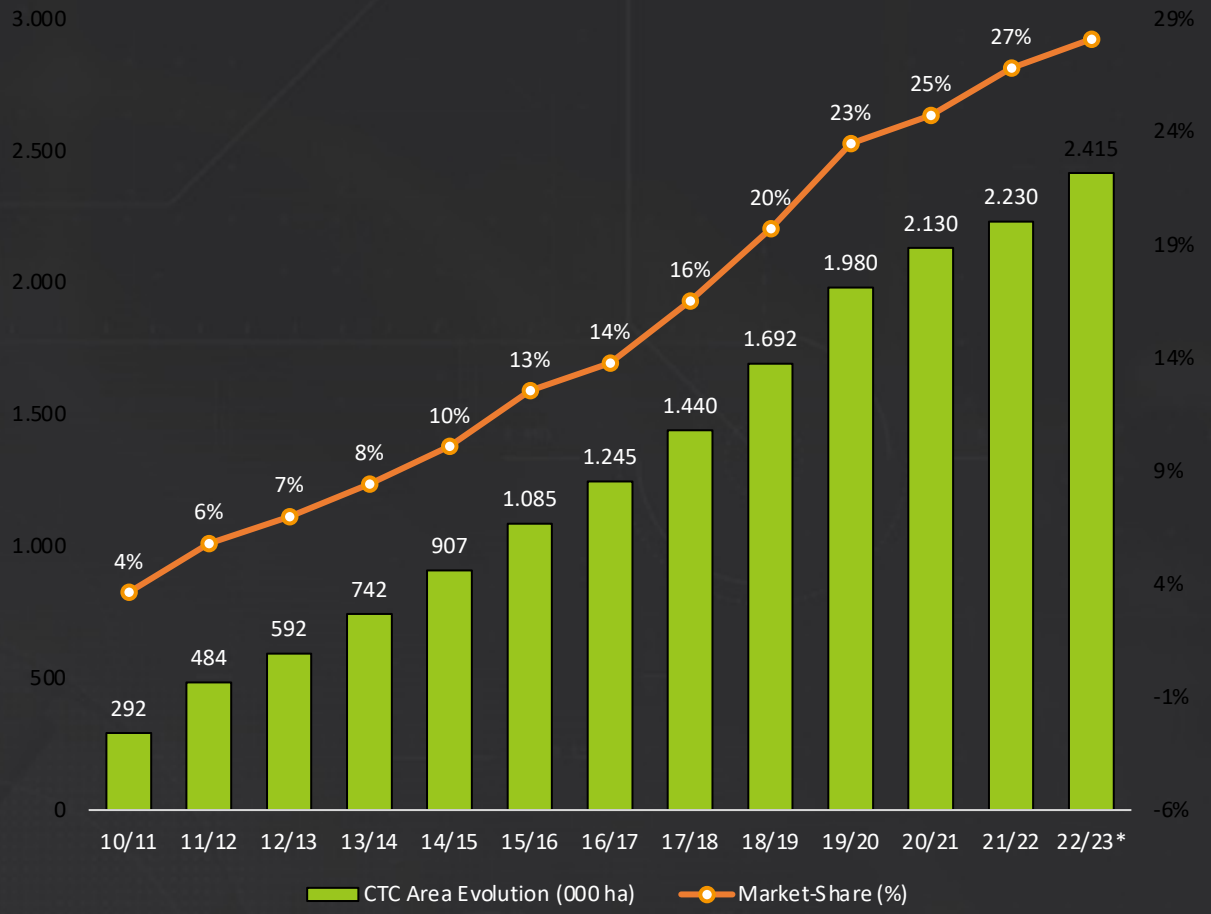


Annual replanting ~16% of total area

% of Brazil Annual Replanting Area



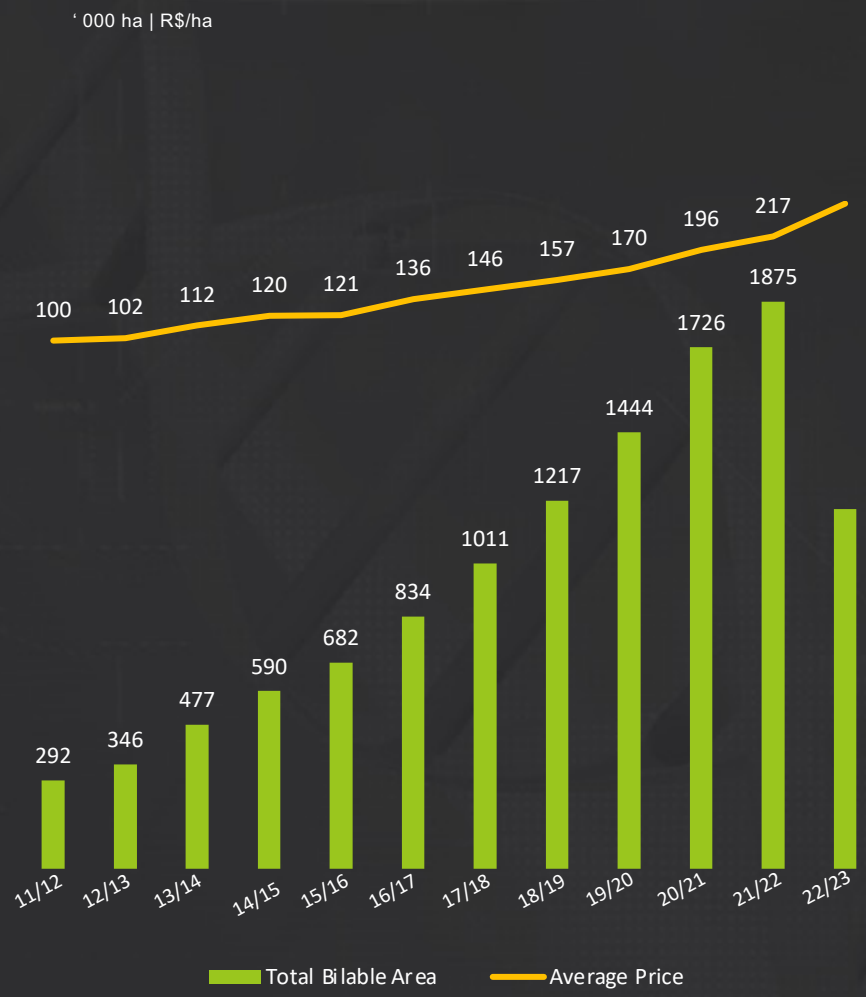
