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OVERVIEW AND PROSPECTS OF THE WORLD SUGAR INDUSTRY

FY 2021-2022, global sugar price strengthened, traded at 17 cents/lb in July 2021 before growing to 20 cents/lb in October 2021 and ranging from 18 to 20 cents/lb to the end of the year.



Factors that supported Sugar price included

Rising sugar prices had spillover support from the current strength of the crude oil market that are also spurred producers to switch to ethanol production;

The global supply chain crisis was caused by zero-COVID-19 policy adopted in China as the world's factory;

Export restrictions of major exporting countries were to address post-COVID recovery needs, as well as due to rising global food protectionism in many countries around the world;

Political tensions (conflicts between Russia - Ukraine and its allies) and adverse weather conditions affected sugar supply by major exporting countries.

According to the analysis by the International Sugar Organization (ISO) on the evolution of sugar prices over the years, raw sugar is currently traded at its highest price in the past five years.





Source: tradingeconomics.com/ISO

MARKET SITUATION IN MAJOR SUGAR EXPORTERS WORLDWIDE IN FY 2021-2022 **AND PROJECTIONS FOR FY 2022-2023**



Brazil's output in FY 2022-2023 is expected to decrease slightly due to adverse weather

FY 2021-2022

The volume of sugarcane crushed totaled 187.6 million tons, down 11.7% YOY;

FY 2022-2023

- Sugarcane farming area in the country is expected to decrease by 1.3% in FY 2022-2023, as part of existing plantations would be converted into corn and soybean farms. It is expected that 56.4% of sugarcane production in FY 2022-2023 will be used for ethanol production given high fuel prices;
- The triple-dip La Nina in Brazil's Central and South regions is projected, potentially lowering production capacity due to severe drought and frost. It would take time for Brazil to restore crop production in the next season, which will make it difficult for production to recover quickly this fiscal year;
- Brazil is also preparing for the October 2022 election which will trigger BRL, thus the world Sugar prices, to grow.



India's production increased thanks to above average monsoon rains

FY 2021-2022

India's production increased thanks to above average monsoon rains. The country exported 10.21 million tons of sugar, exceeding the Government's export quota of 10 million tons;

FY 2022-2023

The monsoon winds begin to retreat in July-October, which is likely to affect the output in the next fiscal year. Also, five million tons of Sugar is expected to be diverted for E10 gasoline blending thanks to high global oil prices, and the Sugar production in FY 2022-2023 is expected to be 34 million tons.









Thailand's production output is on the rebound

FY 2021-2022

Thailand's sugarcane crushing operations were abnormal in the first two months of the year, with sugarcane output to have decreased significantly, peaking at 1.2 million tons per day, indicating that harvests were slowing down. However, sugar output by the end of the year was quite positive. In FY 2021-2022, Thai mills reported a high sugarcane crushing capacity of 93 million tons, a strong bounce back from 66.7 million tons in the previous year thanks to above average monsoon rains and favorable weather conditions;

FY 2022-2023

Thailand's Sugar industry is bouncing back and prospects look positive, with higher sugarcane production and better global prices. Mr. Chalush Chinthammit, Chairman of FTI's Sugar Industry Club, believes that the sugar industry has bottomed out after years of decline and has started a new growth cycle from now on.



5.2

5.0





Australian production output has been growing positively in the last four years

According to USDA, Australia's sugar production is forecast to increase by 330,000 tons to 4.5 million tons in FY 2022-2023. The increase in production is driven by anticipated improvements in sugar cane yields, mainly in the northern tropical regions of Queensland. More than 80% of all sugar produced in Australia are exported to key export markets including Indonesia, Japan, and South Korea.



Source: United States Department of Agriculture - USDA and Green Pool, compiled by TTC Bien Hoa



PRODUCTION SITUATION IN MAJOR SUGAR IMPORTERS WORLDWIDE IN FY 2021-2022 AND PROJECTIONS FOR FY 2022-2023



Indonesia's Sugar imports totalled 5.53 million tons in FY 2021-2022 to become the world's largest Sugar importer. In the upcoming FY 2022-2023, USDA expects that Indonesia's Sugar imports will reach 5.4 million tons, mainly raw Sugar imports for its refineries. Sugar consumption growth in FY 2022-2023 in this country is projected to further grow to 7.9 million tons of raw Sugar.

CHINA IMPORTS

MILLION TONS

China remained one of the major Sugar consumers and also a major importer in the world, with its imports of Sugar to amount to 4.5 million in FY 2021-2022. More specifically, Brazil accounted for 82% of Chinese Sugar imports. As one of major Sugar exporters worldwide, though, India only accounted for a small proportion of 1.8% of China's total Sugar imports.

