

1. Policy, Overview and Goal of Business Operation

1. Corporate Vision & Mission, Philosophy and Core Value

- **Vision**

Ensure raw materials security and better living conditions for cane growers and develop sugar, renewable energy and by-product businesses for sustainable growth and harmonized living between communities, society and nation with responsibility for all stakeholders.

- **Mission**

1. Excellence in management and quality control of sugarcane production, sugar product and all by- product with standard and maximum efficiency.
2. Encourage the sugarcane farmers in the area around the factory to have high productivity and good quality with the principle, care and responsibility for sugarcane farmers.
3. Develop the administration and management system continuously for the stability of the product and the profits of the sugarcane farmer and the businesses of Buriram Sugar Group
4. Enhance innovation and research to increase organization and cane growers' efficiency and competitiveness.
5. Encourage and support staffs and cane growers to learn new knowledge for sustainable growth.
6. Focus on the industry and development of by-product businesses both renewable energy and the other area including increase the value of product for the growth of business sustainable.
7. Conduct business on the basis of good governance, fairness, transparency and ethics with responsibility for stakeholders, communities, society and environment, as well as, all forms of corruption prevention and resistance.

- **Philosophy**

"Sugar Made in the Field" is the philosophy used in Buriram Sugar Group for more than decade which demonstrates a commitment to conducting business with sustainable growth. Buriram Sugar Group believes that the production of sugar in the best quality and highest quantity at lower cost will bring good turnover for the Group and also stability and prosperity for the sugarcane farmer by support and encourage the sugarcane farmer and staff with the knowledge and care starting from the process of cultivation, maintenance and harvest including the use of modern technology and innovation to manage the sugarcane. In addition, the Group will take care of the sugarcane farmer, surrounding community and environment as well as all stakeholders.

- **Core Value**

“TEAM” is the common values of people in the organization that focuses on the success of the team work.

T > Talk	Communicate with all parties both inside and outside the organization
E > Expert & Education	Create the professional by learning and development continuously
A > Achievement	Share the responsibility of team with honest
M > Motivation	The consciousness of success

2. Overview of Business Operation

Buriram Sugar Public Company Limited (“BRR”) and its subsidiaries are one of the pioneers of sugar industry in Northeastern region of Thailand in which Mr. Vichien Tangtongwechakit was the founder who initiated sugarcane growing practices and also encouraged farmers to grow sugarcane in Buriram Province. Buriram Sugar Group (“BSG”) has operated an integrated business of raw sugar and brown sugar manufacturer and distributor both for domestic sale and export more than 50 years including by-products of sugar production such as, bagasse, filter cake (press mud) and molasses to further advance the business utterly which consists of biomass power plant, organic fertilizer and eco-friendly packaging product business.

- **Sugar Business (Core Business)**

1. Buriram Sugar Factory Company Limited (“BSF”) was registered in 2003 with 1 Million Baht of registered capital. In 2010 and 2011, BSF increased registered capital to 990,637,000 Baht and 1,050,000,000 Baht respectively. BSF received the transfer of the employees in various departments, the sugar manufacturing and distribution license, the factory license, the brand, and the electricity production and generation license from BRR which currently holds 99.90% of the total shares.

BSF conducts sugar production and distribution business. Its factory is located on 237 Moo.2, Hinlekhai Sub-District, Kumueang District, Buriram Province and has been authorized production capability of 17,000 tons per day. In the crop year of 2015/16, the production capability was increased to 24,000 tons per day in order to support the increasing amount of cane crushing approximately 2.21 million tons in the crop year 2016/17, and 3.15 million tons in the crop year 2017/18. The distributed products can be divided into raw sugar and brown sugar for both domestic sales as well as international sales. In addition to sugar production, BSF can generate electricity from steam which is by-product of sugar manufacturing, approximately 14.5-15 MW of the maximum capacity of 18.5 MW to use in the sugar factory area.

2. Chamni Sugar Factory Company Limited (“CSF”) was originally named Buriram Super Power Company Limited (“BSP”) which registered in 2015 with currently 5 Million Baht of registered and paid-up capital that is held 99.99% of shares by BRR. Nevertheless, BSP was changed company name and the type of business, which was registered to support the biomass power plant in the future, to CSF in order to support the sugar manufacturing factory which was authorized for the factory establishment by Office of Cane and Sugar Board (“OCSB”) on December 30, 2015 at Chamni District, Buriram Province with the capacity of cane crushing unit by 20,000 tons per day. Nowadays, CSF is under process of making an environmental impact assessment (EIA).

3. Buriram Sugar Capital Company Limited (“BSC”) was originally named Buriram Agro Energy Company Limited (“BAE”), registered in 2015 with 10 Million Baht of registered and paid-up capital that is held 99.99% of shares by BRR. Nevertheless, BAE was changed for company name and the type of business, which was registered to support ethanol business in the future, to BSC in order to support the sugar manufacturing factory which was authorized for the factory establishment by Office of Cane and Sugar Board (“OCSB”) on February 4, 2016 at Nonnarai District, Surin Province with the capacity of cane crushing unit by 20,000 tons per day. However, BSC has not been operated.

- **By-product Business**

1. Buriram Energy Company Limited (“BEC”) was originally named Buriram Ethanol Company Limited, registered on 2005 with 1 Million Baht of registered capital and raised registered capital to 15,600,000 Baht in August 2006 for preparation of ethanol plant construction, however, BEC postponed its construction. In 2010, Buriram Ethanol Company Limited was changed for the company name to Buriram Energy Company Limited, and raised its registered capital to 135,600,000 Million Baht in 2011. BRR currently holds 99.99% of its shares.

According to the electricity generation capacity of 9.9 MW, BEC uses bagasse as a main fuel including other materials such as, woodchips, sugarcane leaves and chaff as the fuel materials for electricity generation as well. BEC sells 8 MW of the electric power generated to Provincial Electricity Authority (PEA) and distributes remaining 1.9 MW to the sugar factory. The power plant is located closed to the BSF for convenience of bagasse logistics transportation and electric power distribution.

On December 30, 2011, BEC signed the power purchase agreement in Adder system with PEA to sell its maximum electricity 8 MW at 22,000 volts electric potential system and started its distribution in May 2012. BEC’s electricity generation has been promoted on investment by Thailand Board of Investment on June 28, 2011. Nevertheless, BEC has amended the power purchase agreement in Adder system to Feed-in-Tariff (FiT) system with PEA on March 11, 2016.

2. Buriram Power Company Limited (“BPC”) was registered on 2011 with currently paid-up registered in amount of 170 Million Baht in which BEC currently holds 99.99% of total shares. BPC was established to support the second biomass power plant of BSG with the capacity of 9.9 MW by using bagasse as a main fuel including other substitutable fuel materials such as woodchips, sugar leaves or chaff to generate electricity. BPC is located near BEC and BSF for convenience of bagasse logistics transportation. BPC sells the electricity to PEA under the power purchase agreement in FiT system by the maximum capacity of 8 MW at 22,000 volts electric potential system, and started the power purchase in April, 2015. Furthermore, BPC’s electricity generation has been promoted on investment by Thailand Board of Investment on January 5, 2015.

3. Buriram Power Plus Company Limited (“BPP”) was registered in 2015 with currently paid-up registered capital in amount of 160 Million Baht in which BRR currently holds 99.99% of total shares. BPP was established to support biomass power plant which uses bagasse as main fuel materials including other substitutable fuel materials such as woodchips, sugar leaves or chaff to generate electricity. BPP is located near BEC, BPC and BSF for convenience of bagasse logistics transportation. BPP is considered as the third power plant of BSG and presently generates and distributes electricity as well as high-pressure and low-pressure steam to BSF in order to support the expansion of sugar manufacturing production business effectively. However, BPP initiated the operation on December 1, 2016, and has planned to sell electricity to PEA in the future as well.

4. Key Brand Fertilizer Company Limited (“KBF”) was established in 2011 with paid-up registered capital in amount of 15 Million Baht in which BRR currently holds 99.99% of total shares. KBF conducts the production of organic fertilizers and chemical fertilizers by using filter cakes as the main raw material, which is by-product of sugar production process, mixed with the ingredients of chemical fertilizers. KBF started the production and distribution on December 2012 with production capacity of 30,000 tons per annum. Throughout the years, KBF has developed the variety of fertilizers; therefore, KBF currently produces 3 types of fertilizers which are granulated organic fertilizers, powdered organic fertilizers and granulated chemical fertilizers, and distributes to BRD in order to support the sugarcane farmers to apply these fertilizers for soil adjustment and nutrition consequently to generate more crop yield and higher quality of sugarcane. In 2018, KBF has expanded to existing market products named “Pla Bin” for distributing the fertilizers to be applied to important economic field crops such as sugarcane, rubbers, cassava, and vegetable plants, etc. Nowadays, KBF manufactures and distributes four types of fertilizer which are powdered organic fertilizers, granular organic fertilizers, granular organic fertilizer plus chemical fertilizer

3 formulas and liquid chemical fertilizer. Moreover, KBF plans to manufacture and distribute chemical fertilizer in 2019.