Value Proposition Translating into Fast Market Penetration



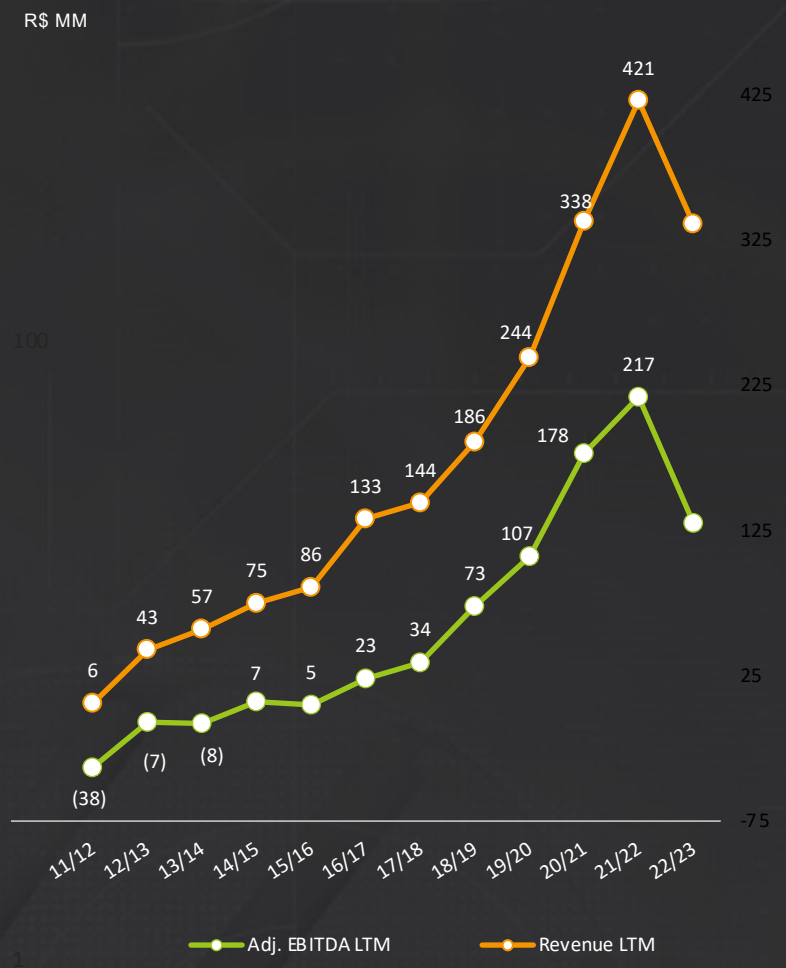
Source: Unica, CONAB, Sensus IAC, RIDESA and Company Notes