USA MDORTS MILLION TONS

The USDA raised its forecast of FY 2021-2022 sugar imports by 217,197 tons to nearly 3.7 million tons based on a 39,000 ton increase in tariff-rate quota imports, a nearly 44,000 ton increase in high-duty imports, and a 135,000 ton increase in imports from Mexico.



Last year, China, including its sugarcane production, was also affected by the La Nina, with increased frequency of frost and adverse weather events. According to a report released by China's Ministry of Agriculture and Rural Affairs, the imports of Sugar in China is expected to remain elevated for the next 10 years, reaching 5.52 million tons in 2030, growing at an annual pace of 5.8%. China's sugar consumption will grow 0.9% annually, reaching 16.44 million tons in 2030. In FY 2022-2023 alone, USDA forecasts that China's sugar imports will reach 4.4 million tons.

The US government announced decisions to allow as much as 235,000 tons of additional raw sugar imports into the United States to boost the critically low supply of sugar in FY 2021-2022. In FY 2022-2023, USDA also forecasts that US Sugar import volume will reach 2.7 million tons.



GLOBAL SUGAR INDUSTRY PROSPECTS IN FY 2022-2023

GLOBAL SUGAR SUPPLY AND DEMAND



According to Green Pool data updated on July 26th, 2022, for FY 2022-2023 that starts from April and ends in March next year, the Sugar industry, despite its current supply surplus, will be seen at a deficit of 685 thousand tons.

In general, market demand in FY 2022-2023 is still met due to production recovery in Asian countries such as India or Thailand,... Meanwhile, Sugar output in Brazil or the European Union (EU) remains unstable due to weather risks.

Green Pool annual global crop year balances

mln mtrv	2018/19	2019/20	2020/21	2021/22	2022/23f
production	187,864	172,367	185,634	190,364	190,039
Consumption	184,753	185,534	184,457	187,098	189,724
Balance (unadjust.)	3,111	-13,167	1,177	3,266	315
Balance (adjust)	2,823	-13,234	985	2,266	-685

Global Sugar S&D - Crop year basis





GLOBAL SUGAR RALLY STILL HAS ROOM FOR FURTHER GAINS

According to medium-term projections by USDA and Green Pool, the raw Sugar price in 2022-2023 may fluctuate between 17 and 23 cents/lb, averaging at 19 cents/lb.



A couple of organizations recently suggested that Brazil's output in 2022-2023 may be reduced to 29 million tons,

Sugar production in China declines while its economic stimulus packages and loosening of the "Zero Covid" policy

India has diverted three million tons of Sugar for ethanol production, with a target of producing E20 gasoline by 2025.

The global supply chain is projected to face challenges to the end of 2022, with high fertilizer and input prices to

Food and goods hoarding practices, especially for essential goods like Sugar, are still a concern in case crisis occurs.

High logistics costs lead to market fragmentation and slow down goods circulation, leading to lowered import

REPORT OF THE BOARD OF MANAGEMENT **ON ACTIVITIES DURING THE YEAR**



CONSOLIDATED NET REVENUE (Unit: Billion VND)



EARNINGS BEFORE TAX (EBT) (Unit · Billion VND) THE SAME PERIOD LAST YEAR AND HIT MORE THAN 139% OF THE TARGET

THE GOAL TO BECOME the leading **Agriculture 4.0** company in Vietnam and the region

WHEN BY INTENSIVE AGRICULTURAL SOLUTIONS. ADOPTING MECHANIZATION AND MODERN TECHNOLOGY IN ALL ASPECTS OF OPERATIONS.

Facing local and global economic uncertainty, the management and staff of TTC Bien Hoa have constantly tried to be proactive and flexible in all activities to adapt to all circumstances and changes. We successfully turned challenges into opportunities and recorded excellent breakthroughs, thereby ending the FY 2021-2022 with outstanding performance. TTC Bien Hoa continued to maintain its leading position in the sugar industry 46% of the domestic market share with a volume of over 1 million tons. The Company's consolidated net revenue reached 18,319 billion VND, an YOY increase of 23% and fulfilling 108% of the target. Profit before tax (PBT) reached 1,046 billion VND, up by 33% compared to the same period last year and hit more than 139% of the target. These achievements result from the Company's introduction of effective sales policy, the expansion of market share as well as the focus on improved production activities and increasing the efficiency of the core business. This is also the first time TTC Bien Hoa has achieved a profit of over one trillion VND in one fiscal year since the commencement of its operation.