5. Sugarcane Ecoware Co., Ltd. (“SEW”) was registered in 2018 with currently paid-up registered capital in amount of 75 million baht and fully paid-up in which BRR currently holds 99.99% of total shares. SEW conducts the production of packaging by using bagasse and other pulps as the main raw material. SEW is estimated to operate by the 3rd quarter of 2019. This business has been promoted on investment by Thailand Board of Investment on November 9, 2018.

Moreover, the production capacity of SEW is approximately 300 million pieces per year, and the main products will be food and medical packaging. As well as, SEW is able to produce other kind of packages based on the customer’s preference such as; package for electronic supply. The plant will be located nearby the sugar factory of BSF for the convenience of bagasse logistics transportation which is the main raw materials for producing process. Currently, the plant has been constructed more than 60%. SEW aims to export the products to foreign country more than 75% of total capacity.

Buriram Sugarcane Research and Development Company Limited (“BRD”)

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Buriram Sugarcane
Research and Development Co.,Ltd.

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Supporting Business

Buriram Sugarcane Research and Development Company Limited (“BRD”) was originally named Buriram Machinery Development Company Limited, registered in 1996 with the registered capital of 1 Million Baht. After that, on February 16, 2010, Buriram Machinery Development Company Limited increased the registered and paid-up capital to 70.88 Million Baht and changed its name to Buriram Sugarcane Research and Development Company Limited respectively in which BRR currently holds 99.99% of total shares.

BRD is a subsidiary that provides raw materials to BSF and operates the supporting business in the sugarcane farmers planting through conducting the contract farming with sugarcane farmers in order to provide the sufficiency of raw materials for full capacity of BSF including develop the innovations of sugarcane variety, the irrigated system management, the machines and equipment in farming, online sugarcane farmers management by Management Information System, sugarcane plantation map system by Geographic Information System and apply the technologies in every step of work in order to operate, control, assess and solve the problems in real time. Moreover, BRD also coaches and conveys the academic and practical knowledge about sugarcane farming to farmers in order to increase the crop yield and quality to farmers and also strengthen the potentials of farmers for sustainably career path as well as make the certain income for a living which will develop the better quality of life consecutively.

According to the ability of agricultural plants and knowledge management of BRD, BRD has collaborated with provincial governmental agencies in zoning management of Buriram Province as the pioneer city in zoning management through changing inappropriate areas that plants other crops such as rice to plant sugarcane instead according to the policies of Ministry of Agriculture and Cooperatives. Furthermore, BRD also determines to raise the standard in agricultural management with the innovations and technologies as well as many kinds of researches in compliance with national development of the economic model “Thailand 4.0” by the government to create a value-based economy that is driven by innovation.

➤ Vision of Buriram Sugarcane Research and Development Company Limited (“BRD”)

“Excellence in Academic Knowledge and Management for the Stable Production and Sustainable Living of Sugarcane Farmers”

➤ Policy and Mission

- Promote sugarcane farmers in a radius of 40 kilometers around the manufacturer to ensure the high crop yield and good quality based on academic knowledge and their responsibility.

- Develop the management system to ensure the stability of output and profit of sugarcane farmers.
- Develop innovation to enhance the competency of the organization and sugarcane farmers.
- Promote the education of its personnel and sugarcane farmers for mutual sustainable growth.
- Research and development for the sustainability of the career in sugarcane farming.

➤ **Value**



➤ **Mission**

- Promote the factors of production in sugarcane planting for sugarcane farmers in order to generate the sugarcane crushing volume and quality as targeted.
- Provide suggestions, knowledge, and technology about production to sugarcane farmers to enhance their competency and to operate their sugarcane farming in appropriate and timely manner; consequently, sugarcane farmers will earn well returns from such career, good quality of life, and sustainable career.
- Develop human resources in raw materials procuring department in order to possess expertise and skills for monitoring, assisting, and provide solutions for sugarcane farmers effectively, together with developing sugarcane farmers' knowledge to be upgraded to professionals, and creating their sustainable happiness.
- Study and develop the new sugarcane planting pattern, sugarcane varieties, and factors of production suitable for sugarcane farmers in the sugarcane planting promotion areas in order to reduce production cost and increase the crop yield per rai.

➤ **Objectives**

- Produce the sugarcane volume for crushing 3,000,000 tons.
- Produce higher sugar yield per ton.
- Create the sustainable career in sugarcane planting for sugarcane farmers who can adhere to this career for good.

➤ **Responsible Party**

Buriram Sugarcane Research and Development Company Limited

➤ **Goal**

Procure the sugarcane volume to Buriram Sugar Factory Co. Ltd. for crushing 3,000,000 tons.

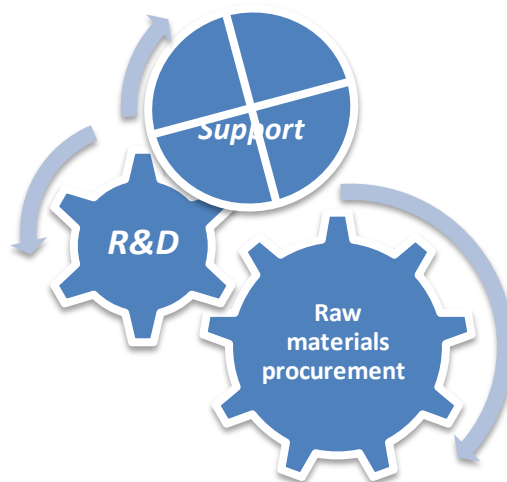
➤ **Excellence in Management to be the Original Sugar Factory of Thailand**

- Implement the smart farming system.
- Utilize GIS to plan the management of individual sugarcane plantation to ensure maximum production and sugar volume per rai.
- Utilize the promotion system and monitor the individual sugarcane plantation based on academic knowledge and oversee sugarcane farmers as scheduled to ensure the targeted output.
- Utilize the promotion system for grouping strong sugarcane farmers to develop their sugarcane planting competently.
- Develop its personnel and sugarcane farmers to enhance professional competence on a regular basis.
- Build the community engagement and confidence in the career of sugarcane planting.

➤ **Strategy**

- Apply the precision agriculture with the management of factors supporting the growth of sugarcane as planned.
- Management of working group to establish the agricultural network and effectiveness of mutual resource consumption, cost reduction, and knowledge transfer to the member of each team.
- Public relations to provide knowledge throughout the sugarcane plantations.
- Management system to support sugarcane farmers to be accessible and able to obtain the factors of production in time.
- Support and develop its personnel to achieve the objectives with happiness and sustainability.
- Build alliances with private and governmental sectors both domestically and abroad.

➤ **Working procedures**



1. Raw Materials Procurement

1.1 Quantity

Sugarcane planting promotion zone is responsible for sugarcane plantations around the factory which are divided into 16 promotion zones in order to cover more promotion areas. The promotion offices have been established for the convenience of communicating and giving advices to sugarcane farmers.

Promotion strategy for increase of production and reduction of cost

- Sustain the sugarcane plantations without changing to other crops by means of increasing production and reducing cost to provide valuable returns to sugarcane farmers.
- Manage the precision agriculture as planned with the management of key factors essential to sugarcane production process. Utilize the technological equipment to enhance productivity as well as IT and communicating application to develop management system more accurately.
- Employees encourage the knowledge transferring to make sugarcane farmers understand the whole system of sugarcane and sugar production procedures and to instill the cooperative awareness.
- Monitoring system of sugarcane plantations in line with the schedule and sugarcane growing phases by using the geographic information system to manage the smart farm system.

1.2 Quality and development of sugarcane farmers

- Training seminars and knowledge building to be applied for career enhancement.
- Building the strength-based practice by establishing the agricultural network to transfer knowledge of sugarcane production and monitor the network's performance in each plantation.

1.3 Sustainability

- Improve the soil structure with organic-chemical fertilizers and dolomite to adjust the soil pH for the efficient fertilizer use and adjust the soil structure for the growth of sugarcane appropriately and sustainably.
- Research of applying fertilizers according to the soil analysis interpretation to ensure that each sugarcane plantation is applied with the appropriate fertilizers to increase production and reduce the production cost.
- Adjust sugarcane varieties suitable for the harvesting period and production capacity of the sugar factory to obtain the best raw materials to produce the most efficient sugar.
- Experimental sugarcane plantation is established to test and select the sugarcane variety which is the most suitable for sugarcane farmers' planting areas.
- Use of the biological control for preventing and eradicating pest.

2. Research and Development

2.1 Development and promotion plan of sugarcane production with academic knowledge

"The maximum sugar production per rai and resistance to pest"

- Experiment and research the sugarcane variety suitable for Buriram plantation area to obtain sugarcane varieties which provide highest yielding crops per Rai.
- Research, experiment and test product, including discover a method for increasing yield and quality of sugarcane.
- Breeding the key sugarcane variety to sugarcane farmers to achieve sustainable productivity.
- Improving and adjusting the soil and determining fertilizers formulas which are suitable for sugarcane production.
- Control disease and pest is divided into monitoring the disease and insect pests including natural pest breeding and beneficial fungus. As well as, management of sugar cane pests with integrated method knowledge transfer and the strong agricultural network.
- Promote and development the water use to increase productivity.