Unique Financial Profile Combining Growth, Profitability, and Recurrence

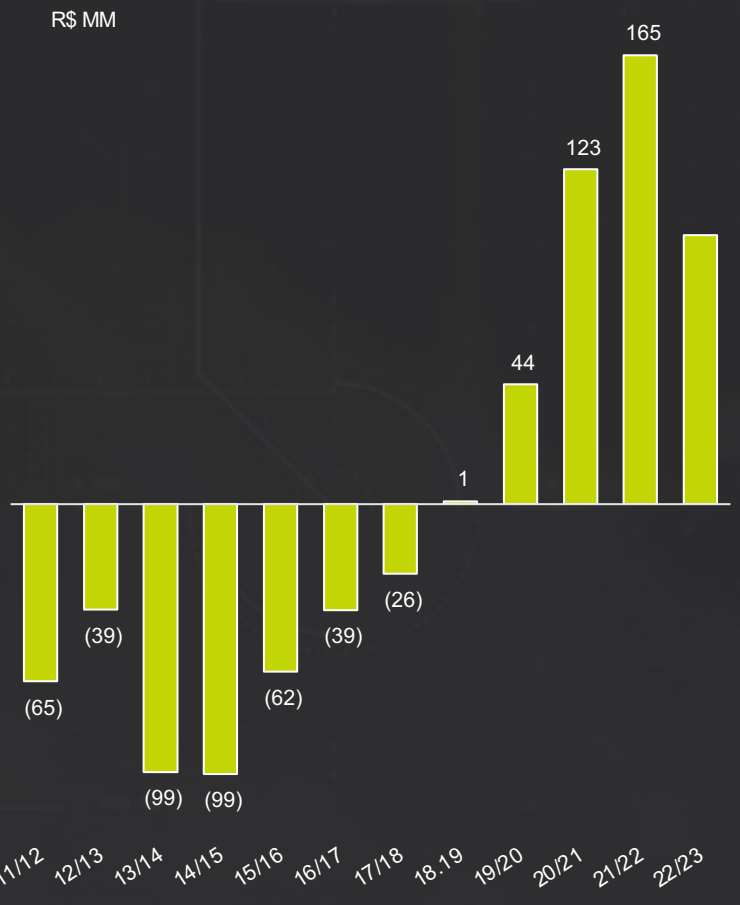
Total Billable Area and Average Price[1]



Revenue and Adjusted EBITDA[2] LTM



Cash Conversion[3]