In FY 2021-2022, the Sugar vertical still played a key role in the Company's revenue structure with 16,862 billion VND, up 19% over the same period, accounting for 92% of Net Revenue. The sales volume continued to stay at over 1 million tons thanks to the Company's flexible adjustment of its sale policies and quick response to market conditions to achieve the revenue and profit targets. Specifically, the SME channel grew by 22% YOY, which is a remarkable effort given the harsh competition from ATIGA Sugar imported by local players as well as the Covid-hit demands. On



the other hand, TTC Bien Hoa's the Western and Northern branches also actively expanded the market and the customer system. This helped the sales volume in the North and the West grow by over 400% and 5% YOY respectively. Besides, the sale volume of other sales channels also recorded growth. Specifically, the B2C channel rose by 10% over the same period. Especially, with the advantage of owning a "Trading house" unit, TTC Bien Hoa continues to promote the search for new export markets, proving its role as one of the pioneers in proactively participating in the international commodity market, bringing Vietnamese Clean Sugar to the world.

TTC Bien Hoa is currently a company that owns the largest and most diverse Sugar product lines in Vietnam with over 75 products including 29 RE Sugar products, 14 RS Sugar products, 11 Alum Sugar products, 8 Organic Sugar products, 4 supplement products, 4 Liquid Sugar products, 3 Yellow Sugar products, and 2 Sugar Mix products. As a result, TTC Bien Hoa can tailor its product offerings to a wide variety of customers including businesses and consumers and in multiple channels including export and trading. Faced with continuous fluctuations in international sugar prices and the demand of the domestic market, the optimization of the sugarcane value chain in the strategy of diversifying the product portfolio is continuously promoted and developed by TTC Bien Hoa with 12 primary and secondary by-products including 2 Miagua products, bagasse, molasses, biomass commercial electricity, 3 caramel products and 4 fertilizer products. In the last fiscal year, Sales of Molasses and Electricity contributed 445 billion VND and 204 billion VND respectively to the Company's total revenue.



The Board of Management of TTC Bien Hoa 🖕



Source: Consolidated audited financial statements for FY 2021-2022, TTC Rien Hoa







As of June 30th, 2022, SBT stock price stood at 18,650 VND, down 12.6% compared to the closing price of 21,350 on July 1st, 2021. In the past fiscal year, the uptrend of SBT was formed and lasted from August 2021. At this rally, SBT closed at 23,600 on September 6th, 2021, creating momentum for the next rally and peaked at 26,850 on January 10th, 2022.



SBT's solid uptrend was maintained in the first 9 months of the year at 22,000-23,000. In the last 3 months of the FY 2021-2022, the average closing price of SBT adjusted to 18,000.

The movements of the SBT stock clearly represented the movements of the market. Specifically, VN-Index lost 353 points, from 1,524.7 on April 4th, 2022 to 1,171.95 on May 16th, 2022. During this period, SBT was also affected and dipped to a short-term bottom on May 13th, 2022 at 14,400 VND per share. Right after that, with good intrinsic value and many positive supporting factors from the Sugar industry, SBT recovered guickly when it increased 27% from 14,400 VND (May 13th, 2022) to 18,250 VND (June 8th, 2022). The recovery was better than the 11.6% rebound of VN-Index with an increase from 1,182.77 (May 13th, 2022) to 1,307.91 (June 8th, 2022).

The Liquidity of SBT and some industry peers between July 1st, 2021 and June 30th, 2022

No.	Company	Ticker	Exchange	Average trading volume (shares)	Average transaction value (billion VND)
1	Thanh Thanh Cong – Bien Hoa JSC	SBT	HSX	4,908,951	109.17
2	Lam Son Sugar JSC	LSS	HSX	954,306	13.84
3	Quang Ngai Sugar JSC	QNS	UPCOM	753,337	37.45
4	Son La Sugar JSC	SLS	HNX	14,660	2.23
5	Kon Tum Sugar JSC	KTS	HNX	8,896	0.26

Source: Vietstock, information consolidated by TTC Bien Hoa

ENSURE DIVIDEND POLICY FOR SHAREHOLDERS AND INVESTORS

For consecutive years since its listing in 2008, TTC Bien Hoa has always fulfilled its commitments on dividend payout to Shareholders and Investors in both cash and shares. On August 26th, 2022, SBT announced a plan to payout a 7% stock dividend for the FY 2020-2021 with over 44 million shares, equivalent to 440 billion VND and the expected time of payout being Quarter 4, 2022, thereby continuing to fulfill dividend obligations to Shareholders.