2.2 Development plan for sugarcane farmers

- Training for the trainer
 - Building the strong agricultural network
 - Monitoring sugarcane plantations and visiting sugarcane farmers
 - Creating the village model with high production
-

- Training center for sugarcane farmers
- Training seminars and study visits

2.3 Human resources development plan for agricultural promotion

- Improve knowledge and skills continuously
- External training seminars and study visits on a regular basis to increase knowledge and skills
- Key performance indicator system and incentives
- Courses for improving employees

3. Support

3.1 Management system

- The MIS (Management Information System) has been implemented. Working procedures are operated on website for managing sugarcane plantations, monitoring the sugarcane quality of each plantation, overseeing the sugarcane farmers' operations as scheduled, supervising the growth rate of sugarcanes, and recording data for harvesting and transporting sugarcanes.
- The GIS (Geographic information system) has been implemented for planning the promotion, developing to increase production, monitoring the sugarcane farmers' operational standard (route overseeing), following-up and prevention, disease and pest control, managing financial support, cutting and transporting sugarcanes.
- Auditing system with UAV to monitor sugarcane plantations.
- Working period system and KPI.

3.2 Proper use of farm tools and equipment

- Equipment for soil preparation and planting
- Equipment for care and maintenance
- Equipment for harvesting and transporting sugarcanes

GIS (Geographic Information System) is utilized for the promotion project to ensure the accuracy in consideration of distributing factors of production, preventing errors occurred from providing inaccurate financial support, as well as building trust toward the factory relating to production volume, which has been implemented for the promotion project as follows:

- Determining the targeted areas, which are empty and have no sugarcanes but considered as proper land for planting, to plan for promotion project.

- Recording information about sugarcane planting locations and areas with appropriateness which can be audited. The promotion agents shall record such locations via GPS equipment prior to promotion requisition.
- Audit unit uses the system for auditing procedures for making decision on approving the promotion.
- Monitoring sugarcane uploaded for crushing and sugarcane farmer receivables in effective and timely manner.
- Verifying the redundancy of sugarcane plantations of each sugarcane farmer.

MIS (Management Information System) is utilized for managing and administrating the promotion system to ensure the most effective working procedures of the raw materials procurement department.

- MIS is used together with GIS for analyzing the risks on promoting, distributing factors of production, and decision-making process for promotion.
- MIS is used for overall conclusion made by the promotion unit for further proposing to the executives for making decision and determining a policy.
- Analyzing the sugarcane planting promotion and establishing the warning system to determine the guidelines and preventive measures.
- Specifying the proper working procedures and successful goals setting.
- Promotion officers are able to acknowledge the operating status of sugarcane farmers through the report for further monitoring their tasks.

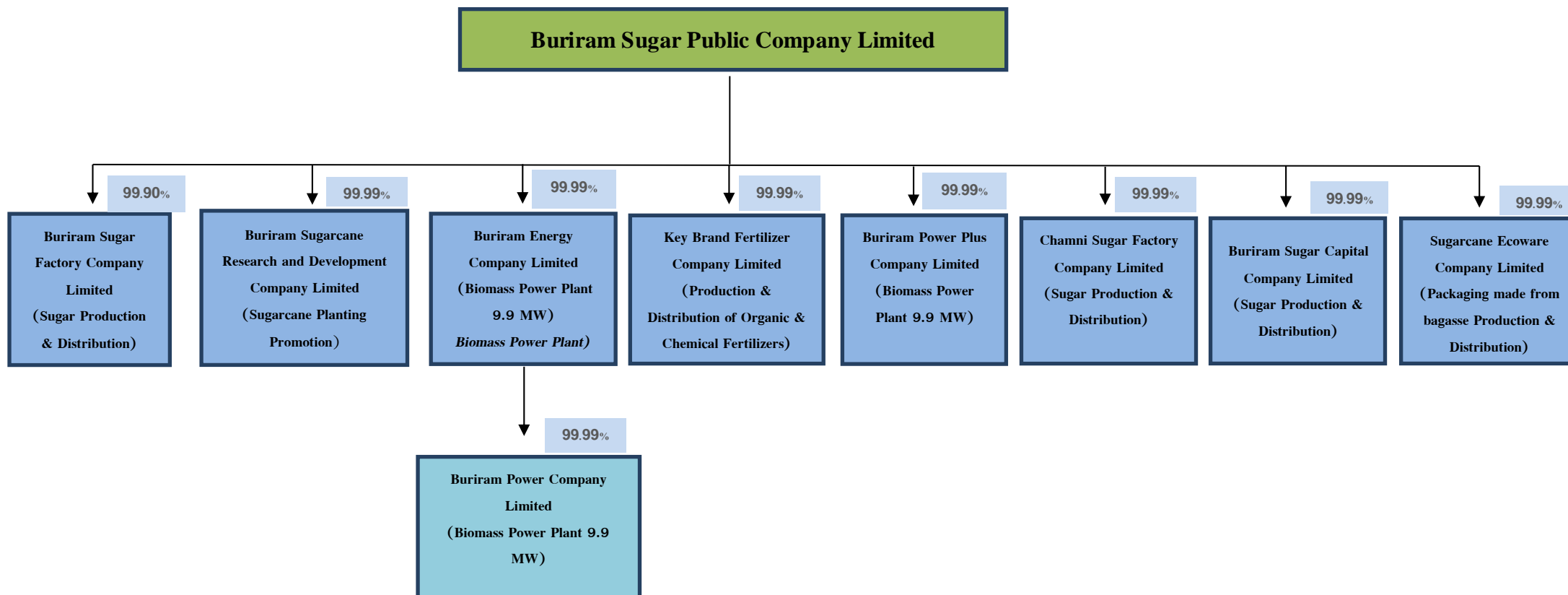
Procedures for providing financial support via GIS and MIS

1. Promotion officers hold a meeting and enter into a contract with a sugarcane farmer for sending sugarcane to the factory, including measuring the sugarcane planting area, and preparing data for sugarcane planting inspection in order to further request the promotion.
2. Submit the report on sugarcane planting inspection together with the picture of plantation areas measured by using application of modern management system for supporting evidence to request the promotion.
3. Director of the promotion shall consider the distribution of production factors and further assign the credit department to be responsible for distributing factors of production.
4. Credit department shall analyze the payment of financial support in consideration of the report on permission for financial support as follows:

- 4.1 Record of sending sugarcane and outstanding debt (5 years backward)

- 4.2 Survey of sugarcane plantations and financial support limit approved at the present year
 - 4.3 Financial support limit used and financial support limit balanced
 - 4.4 Guarantor and collateral
 - 4.5 Opinions of the credit department and credit manager
 - 4.6 Sugarcane farmers' overall information and audited data of sugarcane plantations
 - 4.7 Database system of sugarcane plantations and records of treating sugarcane plantations
5. Notifying the approval of the promotion result to promotion officers in order to further inform sugarcane farmers to receive the factors of production as approved.
6. After the factors of production received by sugarcane farmers, the promotion officers have to ensure that whether they plant and treat sugarcanes or not by recording data of sugarcane plantations and sugarcane treatment as planned. The promotion agents are responsible for recording such data and pictures on the online system linked to the company's database system for further consideration. Such information keyed in the online system must be operated every two weeks.

The Subsidiary Structure of Buriram Sugar Group



Relationship of Major Shareholders' Business Group

-None-

Shareholding Structure of the Company Group

Buriram Sugar Public Company Limited is a holding company which consists of 9 subsidiaries as follows:

Company Name	Registered Capital (Million Baht)	Investment proportion (%)	Types of Business	Types of Business Regarding to the Definition of SEC	Size of Subsidiary on the Holding Company*
Sugar Business					
Buriram Sugar Factory Company Limited	1,050.00	99.90	Sugar Manufacturing and Distributing	Core Business	72.96* (74.60)**
Chamni Sugar Factory Company Limited	5.00	99.99	Sugar Manufacturing and Distributing (Not Operated Yet)	Subsidiary	N.A.**** (1.27)**
Buriram Sugar Capital Company Limited	10.00	99.99	Sugar Manufacturing and Distributing (Not Operated Yet)	Subsidiary	N.A.**** (0.52)**
By-product Business					
Buriram Energy Company Limited	135.60	99.99	Biomass Power Plant	Subsidiary	5.39* (4.46)**
Buriram Power Company Limited***	170.00	99.99	Biomass Power Plant	Subsidiary	6.22* (6.33)**
Buriram Power Plus Company Limited	160.00	99.99	Biomass Power Plant (Initially Operated on December, 2016)	Subsidiary	3.12* (5.92)**
Key Brand Fertilizer Company Limited	15.00	99.99	Organic and Chemical Fertilizers Manufacturing and Distributing	Subsidiary	4.47* (1.50)**
Sugarcane Ecoware Company Limited	75.00 ¹	99.99	Packaging made from bagasse Manufacturing and Distribution	Subsidiary	N.A.**** (2.27)**
Supporting Business					
Buriram Sugarcane Research and Development Company Limited	70.88	99.99	Research and Development to Increase the Efficiency of Sugarcane Farming	Subsidiary	7.84* (4.22)**

Remark:

* Sizes of Subsidiary on the Holding Company are calculated by revenue of the subsidiary's core business divided by 2018 total revenue instead of categorizing by the asset size since the company believes that revenue method is capable to show operating results and returns from investment of each subsidiary more accurately than asset method.