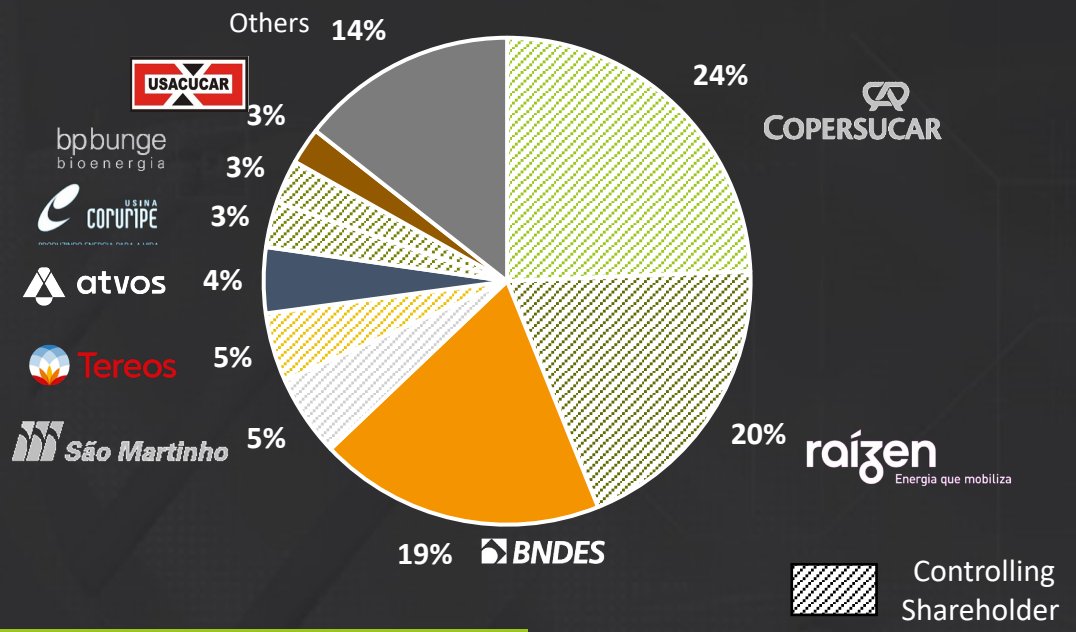


Notes

1. Average price calculated based on net revenue . 21/22E prices based on billable area identified by the Company vs. average royalties charged
2. EBITDA adjusted for impairment and other operational revenues/(expenses)
3. Cash conversion considers EBITDA (–) Capex

Industry Expert Board of Directors and Prime Governance

CTC Shareholders



Board of Directors Composition

9	2
TOTAL BOARD MEMBERS	INDEPENDENT MEMBERS

Key Corporate Governance Practices

- Scientific Committee
- Related Parties / Pricing Committee
- Audit Committee
- Fiscal Committee
- Human Resources Committee
- +10 Years Audited by Big Four
- Bovespa Mais Since 2016

Best-in-Class R&D Capabilities Led By World Class Scientists

Well Recognized International Scientific Committee….

Includes Major Global References in Ag-biotech

Fernando Reinach, PhD

Founder of Canavialis and Head of Pitanga Private Equity

Marc van Montegu, PhD

Discovered main technology for gene modification and former President of the European Federation of Biotechnologists

Ganesh Kishore, PhD

Pioneered the use of genetic modification (25 years of Monsanto and DuPont), and former CEO Malaysian Life Sciences Capital Fund

Patrick Schnable, PhD

Professor of Iowa State University and former chair of the American Society of Plant Biology's Science Policy Committee

John William Pierce

Former Chief Biocientist of British Petroleum and vice-president of Development at DuPont

… Backed up by Brainy Staff…

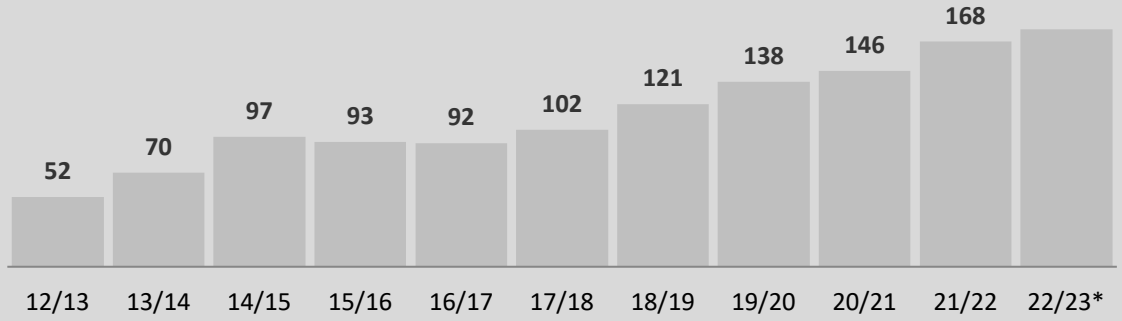
185
RESEARCHERS ENGAGED ON NEW DEVELOPMENTS