(*) Under the General Shareholders' Meeting Resolution No. 10/2020/NQ-DHDCD dated October 28th, 2020, the Company had submitted an application to the State Securities Commission requesting the approval of the Plan for payment of dividends for the FY 2019-2020 through the issuance of shares in September 2021. However, due to a change in relevant legal regulations (the Law on Securities 2019 (effective January 1st, 2021), the Enterprise Law 2020 (effective January 1st, 2021), the application for Dividend payment needed to be adjusted and must be approved by the General Meeting of Shareholders on a number of related matters. The Company will ask for shareholders' opinions at the 2021-2022 Annual General Meeting to be held in October 2022, and will complete the procedure for paying this dividend as soon as possible.



Source: TTC Bien Hoa





Closing the FY 2021-2022 with many activities in the capital market, TTC Bien Hoa inherited and built on the growth momentum from previous years. Since the year of incorporation, TTC Bien Hoa has constantly working hard to achieve and been persistent with the goals that we establish. By the end of the FY 2021-2022, the Company's charter capital had reached 6,508 billion VND, an increase over the same period mainly due to the conversion of bonds into voting common shares. Specifically, in the 1st quarter of FY 2021-2022, TTC Bien Hoa successfully converted 172 SBT42004 convertible bonds into nearly 12 million SBT shares. The total par value of this transaction was 172 billion VND, and the number of bonds converted into shares are not restricted in terms if transferability. The increase in charter capital each year proves the sustainable development of the Company as well as affirms its strong financial capacity and opens up many new investment opportunities in the future.

→ PIONEERING BUSINESS MODEL A ROADMAP FOR ROBUST BUSINESS TRANSFORMATION

Promote transformation at scale to unlock growth momentum in the followup stages and develop unique and feasible digital technology solutions for the End to End (E2E) process via integration of all application (NonCore - Core) systems to form an ecosystem at TTC Bien Hoa of strategic importance.

• Design an integrated ecosystem to help generate outcomes from our largescale agricultural production, adopt suitable ERP Core and NonCore solutions, select partners with relevant experience and expertise to drive fast growth and solve all potential challenges, build cost-effective ecosystem integration and collaboration models, and achieve transformation goals.

Stage 2 PROMOTING **NEW BUSINESS** MODELS

Stage 1

TRANSFORMATION

FOR DISRUPTIVE

GROWTH

• Develop all needed for successful operation and proper setup of end-user interface inside the ecosystem using Cloud-based infrastructure and in line with business requirements, standardize operational processes using ERP Core applications and Front End business operating systems, provide training of all end users on the E2E process, followed by standardization of organizational structure, clear definition of the roles and responsibilities of each member in the organizational structure, as well as develop a process to monitor the performance of the ecosystem.

• Focus on system and business performance for continued improvement of cross-border ecosystem and functional processes, and promote centralized data usage for better data analytics to boost knowledge sharing between member entities in different countries.

Stage 3 AN ECOSYSTEM **USING NEW TECHNOLOGIES** AND DATA-DRIVEN GOVERNANCE

- Adopt new technologies such as Cloud platforms, IoT devices or satellites for land/productivity mapping, AI/ML-based applications for the blockchain technology, customer-centric approach for agricultural traceability and market routing. This is a diversification strategy that can facilitate TTC Bien Hoa's digital transformation in all business lines based on the vision and aspirations of the Board of Directors.
- Our data strategy sets out a shared vision to align data with current and future business goals. Leaps in building large database systems (Data Lakehouse) and Cloud data services (PaaS) will promote application of AI/ML technology for automated analytics.



TTC BIEN HOA'S STEADFAST POSITION ON OUR 5 YEAR DIGITAL TRANSFORMATION ROADMAP TOWARDS ACHIEVEMENT OF 2024-2025 GOALS

In FY 2021-2022, TTC Bien Hoa successfully implemented Phase 1 of our 5 year digital transformation roadmap towards 2024-2025 goals as a promising start of our comprehensive digital transformation journey.

Specifically, TTC Bien Hoa established solutions to upgrade the E2E process within 6 to 18 months for the integrated ecosystem including: construction of Cloud applications (SaaS), Cloud Infrastructure services (IaaS), Master Data set, Data Warehouse, Data Analytics and Supply Chain Management (SCM). The ecosystem is applied to digitize all functions in TTC Bien Hoa's value chain from agricultural production to functional teams in charge of sugar production, electricity generation, water supply, fertilizer production,...