**Sizes of Subsidiary on the Holding Company are calculated by the method of asset criteria by divide total asset of subsidiary after deducting connected transaction with total asset of consolidated financial statement at the end of 2018

*** Shares hold by Buriram Energy Co., Ltd.

**** In 2018, the subsidiaries have not started business operation yet; therefore, there is no revenue to be calculated for the size of subsidiary on the Holding Company.

¹The registered capital was increased and paid up in amounted of 75 million Baht from 5 million Baht in January 2018.

3. Important Background, Changes and Development

Buriram Sugar Public Company Limited was originally Sahathairungruang Sugar Company Limited (1963) (Transferred the business from Sahathairungruang Sugar Factory Limited Partnership) and registered on December 20, 1963 with 2 Million Baht of registered capital to support the business of brown sugar production in Buriram. The significant events and developments of BSG are as follows:

Year	Major Events
1963	<ul style="list-style-type: none"> Sahathairungruang Sugar Co., Ltd. was established, with 2 million Baht registered capital, to produce raw sugar. The crushing capacity at that time was 3,003 Tons Cane per Day (TCD). Major shareholder groups were Mr. Vichien Tangtongwechakit group, Mr. Somchai Siripanumat group, and Mr. Pichai Lianggobgij group.
1980	<ul style="list-style-type: none"> The company increased its registered paid-in capital to 15 million Baht.
1986	<ul style="list-style-type: none"> Mr. Somchai Siripanumat group and Mr. Pichai Lianggobgij group sold all shares to Tangtongwechakit family group and changed the company name to Buriram Sugar Co., Ltd. to conduct raw sugar and white sugar manufacturing business under “Double Keys” brand.
1990	<ul style="list-style-type: none"> Received approval to expand the factory 2nd time in October 10, 1990. The capacity increased to 7,700 TCD.
1991- 1994	<ul style="list-style-type: none"> Continuously, increased its registered paid-in capital to 200 million Baht. Received approval to increase the capacity to 8,991 TCD without increased equipment horsepower in October 1994.
1996	<ul style="list-style-type: none"> Established Buriram Sugarcane Research and Development Co., Ltd. (“BRD”), which is a subsidiary to support academic aspect and cane management to stabilize agricultural products and improve life quality of farmers. Received approval to increase the capacity to 12,000 TCD without increased equipment horse power in February 1996.
1997	<ul style="list-style-type: none"> The company started facing financial problems due to national economic crisis.
2001	<ul style="list-style-type: none"> BRD started using MIS (Management Information System) and GIS (Geographic Information System) to manage operation for the first time in July, 2001.

Year	Major Events
2003	<ul style="list-style-type: none"> Established Buriram Sugar Factory Co., Ltd. (“BSF”) to conduct sugar trade business.
2005	<ul style="list-style-type: none"> Established Buriram Energy Co., Ltd. (“BEC”) for support energy business in the future. The company started debt restructuring and entered business rehabilitation plan.
2009	<ul style="list-style-type: none"> Acquire approval to increase its capacity from 12,000 TCD to 17,000 TCD in September, 2009. BRD used drip irrigation system for the first time to regulate appropriate amount of water supply to sugarcane plot of member farmers for maximizing yield. BRD started using online plot system on October 1, 2009, to survey and monitor sugarcane plot of member farmers.
2010	<ul style="list-style-type: none"> Buriram Sugar Co., Ltd. made a future contract to sell its assets and business licenses to Buriram Sugar Factory Co., Ltd. in conformance to the business rehabilitation plan which has affected the company as follows: <ul style="list-style-type: none"> BRR has transferred its employees in department of production, procurement, marketing, and loan to BSF and its employees in department of material procurement, as well as fertilizer, medicine, and equipment loan to BRD for efficiency in managing personnel and experts. The department of operation and support (except department of loan) are under management of the company. The main reason to firstly transfer personnel to the subsidiaries because the company has not received approval to transfer the licenses from the Office of the Cane and Sugar Board. Since, period of cane crushed was near, the company had to transfer personnel first to be able to operate work uninterruptedly. BRR leaved the business rehabilitation plan.
2011	<ul style="list-style-type: none"> BRR sold its assets as well as sugar manufacturing and distribution license and factory business license to BSF. BRR changed its operating business to Holding company while BSF operates sugar manufacturing and distributing business. BEC have had equipped capacity 9.9 MW and made a trading contract with PEA amounted 8 MW and distributed remaining 1.9 MW to use in the factory and receive Investment Promotion Card no.2003(1)/2554

Year	Major Events
2011	<ul style="list-style-type: none"> Established Buriram Key Brand Fertilizer Co., Ltd. (KBF) to conduct organic and chemical fertilizer production and distribution business. Established Buriram Power Co., Ltd. (BPC) for support expansion of biomass electric energy business due to expansion of amount of cane sent to crush which increase the amount of bagasse correspondingly. BPC have had equipped capacity 9.9 MW and made a trading contract with PEA.
2012	<ul style="list-style-type: none"> BRR increased its registered paid-in capital to 320 million Baht. BEC started distributing electricity to PEA in May, 2012. KBF stated production and distribution of organic fertilizer and had production capacity 30,000 tons per annum. BRR has participated in “New share, proud of province” project, a project of the Securities and Exchange Commission, which allow the company to gain several privileges, for example, capital market workshop, advise from related organization, plague of honor, etc.
2013	<ul style="list-style-type: none"> Buriram Sugar Co., Ltd. has converted to Buriram Sugar Public Co., Ltd. BRR has increased its registered capital to 676,750,000 Baht to support IPO which consists of; <ul style="list-style-type: none"> Capital increase ordinary shares totaling 180,800,000 shares offered to existing shareholders at specified value price. Capital increase ordinary shares not exceeding 6,767,500 shares offered to directors, executives, and employees at 2.70 Baht per share. Capital increase ordinary shares not exceeding 169,182,500 shares offered to public. BEC participated in “Thai power love Thai energy” broadcast on Thai News Network on July 22, 2013. BRD had more 872 farmers and own more 8,153.92 Rai of cane growing area in production year 2012/2013 totaled 7,133 farmers and 129,516.73 Rai of cane growing area. BRD finished creating UAV for cane farm survey and initialized flight in January 2013. The UAV operating time is 20 minutes at altitude 300 meters.

Year	Major Events
2014	<ul style="list-style-type: none"> BSF increased its capacity to 17,000 TCD. BEC participated in “Electalon Passion Life” broadcast on Royal Thai Army Television station on August 4, 2014. BRD had more 2,754 farmers and own more 38,857.92 Rai of cane growing area in production year 2013/2014 totaled 9,877 farmers and 168,374.65 Rai of cane growing area. BRR has registered in The Stock Exchange of Thailand in November 6, 2014.
2015	<ul style="list-style-type: none"> Established Buriram Agro Energy Co., Ltd. (“BAE”), which is held 99.99 per cent of shareholding by BRR. The objectives are produce and sell ethanol. Recently is yet to start operations. Established Buriram Power Plus Co., Ltd. (“BPP”) for operating the biomass power plant. Currently, there has not started business operation because there is asking for license to produce electricity from the Energy Regulatory Commission (ERC). Established Buriram Super Power Co., Ltd. (“BSP”) which is held 99.99 per cent of shareholding by BEC for supporting the operation of the energy. Currently, there has not started business operation. The resolution of Extraordinary General Meeting of Shareholders No. 1/2015 approved the issuance and offering of debentures of 2,000 Million Baht to expand production capacity to 23,000 cane tons per day and / or general working capital of the company. On December 30, 2015, there was approved by the Office of the Cane and Sugar Board to establish sugar manufacturing factory in Chamni District, Buriram Province with production capacity of 20,000 tons per day. BRR was evaluated the 2015 Annual General Meeting of Shareholders and got 100 full scores by Thai Investors Association.
2016	<ul style="list-style-type: none"> On February 4, 2016, BRR was authorized by Office of the Cane and Sugar Board to establish one more sugar manufacturing factory in the area of Nonnarai District, Surin Province with production capacity of 20,000 tons per day.