60%
GRADUATED

40%
MASTERS AND PHD

… And Large R&D Investment Profile

~R$1,1 billion
IN THE PAST 10 YEARS

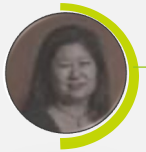


Seasoned Executive Team Responsible for Key Accomplishments

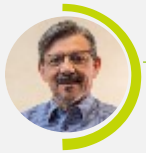
Gustavo Leite
CEO

Previous Experience

Adriana Capella
R&D Director



Sílvia Yokoyama
Regulatory Director



Luiz Paes
Sales & Marketing Director

Viler Janeiro
Operations Director

Rinaldo Pecchio Jr
CFO & IR Director

Previous Experience

Sérgio Mattar
Planning & PMO Diector

Lucia H. Domingos
Legal & IP Director

Fábio Hayashida
HR Director

Key Achievements by Management Team

Introduced new royalty-based revenue model in 2012

Increased market share from 8% to 39% between 2010 and 2020

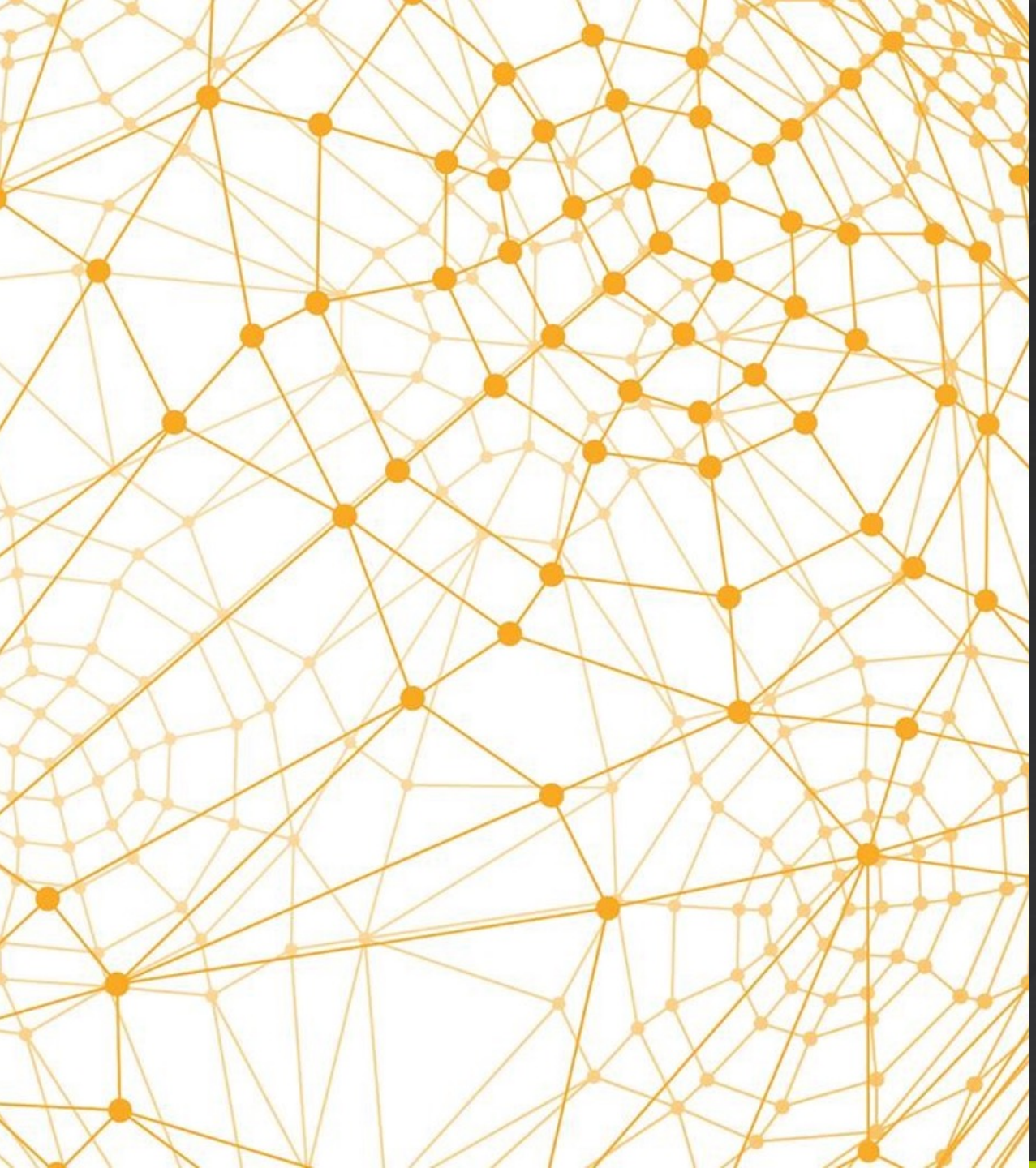
Introduction of GM, Seed Technology and Molecular Breeding

Inauguration CTC Genomics LLC and set up of 4,400sqm of world class biotech facilities

Local and global deregulation and implementation of fast track with CTNBio

Closing Remarks

1. Ag biotech is the single most important untapped driver of sugarcane productivity
2. CTC is the world's only biotech company focused on sugarcane
3. Strong entry barriers and a highly successful business model
4. "A cash cow with multiple growth avenues"
5. Management with proven track-record and high governance standards



Thank You!