Upon completion of Phase 1, the key activities to be implemented by TTC Bien Hoa in the upcoming years include:



ACCELERATING NEW BUSINESS MODELS FOCUSING ON FRONT END SOLUTIONS AND SUPPORTING SUPPLY CHAIN DIGITIZATION

The proposed strategy includes improvement of TTC Bien Hoa's digital technologies used in agricultural activities (DigiFarm), factory operations (DigiFactory) and centralized customer relationship optimization (CRM - DMS - eRetail). By this, the ecosystem will involve into a comprehensive and integrated E2E solution, outlining how digital technology can be deployed and meaningfully applied to each respective thematic area. The system is built on the most successful practices adopted by each member company or functional department and in each business line, and also based on the vision of the Management on sectoral development opportunities, and especially expanded reforms that combine experience of domestic suppliers and TTC Bien Hoa's agricultural know-how.

- of member companies in 05 countries, i.e. Vietnam, Laos, Cambodia, Singapore and Australia.
- In particular, the ERP Core system on the Oracle Fusion SaaS platform is used as a centralized management system, ready for connection with digital solutions of the member companies (Front End solutions, Back End solutions and digital financial solutions,...) and integration of technology solutions such as IoT or Robotics,...





R&D SITUATION IN THE 2021-2022 PERIOD

The 2021-2022 period has been greatly affected by Covid-19. In particular, the pandemic has resulted in a change in consumption trends with healthy products becoming increasingly favored and trusted by customers. Taking this into account, TTC Bien Hoa has been highly active in R&D activities with the focus being placed on high-convenience as well as healthy and energy-boosting products such as Half Sugar, Stevia Sugar, Flavored Syrup, Molasses,... The Company is currently choosing the right timing to market these products to consumers.



For agricultural activities, TTC Bien Hoa has been doing research to further expand agricultural products including fruit trees. Therefore, the R&D for packaging has also been implemented and production has been implemented based on customer needs.

In the 2021-2022 period, TTC Bien Hoa's R&D team has actively partnered with both local and foreign universities and research institutes to conduct research products with high added value from bagasse such as:



TTC Bien Hoa signed a Memorandum of Understanding (MOU) with the Korea Institute of Advanced Engineering (IAE) to develop the project "Demonstration and development of foreign business model of a 6MW power plant with unused renewable energy" with an estimated total project cost of 28 billion KRW, equivalent to 506 billion VND. This will pave the way for TTC Bien Hoa to access advanced technical options to acquire additional value from bagasse;





IN OCTOBER 2021

TTC Bien Hoa entered into a partnership with Hanoi Paper Institute to research the production of pulp from bagasse using biotechnology.



🗉 TTC Bien Hoa signed a Memorandum of Understanding (MOU) with the Institute of Advanced Engineering (IAE) - Korea in September 2021

Sugarcane conveyor belt at TTC Bien Hoa's factory





Comparison of the second customers' **FEEDBACKS ON PRODUCT QUALITY**

RIGOROUS INTERNATIONAL STANDARDS AND CERTIFICATIONS MET AND ACHIEVED BY TTC BIEN HOA



TTC Bien Hoa has been recognized for compliance with important international standards such as ISO 9001:2015, ISO 14001:2015, ISO/IEC 17025 or FSSC 22000 Scheme Version 5.1, certified by HCA for food safety for the Middle East region, Kosher certified, and involved in Sedex, URSA, SGP Certifications,... In addition, we are also certified by the U.S. Food and Drug Administration (FDA), the U.S. Department of Agriculture (USDA) (for USDA organic), EU and China through the Control Union Certifications (Fair Choice and Fair Trade certified). These formal recognitions are important

milestones that mark our position in the market and expand our access to high-end markets with strict guality standards, especially the United States and the EU.

In addition to product quality certifications, TTC Bien Hoa also adopts environmental management systems based on ISO 14001:2015 standards or standards for occupational health and safety based on ISO 45001:2018 requirements to best support the production process and sustainable development.

FAIR CHOICE Certification body: **Control Union**

Social and Fair Trade Standard

Being certified to Social and Fair Trade is a manifestation of enterprises committing them to sustainable development and improvement of social conditions, meeting the demands of conscious consumers, whose numbers are increasing in every country and thereby creating new market possibilities.



EU, USDA and China Organic Product Certifications Certification body: **Control Union**

European, the U.S. and China Organic Standards

Being certified to one of these standards means that the organization's products meet the requirements of the European, the U.S and China Organic Standards.



FAIR TRADE Certification body: **Control Union**

Fair Trade Certification issued by Fairtrade Labelling **Organizations International** (FLO)

This certification offers fair terms of trade, better prices, decent working conditions and local sustainability.