Year	Major Events
2016	<ul style="list-style-type: none"> On March 11, 2016, BEC was amended the power purchase agreement with PEA from Adder system to Feed-in-Tariff system. On March 25, 2016, BRR committed to join the project of Thailand's Private Sector Collective Action against Corruption (CAC) BPP raised the registered and paid-up capital from 10 Million Baht to 160 Million Baht and adjust the organization chart within BSG in which BRR holds 99.99% of total shares instead of BEC. BRR was evaluated the 2016 Annual General Meeting of Shareholders and got 100 full scores by Thai Investors Association. On September 8, 2016, the Extraordinary General Meeting of Shareholders No.1/2016 had the resolution to approve the setup of Buriram Sugar Group Power Plant Infrastructure Fund or BRRGIF which is currently in the consideration to approve by Securities and Exchange Commission of Thailand (SEC). On October 5, 2016, BRR was awarded and certified the ability of innovation and innovative organization by National Innovation Agency of Thailand and Stock Exchange of Thailand. On October 28, 2016, Buriram Agro Energy Company Limited ("BAE") was changed the company name and its types of business which was the ethanol manufacturer and distributor to Buriram Sugar Capital Company Limited ("BSC") to operate the business of sugar manufacturer and distributor in the area of Nonnarai District, Surin Province according to the license authorized by Office of the Cane and Sugar Board on February 4, 2016. On October 28, 2016, Buriram Super Power Company Limited ("BSP") was changed the company name and its types of business which was biomass power plant to Chamni Sugar Factory Company Limited ("CSF") to operate the business of sugar manufacturer and distributor in the area of Chamni District, Buriram Province according to the license authorized by Office of the Cane and Sugar Board on December 30, 2015. BPP which is the third power plant of BSG was officially operated on December 1, 2016.

Year	Major Events
2016	<ul style="list-style-type: none"> BRR was evaluated the 2016 Annual Corporate Governance Report of Thai Listed Companies (CGR) and got the average scores by 74% which is in Good level. BSF increased the production capacity raised by 17,000 tons per day to 24,000 tons per day in order to support the cane crushing in the crop year of 2016/17. In the crop year of 2015/16, the amount of cane crushing was raised to 2.06 million tons with 11,587 contract farming and 189,382 Rai of sugarcane plantation increasingly.
2017	<ul style="list-style-type: none"> BRR raised its registered capital from 676,750,000 Baht to 812,100,000 Bath, and already paid-up 812,099,845 Baht on May 29, 2017 to facilitate the common stock dividend payment to the company's shareholders. The Securities and Exchange Commission approved to set up the Buriram Sugar Group Power Plant Infrastructure Fund (BRRGIF) on August 1, 2017, and offering of investment units totaling of 350 Million Units with the last offering price and par value per unit by 10.30 Baht. The amount of first offering of investment units was equivalent to 3,605 Million Bath, and such infrastructure fund trading in the Stock Exchange of Thailand was firstly operated on August 7, 2017. BRR was assessed as "Very Good" by 87% in 2017 enhanced from "Good" in the previous year under the project of the Assessment of Corporate Governance Report of Thai Listed Companies (CGR) in 2017 by Thai Institute of Directors (IOD). BRR's assessment scores were higher than the average scores of listed companies. BEC received the first runner-up award for the cogeneration project in the event of Thailand Energy Awards 2017 by the Department of Alternative Energy Development and Efficiency, the Ministry of Energy. BEC received the winner award on the cogeneration category at the 35th ASEAN Ministers on Energy Meeting (35 AMEM) in Philippines.
2018	<ul style="list-style-type: none"> In the crop year of 2017/18, the amount of cane crushing was raised to 3.15 million tons according to the company's goal and strategy with 11,780 contract farming and 239,523 Rai of sugarcane plantation increasingly. BRR decreased its registered capital from 812,100,000 Baht to the new registered capital of 812,099,845 Baht by decreasing the remaining shares from allocation of the additional

Year	Major Events
	<p>common stock to facilitate the stock dividend payment.</p> <ul style="list-style-type: none"> BRR was established Sugarcane Ecoware Company Limited (“SEW”) to manufacture packaging products, equipment, and appliance which are made from bagasse and other pulps. The products will be distributed both retail and wholesale, as well as import and export. SEW was increased the registered capital in amount of 75 million Baht in January 2018. BRR become a certified member of the Collective Action Coalition Against Corruption (CAC) on June 7, 2018. BRR was assessed as <i>“Excellent” with an average score of 93%</i>, under the project of the Assessment of Corporate Governance Report of Thai Listed Companies (CGR) in 2018 by Thai Institute of Directors (IOD), <i>that it’s score is higher than the average score of the overall listed companies.</i> BRR was evaluated the 2018 Annual General Meeting of Shareholders by Thai Investor Association and got 100 full scores. BRR was selected as a new securities list in the Stock Universe of Thai CG Funds as of August 1st, 2018 (ranked as one of the 172 listed companies) BPC received the Excellence Award for the bagasse-fired cogeneration power plant project in the event of Thailand Energy Awards 2018 by the Department of Alternative Energy Development and Efficiency, the Ministry of Energy. BPC received the first runner-up award on the cogeneration category at the 36th ASEAN Ministers on Energy Meeting (36 AMEM) in Singapore.

4. Business Goal (Strategy)

Buriram Sugar Group has set short-term and long-term business goals including the sustainable business goal according to the vision and mission as planned.

4.1 Short-term Goal

Create the Sufficiency of Crop Yield and Life Quality of Sugarcane Farmers

BSG set the goal to develop sugarcane crop yield in the next 2-3 crop years by supporting the sugarcane farming and expanding the plantation to approximately 250,000 Rai in order to increase the

crop yield to 3 Million tons including maintaining the standard quality of sugarcane to gain the highest yielding crops per Rai.

In the crop year of 2017/18, the amount of cane crushing was 3.15 million tons which is increased in approximately 940,000 tons compared with the crop year of 2016/17. For sugarcane plantation areas presently (crop year 2017/18), such area is totally measured at 239,523 rai, an increase of 54,411 rai compared with the crop year 2016/17 (the crop year 2016/17 had the plantation area by 185,112 rai). In 2017/18, there were contracted sugarcane farmers 11,780, which are increased from the previous year where there were 11,023 farmers. In addition, the Commercial Cane Sugar (“CCS.”) in 2017/18 of BSG is approximately 13.71%, and the sugar production is 119.88 kilograms per tons cane as expect.

Investment Expansion, Value Addition to Products and By-products Business Development

BSG planned to invest in the business of refined sugar manufacturer and distributor to create value-added products and support the increasing amount of sugar production by focusing on export sales for international industry. Afterwards, BRR’s Board of Directors’ Meeting No. 2/2018 on April 10, 2018 has approved to invest in the sugar refinery project with the maximum capacity of 1,200 tons/day. The machines used in this project is anticipated to be installed and operated for producing refined sugar within the crop year 2018/19. This project is valued at approximately 393.75 million Baht.

In term of the biomass power plant business, currently the company group has three plants in total namely, BEC, BPC and BPP. BPP sells the electricity to the sugar factory in order to support its increasing production capacity. However, if Provincial Electricity Authority (PEA) opens the negotiation for power purchase agreement, the company will discuss with PEA about this matter accordingly.

Furthermore, the company was established Sugarcane Ecoware Co., Ltd. (“SEW”) to manufacture packaging products, equipment, and appliance which are made from bagasse as main raw material and other pulps. This project is anticipated to be operated for producing within the third quarter of crop year 2018/19. This operation of such by-product business is in line with the increasing of bagasse quantity in amount of 900,000 tons per year due to the quantity of cane crushing was raised by 3 million tons. In addition, the demand of using biodegradable packaging product is likely increasing continuously due to the increasing of the amount of waste and environmental impacts.

4.2 Long-term Goal

The company aims to maintain the standard and the leading of management and quality control of sugarcane to produce sugar and byproducts in maximum efficiency since the company deeply understands that the raw material is the most major risk of the businesses therefore if it is well-managed and controlled to generate the stability as well as develop the system and business tools continuously, the company will be able to conduct business securely and sustainably.

According to the business of sugar manufacturing factory, the company has planned to expand the investment in the future to establish additional 2 sugar manufacturing plants (operate by CSF and BSC) with 20,000 tons of production capacity per plant in compliance with the license of factory establishment authorized by the Office of Cane and Sugar Cane Board. Currently, the CSF's project is under the process of making environmental impact assessment (EIA).

Furthermore, the company has studying ethanol and other products that are be able to increase revenue and create the business sustainability, including new business line which can create value added to BSG.

4.3 Sustainable Goal

In order to create the sustainability of business growth and development, the potential and capability to profitability is required; however, it is not the only factor that can completely create the business sustainability. The good governance and ethics, the responsibility for stakeholders, self-learning and development as well as the creative minds to develop the new innovations are also needed for sustainable business operation. As the results, BSG commits to develop these 5 sectors as follows:

1. Human Resource Development

Employees are very important human resources for the business development therefore BSG pays attention to every step in human resource management especially the recruitment in order to put the right man in the right job regarding to the process of recruitment from internal and external organization to find the applicants whom the qualifications are matching with the positions including follow the working results to evaluate work performance in accordance with the standards as specified. Furthermore, the company also regulates the employees to comply with the regulations of the company and the “Good Corporate Governance and Code of Conduct Handbook” in order to recognize the priority on stakeholders as well as generate self-awareness on the social responsibility by participating the relevant activities.