FSSC 22000

Certification body:

Bureau Veritas, BSI

Food Safety Management Systems

This is an international standard in order to create

safe products for customers.

HALAL Certification body: HALAL Certification Agency Vietnam (HCA)

Islamic quality management standards Being certified to HALAL verifies the product's conformity to ingredient requirements and fulfillment





ISO 9001:2015

Certification body: Bureau Veritas, BSI This is an international standard

on quality management to ensure consistent quality that meets customer requirements and continuous improvements

specifies the requirements lt for risk assessment to support the establishment, operation and improvement of the quality management system.

ISO 14001:2015 Certification body:

Bureau Veritas, BSI

This is an international standard on environmental management for minimal negative impacts on the environment

It specifies the requirements for expanding beneficial impacts of the organization's operations on the surrounding environment.



SEDEX

Certification body:

SGS

Social security standards

This certification validates ethical, responsible

and sustainable business practices in global

supply chains.



SGP Certification body: Coca-Cola Company certification based on SGS auditing

Coca-Cola's social security standards

This certification validates ethical, responsible and sustainable business practices in global supply chains.



of manufacturing eligibility conditions and HALAL standards.

KOSHER Certification body: KOF-K

Jewish quality management standards

Being certified to HALAL verifies the product's conformity to ingredient requirements and fulfillment of manufacturing eligibility conditions and Kosher standards.



ISO 45001: 2018

Certification body: **Bureau Veritas**

This is an international standard on occupational health and safety to minimize occupational accidents

It specifies the requirements for hazard identification and risk assessment to determine the controls that are necessary to reduce the risks of injury and/or illness.

ISO/IEC 17025 Certification body:

Bureau of Accreditation (BoA)

Quality management system standard specifically applicable to testing and calibration laboratories

It sets requirements to ensure technical competencies, including quality management system requirements that are necessary to provide highly reliable and internationally recognized test/measurement results.



URSA

Certification body: Unilever Group certification based on SGS auditing

Unilever's social security standards

This certification validates ethical, responsible and sustainable business practices in global supply chains.

∴ AGRICULTURAL RESEARCH INSTITUTE THE CRUCIAL ADVANCEMENT TOWARDS **SUSTAINABLE MATERIAL AREAS**

Integrated Pest Management Using Natural Enemy

Sugarcane borer is a dangerous and frequent pest that can reduce yield from 10-30% on sugarcane. In more severe cases, its outbreak can cause a complete loss of crops.

Controlling sugarcane borer with chemical drugs is often difficult and expensive while the effectiveness is not high. Besides, spraying has toxic effects on the environment, humans and livestock, and damages biodiversity. In particular, in the sugarcane material areas where organic standards are applied, absolutely no chemical drugs are used.

Since 2018, after the research process, TTC ARI has produced and applied the natural enemy method to release Trichogramma on a large scale, over more than 6,000 hectares of sugarcane per year. Up to now, the areas on which Trichogramma has been used for many years have shown a very stable performance with the rate of pests being only about 1-2%. There has been no disease outbreak in most of these areas.

Building on these results, TTC ARI has opened many training courses for farmers, agricultural officers and technicians to propagate this solution in order to raise awareness about biological measures so that the scope of use can be expanded in the future.



Not only effects can be seen on sugarcane, TTC ARI's research and products on natural enemies are also applied to diverse and potential crops. TTC ARI's Trichogramma products have been distributed to over 200 hectares of coconut material areas and 300 hectares of agarwood material area in the provinces of Ben Tre, Tra Vinh,... for controlling coconut blackhead worms and agarwood leaf worms.

Currently, TTC ARI has improved the rice moth rearing method to obtain artificial eggs for Trichogramma rearing, storage methods, parasite method and the Trichogramma field release method. From there, the Institute can produce very large numbers of parasitic Trichogramma at a competitive cost compared with the use of pesticides. With this improvement, TTC ARI can provide enough Trichogramma for an area of up to 40,000 ha to meet the future development needs of TTC Bien Hoa's green material areas.



Trichogramma released in material area.

INTERNATIONAL COOPERATION THE KEY TO ACCESS NEW TECHNOLOGY

Despite its relatively young age compared to other Agricultural Research Institutes, TTC ARI has made great strides in international cooperation to quickly catch up with TTC Bien Hoa's internationalization trend. In the 2021-2022 period, TTC ARI has cooperated with many major international organizations for joint research, learning and development of Agriculture 4.0 such as:

DEG

Cooperation with DEG - an investment Fund of the German Government to carry out the release of Trichogramma on 6,000 hectares of organic sugarcane and 1,000 hectares of high standard sugarcane. The project aims to raise the awareness of agricultural environmental protection, improve the livelihoods of small-scale sugarcane farmers, and improve sugarcane productivity through the expansion and sustainable maintenance of the Integrated Pest Management (IPM) strategy. Accordingly, a series of seminars on the topic of integrated pest management by natural enemies were held in material areas. Up to now, TTC ARI and DEG have coordinated to conduct 12 training sessions for staff and 20 training sessions for farmers.