Additionally, BSG has set “The Policy of Human Resource Development”, which written and collected in a part of “Good Governance and Code of Conduct Handbook 3rd Edition” which such policy is effective since 2018.

The Policy of Human Resource Development

BSG provides the process to support the development of knowledge, skills and capabilities for directors, executives and employees as needed in work both in the present and in the future since BSG realizes that human resources are the most valuable assets in business operation therefore the concept of human resource development is suitable for long-term investment. BSG has developed human resources according to the policies and current situations with the knowledge and skills development and job features needed for employees through using the tools of human resources development which are coaching, knowledge sharing and project assignment in order to direct the employees to apply the knowledge in work and strengthen the organization as well as support the business growth accordingly.

BSG commits to developing and arranging the human resources development for the group of key persons through the method of consideration and selection the qualified employees who expertise in responsible tasks with the good personality and mindful behaviors including the good attitudes at work as well as the organization. The department of Human Resources and Administration has cooperated with original departments to conduct the Individual Development Plan (IDP) with the variety of learning concepts, for example, coaching, knowledge sharing, project assignment and internal and external training to acknowledge the precise data of human resource development through conducting the individual evaluation assessed by supervisors and/or the related persons and also following the performance results with supervisors 2 times/year

BSG prioritizes the development and preparation of human resources in order to support the business expansion therefore Individual Development Plan (IDP) and High Potential Development is determined through the selection of key persons in each department. The selected employees will have opportunities for learning and self-potential development, for example, learning work from different department in the organization (Rotation), etc. Furthermore, BSG supports the stage to show the abilities for employees as well by assigning the challenging projects such as innovation development to respond the business operation and productions to society. The chosen projects will be supported by BSG to apply the innovations created by employees in the real work practices in order to generate the benefits for the organization indeed.

2. Sugarcane Farmers Development

According to vision and missions of BSG which commits to generate the sufficiency of crop yield and life quality for farmer regarding to the business philosophy: **“Sugar Made in the Field”**, BSG aims to support and develop the skills of sugarcane farmers in term of the academic and practical knowledge management of sugarcane farming, from the plating process, crop cares to crop harvesting, including the knowledge to apply the up-to-dated technologies for sugarcane farming management. Furthermore, the company has organized the domestic and international company visit for sugarcane farmers in order to integrate the knowledge for further business and apply it for real work practices. The sugarcane farmer development is considered as the sustainable development which can increase the quality and crop yield per Rai for farmers and also minimize the risk from insufficiency of raw materials as well as generate the certain sufficiency of crop yield for BSG.

Additionally, BSG has initiated the concept of **“Sugarcane Agriculturist Businessmen”** for the purpose of inspiring and educating every farmer to plan and manage the sugarcane farming and other relevant processes appropriately with the practical and theoretical knowledge support from BSG closely in order to create the stability for the career of sugarcane farmers which provide the well returns and happiness including pass on experiences as well as inherit the business from generation to generation.

3. Research, Innovation and Technology Development

Throughout the period of business operation, BSG prioritizes the development of research, innovation and modern technology to develop, improve and strengthen the potentiality for BSG and sugarcane farmers. BSG has applied Online Farming Management System, Online Smart Farm System, Management Information System (MIS) and Geographic Information System (GIS) including other technology to support sugarcane planting in order to follow the individual sugarcane fields according to the academic principles and solve the problems real time. Furthermore, BSG has conducted the researches to prevent and eliminate the plant diseases and pests, for example, the outbreak control of plant diseases and insect infestation by using the method of biological control which is the culture of natural enemies such as parasitic wasps in order to control the outbreak of sugarcane borer and green muscardine fungus as well as eliminate stem boring grub.

Nevertheless, BSG keeps on developing business performance in order to enhance standard of the agricultural management on research, innovation and technology in accordance with Thailand 4.0 Policy of the government which focus on the economy empowered by the innovation.

4. Community and Environmental Development

BSG believes that the business development has to be collaborated with the development of community and environmental conservation at the same time.

Community Development: BSG has set the important mission to enhance the life quality of people in the community through the knowledge management and the career support; therefore, BSG has organized the sightseeing to develop and create the value-added products including advertise and purchase the local products to make as the souvenirs for special occasions so that the local people can earn a living and be proud of themselves. Moreover, BSG has developed and supported the education for children and the schools which are located in the surrounding area of BSG as well.

Environmental Development: BSG cares and protects the environment, starting from the internal management of factory which is namely production process and landscaping around the plant, and so on. Additionally, the activities about environmental conservation have been conducted with the great participation of local people, governmental agencies and employees of BSG in order to generate the unity and create the public consciousness on local environmental conservation.

5. Good Governance and Ethics in development and management

The commitment in organization sustainable development with good governance and ethics is one of important issues of BSG has prioritized and developed constantly. BSG has operated the business in accordance with transparency which is disclosure the information pursuant to the appropriate regulations as required to generate the fairness as well as the equality among shareholders. Furthermore, the internal audit system proceeded by independent internal and external auditors was conducted to generate the accuracy and transparency in the business operation.

In 2018, Buriram Sugar Public Company Limited (“BRR”) has become a certified member of the Collective Action Coalition Against Corruption (CAC) held on June 7, 2018. Hence, the company has conducted businesses in accordance with the policy and measures on anti-corruption continuously, as well as informed and communicated such matter to business partners and related parties, including organized in-house seminars and campaigns for the personnel in the organization. Furthermore, the company has opened the channel for receiving the complaint and suggestion (Whistleblowing) for the complaint from stakeholders through the suggestions box and postage which will be sent directly to the Chairman of Corporate Governance Committee. However, there was no any whistleblowing issue or suggestion received from stakeholders in the previous year. Additionally, BSG reviewed the Good Corporate Governance and Code of Conduct Handbook 2nd Edition effectively in 2018, and afterwards the handbook

was reviewed and edited again in February 2019, thus the third edition was published on the company's website.

On account of overseeing and monitoring the compliance with the good corporate governance, this led to the result of being assessed as “Excellent” with the average score of 93% which is higher than the average score of the overall listed companies of the Stock Exchange of Thailand under the project of the Assessment of Corporate Governance Report of Thai Listed Companies (CGR) in 2018 by Thai Institute of Directors (IOD).

2. Nature of Business

(1) Revenue Structure of Buriram Sugar Group

Revenue structure of the company and its subsidiaries are as follows:

Types of Revenue	Company/ Subsidiaries	2016		2017		2018	
		Million Baht	%	Million Baht	%	Million Baht	%
1. Revenue from Sugar and Molasses Sales							
1.1 Revenue from Domestic Sales of Brown Sugar	BSF	1,162.02	24.80	1,144.94	19.42	658.77	11.27
1.2 Revenue from International Sales of White Sugar	BSF	53.29	1.14	6.67	0.11	-	-
1.3 Revenue from International Sales of Raw Sugar	BSF	2,230.29	47.60	3,114.99	52.83	3,207.49	54.88
1.4 Revenue from Domestic Sales of Molasses	BSF	283.60	6.05	437.44	7.42	499.28	8.54
Total Revenue from Sugar and Molasses Sales		3,729.19	79.59	4,704.04	79.79	4,365.54	74.69
2. Revenue from Other Related Business							
2.1 Revenue from Electricity Sales	BEC / BPC	383.81	8.19	492.14	8.35	556.57	9.52
2.2 Revenue from Fertilizer Sales	BPP/ KBF	328.83	7.02	335.51	5.69	370.71	6.35
2.3 Revenue from Other Goods Sold and Services Rendered	BSF / BRD	137.38	2.93	208.75	3.54	263.15	4.50
Total Revenue from Other Related Businesses		850.02	18.14	1,036.40	17.58	1,190.43	20.37
3. Other Revenues*	BRR / BSF / BRD / BEC / BPC	95.22	2.03	151.72	2.57	253.05	4.33
4. Profit (Loss) from Exchange Rate	BSF	11.09	0.24	3.59	0.06	35.79	0.61
Total Revenue		4,685.52	100.00	5,895.76	100.00	5,844.81	100.00

Remark: *Other revenues are namely the profits on disposal of assets, bad debt recovery, compensation of sugar production and distribution, interest received and etc.

(2) The Business of Sugar Manufacturer and Distributor

Operated by Buriram Sugar Factory Company Limited (“BSF”)

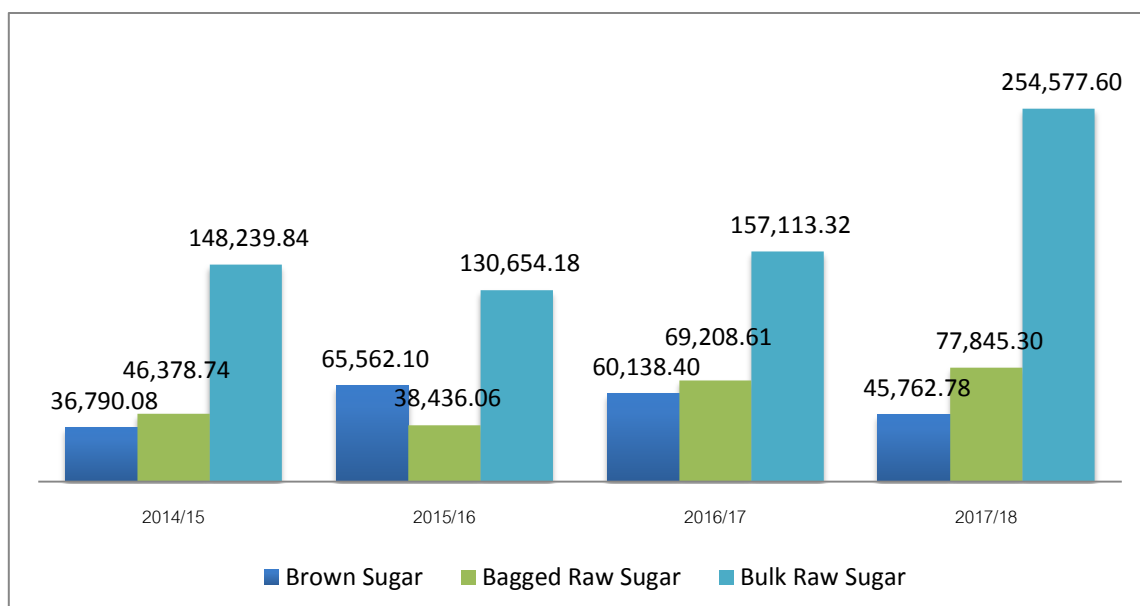
BSF is the first sugar mill of Buriram Sugar Group (“BSG”) which is located in the local community for approximately 5 decades. Throughout these years, BSF commits to produce quality sugar and safety products for consumers as well as create customer satisfaction. Therefore, BSF has developed the quality process of sugar production and distribution and received the international standard certificates which were, for example, “ISO 9001: 2015” certificate, “QMS” (Quality Management System) for quality management standard system, “GMP” (Good Manufacturing Practice) for quality production standard, “HACCP” for analysis and critical control points and “Halal” which ensures the products are permissible to consume for Muslims including the production management standard that has less environmental impacts, for instance, “Carbon Footprint” which certifies the reduction of greenhouse gas emissions caused by the production process and “Water Footprint” which certifies the sustainable water management.

2.1 Product and Service

BSF can produce sugar classified by type and purity of sugar into 2 types which are brown sugar and raw sugar. However, raw sugar can be classified into 2 categories which are bulk raw sugar and bagged raw sugar. In addition, sugar production process can produce byproducts which can be distributed and add more values in products such as molasses, bagasse, filter cake and steam.

BSF’s Sugar Production Volume Classified by Types of Sugar

Unit: Metric Ton



Raw Sugar

Raw sugar is the sugar from the initial production process by boiling and crystallizing sugarcane. Raw sugar has a color value or ICUMSA higher than 1,500. It is dark brown, and has a high dirt index and a low purity index. The crystals of this sugar are bright, light-to-dark brown, and contain medium moisture. Raw sugar crystals tend to stick together and not crumbly. This type of sugar cannot be consumed until it is reprocessed or purified, turning into white sugar or refined sugar. Transfer is done in bulk without the use of sacks to export.

In addition, very high polarization sugar (VHP) or bagged VHP is partly purified therefore its color is yellow-tinted brown with ICUMSA 1,000 - 1,500. It can be consumed without any further process needed. BSF packs high polarization sugar in bags or sacks before exporting overseas by dividing into 2 sizes which are 50 kilograms and 15 kilograms.

Brown Sugar

Brown sugar is purified sugar without processing its color value therefore it becomes gold with the ICUMSA unit not more than 1,000 in general. The company produces brown sugar with 800-1,000 ICUMSA Unit (known as sugar grade 3 or golden brown sugar) and not more than 0.1% of moisture in order to sell to distributors in local community nearby Buriram province and up-country mostly in Northeastern, Southern and Bangkok metropolis area including modern trade and food service channel as well.

BSF Sugar Classified by ICUMSA, Polarization and Moisture

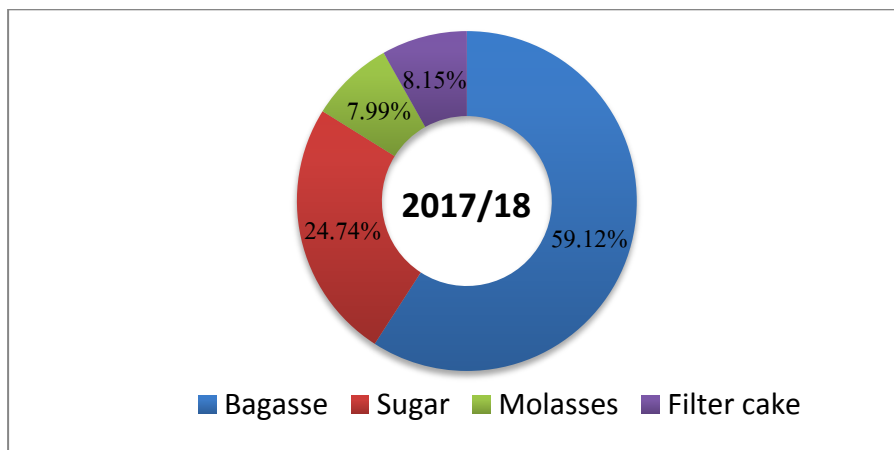
Products	ICUMSA Unit	Polarization (%)	Moisture (%)
Bulk Raw Sugar	≥1,001	≥95.00	≤ 0.6
Very high polarization sugar (VHP)	1,000 – 1,500	99.20 - 99.49	≤ 0.2
Brown Sugar	800 – 1,000	≥ 99.20	≤ 0.1
Premium Sugar	≥ 1,000	≥ 99.20	≤ 0.2

By-products from Sugar Production Process

In addition to sugar from manufacturing process, the quantity of cane crushing in amount of 14,000 tons generally produces 1,600 tons of sugar and also byproducts from sugar production process which produces 600 tons of molasses, 3,800 tons of bagasse and 600 tons of filter cake.

In 2017/18 crop year, the quantity of cane crushing was approximately 3.15 million tons which could produce 378,185.67 tons of sugar and also byproducts from sugar production process namely 122,144.49 tons of molasses, 903,607.57 tons of bagasse and 124,507.70 tons of filter cake.

Proportion of Sugar and By-products



Hence, the physical characteristics and utility of by-products are as follows:

■ **Molasses**

Molasses is one of by-products which is dark and sweet syrup left over from the centrifuge process. The composition of molasses is mostly not crystallized sucrose. According to sugar production process, it can produce 38 - 42 kilograms of molasses per 1 ton of cane crushing. Nevertheless, molasses can be used as material for food and beverage production such as, liquor, yeast, Monosodium Glutamate (MSG), animal feeds, vinegar, soy sauce and dressing. Currently, BSF sells molasses to food and beverage industry.

■ **Bagasse**

Bagasse is the remained fibrous residues after sugarcane stalks are crushed to extract their juice. It contains carbon, hydrogen, oxygen, and nitrogen and can be used as an effective biofuel for electricity generation after being dried by the sun. Aside from biofuel, it can also be used for making packaging and utensils from bagasse, fiber board, particle board, or cellulose fibers production. Currently, BSF sells bagasse to power plant business group in BSG and purchases the electricity which is left from being purchased by Provincial Electricity Authority (“PEA”) to use in sugar manufacturing factory.

■ **Filter cake**

Sugarcane filter cake (press mud) is a by-product from sugarcane juice filtration. Filter cake is adhered with sugar composing of various nutrients such as, protein and other minerals which can be used for soil adjustment since the layer of filter cake protects the soil against erosion, decrease the soil pH or improves water retention, ameliorates physical and biological soil properties and the important source of plant nutrients including the animal food or biochemical gas production. BSF currently sells filter cake to Key Brand Fertilizer Company Limited (“KBF”), one of the subsidiaries of BSG to use as the main raw material in fertilizer production and distributes to Buriram Sugarcane Research and Development Company Limited (“BRD”) in order to support sugarcane farmers in supportive areas to have the quality fertilizer for planting which generates the increase of crop yield per Rai.

■ **Steam**

Steam is one of by-products from sugar production which can be utilized to propel machineries and generate electricity. The maximum electricity generation capacity of BSF is 18.5 Megawatts; however, BSF currently generates 14.5–15 Megawatts in average in order to utilize in the sugar factory. The additional generation helps reduce electricity cost and manage existing resources for profit maximization as well as efficiency to the organization.

2.2 Future Projects

In the end of 2015 and 2016, BSG had two licenses issued by Office of Cane and Sugar Board (“OCSB”) to establish 2 sugar manufacturing factories in Chamni district, Buriram province and Non-narai district, Surin province with the cane crushing capacity of 20,000 tons per day for each factory. These two factories were registered as Chamni Sugar Factory Company Limited (“CSF”) which is under the process of the Environmental Impact Assessment (EIA). (originally Buriram Super Power Company Limited) and Buriram Sugar Capital Company Limited (originally Buriram Agro Energy Company Limited) respectively. Furthermore, the project of refined sugar manufacturing factory in order to create the value-added products, which is expected to start the production of refined sugar on third quarter of 2019.