FARMACIST

In May 2021, TTC ARI collaborated with TTC Bien Hoa's Agribusiness Division to work with Farmacist agronomic consulting company from Queensland, Australia to exchange and improve Sugarcane farming techniques at TTC Bien's material areas in three countries including Vietnam, Laos, and Cambodia. Farmacist is a provider of agronomic solutions based in Mackay, Burdekin and North Queensland, Australia with over 140 years of integrated agronomic experience. Farmacist is specialized in practical precision agronomic solutions. The partnership with Farmacist is an important driving force for TTC ARI to strengthen its research and technology application capacity, thereby playing a core role in TTC Bien Hoa's green and clean material area development strategy that meets international standards.



Minister for Agricultural Industry Development and Fisheries and Minister for Rural Communities. Mr. Mark Furner shared expectations about cooperation in developing high-tech, sustainable agriculture in Vietnam & Oueensland







\Rightarrow RESPONSES OF SUGARCANE-GROWING PARTNERS AND **AGRICULTURAL EXTENSION STATIONS' MANAGERS**

RESPONSES OF SUGARCANE-GROWING PARTNERS



Filling is very important. To estimate the amount of cuttings and labor needed to prepare for filling, it is hard to ensure accuracy by standing in the field. Thanks to the drones operated by the agricultural extension staff at station #4, I can have a bird's eye view of my sugarcane field, thereby planning thorough filling. In addition, in the rainy season, photos taken from drones also help to easily identify flooded spots to exploit irrigation and prevent water-logging for sugarcane.

Mr. Nguyen Huu Nghi (standing on the right)

Member of Tay Ninh Farming Entrepreneurs Club - Sugarcane farmer, Agricultural Extension Station No.4, TTC Bien Hoa, Tay Ninh

"

Thanks to actively applying mechanization to production, we can have the initiative in growing and caring for sugarcane. But there is one thing that we are still worried about, that is weeding for sugarcane. This is very important and greatly affects the yield and profit of sugarcane growers. Currently, the Company encourages us to keep sugarcane leaves after harvesting to cover the grass, apply the mini weeding machine when sugar cane has grown and to fly drones to monitor grass within the field. We are thus somewhat reassured. Hopefully, this year sugarcane prices will remain high. This will help us to increase our income and enable us to develop more area for the next year.



Mrs. Nguyen Thi Hiep (standing on the right) -Sugarcane-growing partner, Agricultural Extension Station No.5, TTC Bien Hoa, Tay Ninh



Currently, in Krong Pa area we have adopted intensive mechanization from tilling, tending to harvesting. In the 2021-2022 crop, thanks to favorable weather conditions, the yield was good. With an area of 43.4 hectares, the average sugarcane yield was 90 tons per hectare. Thanks to the facilitation of TTCS Gia Lai Sugar Factory in Ayun Pa and the higher price of sugarcane compared to last year, our average profit after all expenses was about 40 million VND per hectare.

• Mr. Dinh Van Ta

Sugarcane-growing partner, Agricultural Extension Station No.1, TTCS Gia Lai, Gia Lai

"

My family has been farming sugarcane for a long time, we find the Company's management of sugarcane cutting and transport very appropriate and timely. In particular, the TMS system helps dispatch vehicles automatically. This approach helps us feel more secure in each pressing season. In the 2021–2022 crop, my family had 14.5 hectares of sugarcane. After deducting all expenses, this year our income is very good. It has been a successful crop. If the price of sugarcane stays stable, growing sugarcane yields more stable income and requires less effort than other crops.



Sugarcane-growing partner, Agricultural Extension Station No.8, Gia Lai TTCS, Gia Lai



" assured to do our job.

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We received training on the ditch farming model from the staff of the sugar factory at the end of 2020. Sugarcane is grown in ditches which hold water and nutrients. Through a number of droughts, sugarcane can still grow well. With such characteristics as high terrain, lack of water resources and arid climate, in Ninh Xuan I find it very difficult to find a more efficient crop than sugarcane. But with the current sugarcane price guaranteed by the sugar factory, no one can give up sugarcane. I am confident that this year's output can be more than double that of the previous one and it is expected that after this crop I will continue to expand the farming area by over ten hectares.

Mrs. Nguyen Thi Thanh

Sugarcane-growing partner, Ninh Thuong Agricultural Extension Station, TTC Bien Hoa – Ninh Hoa, Khanh Hoa



" compared to rice farming in the past.

 Mr. Sombun Phengsavan Sugarcane-growing partner, Agricultural Extension Station No.3, TTCA, Attapeu " Since we switched from rice to sugarcane, my family's income has improved a lot, which has enabled me to renovate my home, buy more items and send the kids to school. My thanks to the Company for helping us by creating jobs for us earn extra income. Mr. Khanthong Nhindavong Sugarcane-growing partner, Agricultural Extension Station No. 1, TTCA, Attapeu

Thanks to the investment in the irrigation system and microbial organic fertilizer in the previous crop, the yield of sugarcane harvested this year is very good. An one-time investment brings effects for several years. In this season, the factory also provides financial support to farmers to help loosen the soil using mechanical machines. With the Company's annual support policy, combined with the policy of minimum purchase insurance for at least 3 years with CCS of 10 at 850,000 VND per ton, we feel

- Mr. Tran Thai Hoanh

Sugarcane-growing partner, Agricultural Extension Station No.2, TTC Bien Hoa – Phan Rang, Ninh Thuan



Since the company adopted an investment policy in favor of sugarcane farmers, instead of only planting wet rice or leaving the land uncultivated like we previously did, we have now taken advantage of abandoned land for production. Although I have no experience with sugarcane, the policy and enthusiastic support of the Company's staff has helped me understand about it and I have been able to make the most of my free time to care for the crop. I feel very happy that growing sugarcane can increase my family's income



Le Thi Thanh Tam -

Health Safety and Environment Specialist (HSE) - TTCS Gia Lai

TTCS Gia Lai, where I have been working for the past 10 years is like a second family, a warm, full-of-love common house, thanks to the management and the colleagues giving me a chance to work here and for helping and supporting me with professional knowledge. I am happy because I feel less worried about tomorrow. I have a stable income and more money to take care of my family. I wish TTCS Gia Lai continued development and hope that with every step made forward, TTCS Gia Lai will still give the best care for employees, the best values for customers, and the best contributions to the community.



Quach Duc Tai - Head of Talent Acquisition - TTC Bien Hoa

With nearly 2 years under the common house of SBT, besides applying my knowledge and expertise to my work, I myself have been able to learn and develop my abilities and skills to improve myself through both internal and external training programs.

Proud to be the leading agricultural company in Vietnam that is transforming strongly with modern technological innovations, SBT always strives to provide talents with a solid foundation to plan their future careers and turn their career dreams into reality. With continuous efforts, we are proud to be known by the community as the best place to work in Asia for 2 consecutive years.

At SBT, the management always attaches importance to and facilitates the development of human resources through a series of training and development programs which are designed to improve the professional capacity and skills of each SBTer. We are always consistent in making sure the human resource development strategy always goes hand in hand with the Company's development strategy. This is considered an important part of each plan and can determine the Company's business results.



Vu Duy Quang - Legal Specialist

Although I have only been with the Company for 1 year and 6 months, I have really experienced a lot of things, not only in legal expertise, but also in soft skills, especially the skills to work and interact between departments from human resources, administration to business, commercial and accounting. Besides, I also had the opportunity to know a new culture during my Australia business trip when participating in the Company's development project. These things have helped me to develop myself a lot and I am really grateful for the opportunities to work and develop myself so far.

Nguyen Thi Ngoc Nhu - Head of Operations - TTCAD



The 10-year journey is neither too short nor long enough, but it is the period of time that I've spent with the Sugar industry here at SBT. During their vibrant years of youth, many people choose to hop to many different companies to learn and gain more experience for themselves. I, however, am fortunate to be a member of a company with a friendly and open working environment for each individual. Apart from many suitable career orientations to choose from, the Company also offers practical welfare and other and incentives for the team. At SBT, I have had the opportunity to work in 3 member companies with different experiences. Each of these jobs gives me the opportunity to develop myself both in terms of professional and life skills. Currently, TTCAD is the 3rd home I have chosen and have been with it for 3 years. Although TTCAD is a new entity, it has gathered members with a lot of experience, energy and iron will to fight for the common goal of the Company. Here, I have become "mature" and accumulated a lot of knowledge and skills through training programs, management sharing as well as team building activities. I really get to be "myself" when working at TTCAD in particular and SBT in general.