2.3 Market and Competition

➤ **Competitive Strategy**

BSG has experiences in sugar production and distribution more than 56 years. In order to strengthen the BSG’s businesses, Buriram Sugarcane Research and Development Company Limited (“BRD”) is established for raw materials management by promoting and supporting sugarcane farmers to

ensure the business competitive advantage. BSG has determined the strategy upon goal-oriented promotion leading to achievement together with the development of human resources and sugarcane farmers. In addition, there are new research and development on sugarcane quality for higher output, experiment and examination of sugarcane variety for productivity, pest and disease resistance, productivity of ratoon sugarcane suitable for the plantation areas in Buriram, and management of pest and plant disease with bio method. These have been extended to sugarcane farmers, and establishing their network to manage the sugarcane pest problem. Moreover, BSG has developed agricultural equipment to reduce expenses and workforce cost, promoted and support water use for increasing productivity and promoted sugarcane plantation by means of information technology to manage the sugarcane farm system on the contract farming. The agriculturist network is strengthened with the support and promotion upon the knowledge to enhance skills, experiences, development and products in every dimension, which can be applied for themselves, leads to sustainable development and sugarcane farmers' good quality of life, and in accordance with BSG's vision of business operation stating that **"Building the Crop Yield Stability and Life Quality of Sugarcane Farmers"**. Such various operations are summarized as follow:

1. Sugarcane Growing Promotion on Contract Farming

Contract Farming

The company has contracted with sugarcane farmers with the contract farming system in order to support the factors of production and advance credits to ensure the stability of raw materials and output. The company developed application program for management of production activities on individual basis for measuring land areas with latitude and longitude coordinates of sugarcane farms to access the information about sugarcane farming, field-by-field management for generating the maximum output. Such system is linked with the contract farming which records sugarcane farming activities, information of sugarcane farms, farm codes, land areas, nature of sugarcane farms, types of sugarcane, factors of production, financial support and so on, helping for consideration on such operations.

Supportive Areas

Most of supportive areas for growing sugarcane are located 40-kilometer radius around the manufacturer. Most of the areas were rice plantations but provided less output (highland). The agriculturalist have adjusted their ways of life and applied the land for sugarcane plantation instead. Such land is suitable for growing sugarcane with promotion in contract farming form that is monitoring and providing factors of production at each sugarcane farm. As the result, such operations have been

40-kilometer radius sugarcane fields around the manufacturer

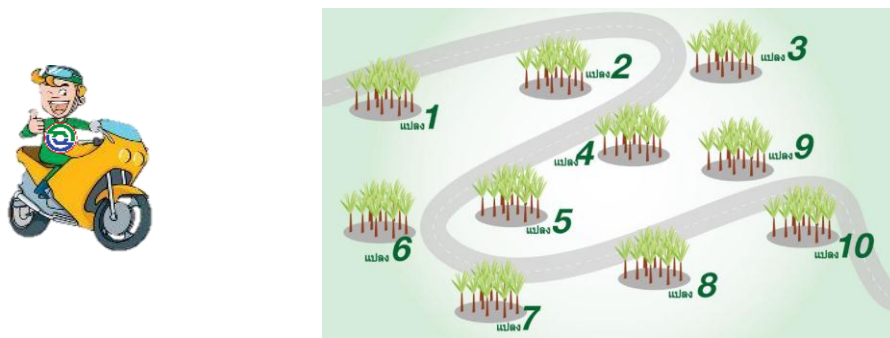


Items	Crop Year					
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Contract Farming (Persons)	10,777	11,587	11,023	11,780	11,369	11,657
Sugarcane Fields (Rai)	180,046.23	189,381.90	185,112.91	239,523	240,000	240,000
Cane Crushed (Tons)	1,951,247.12	2,060,649.65	2,212,736.63	3,154,586.44	2,900,000	3,100,000
CCS. (%)	13.48	13.45	13.18	13.71	13.70	13.80
Sugar Yield	118.60	117.06	112.59	119.88	120.00	122.00

- Crop Year 2019/20 is the target.

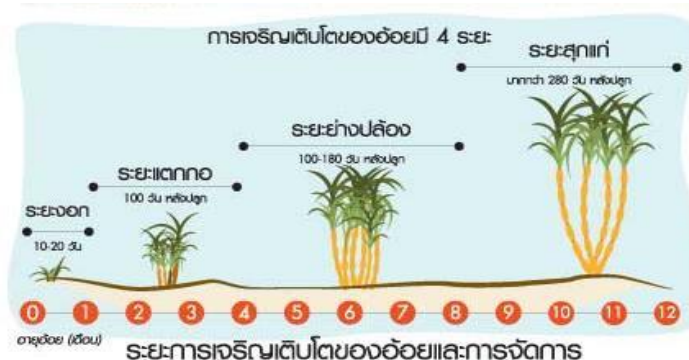
The company has selected personnel with regard to producing sugarcanes namely “Specialist Increases Production” (“Specialist”) providing suggestions to sugarcane farmers for managing the factors of production and sugarcane output from the start of planting to harvesting. Such all steps are equally important. Moreover, the extension offices have been established in more than 16 promotion zones

spreading around the plantation areas for a close relationship with sugarcane farmers in every area. The promotion zones are the center of providing technological knowledge and studying the sugarcane production, monitoring the agricultural activities as considered one of the operational procedures in order to enable the company to access the information status of sugarcane plantation, sugarcane growth level in order to take rectified immediately with the along-the-route examination conducted by the company's staff to ensure that every plantation is supervised completely, and there is an exact supervisory schedule. While checking the sugarcane plantation, the Specialist will record the plantation status via application and updates on the information server, and then conducts real-time evaluation of every individual provided to the management and related persons for acknowledgment.



3. Promotion during Growth Phase

There are 4 growth phases of sugarcanes. Each phase needs different factors of production and management to ensure the effective management and the best output. The company has monitored and promoted in line with the growing stages of sugarcanes such as supervising the germination percent during the period of 45 days, counting sugarcane tillers on the tillering phase of 4-5 months, and evaluating the output and sugarcane quality on the phase of 11-12 months. Moreover, the company has to determine activities for providing suggestions, auditing, and monitoring the operations of sugarcane farmers relating to sugarcane treatment such as applying fertilizers, and pest control, etc. This makes sugarcane farmers understand the sugarcane stalk for proper management, understand the nature and need in each phase of sugarcane growing, and enables them to check or monitor procedures performed, and evaluate the products and quality, as well as the sugarcane farmers have to understand the sugarcane's growth phase for further management as targeted.



4. Management System for Sugarcane Farmers' Sustainable Goals

The company has prioritized the raw materials management because the quantity and quality of raw materials can provide operating performance toward sugarcane farmers including the sugar factory as the business partner. Thus, the procurement of raw materials sufficient for the factory's production capacity is important. Regarding the sugarcane plantation of 40 kilometers around the factory, the company has set up the promotion zones for sustainable creation toward sugarcane farmers and the factory because such distance can be controlled for providing services and reducing transportation expenses. Such promotion zones are the center for development of production and quality and sustainability in accordance with the company's mission to enhance the productivity of sugarcane farmers living in the area of 40 kilometers around the factory, and good quality based on academic knowledge and their responsibility. In addition, the company has developed the management system to ensure the stability of output and profit of sugarcane farmers, the innovation to enhance the competency of the organization and sugarcane farmers, promoted the education of its personnel and sugarcane farmers for mutual sustainable growth. Moreover, sugarcane farmers are able to develop their production as targeted, which is necessary to determine procedures to implement the strategy and guidelines, clear working time frame for personnel and sugarcane farmers for taking actions in the same direction. Thus, the Buriram model has been established for such operations as follows:

- Sugar made in the fields
- Building the network "Strong Agriculturist -Businessman Network"
- Using GIS (Geographic Information System) and MIS (Management Information System) to enhance the productivity
- Monitoring individual sugarcane plantation for earning the maximum value from resources at each area (x, y Coordinate).
- Developing and enhancing the human resources and agri-businessmen for further performing duties with knowledge by specifying the consequences and mutual action plans

Regarding the human resources development, this is developed for both company's employees and sugarcane farmers to ensure the enhancement of productivity for the same goal orientation.

5. Establishment of Good Relationship and Engagement with Sugarcane Farmers

With the commitment to stability and development of sugarcane farmers' quality of life. In 2018, the company has initiated the concept of changing sugarcane farmers into "agriculturist -businessmen". Such concept paves the way to develop the sugarcane production, sugarcane farmers to be agriculturist -businessmen who are the expert of management, recognition of cost and expenses, proper operations, and can improve their occupation. Thus, this

is to make such career stable, provide earnings and happiness, which is proud and inherit from generation to generation.

In addition, the company has various communication channels for providing news and useful activities for sugarcane farmers such as FM 92.0 MHz radio, social network: Facebook, leaflet, journals and so on.



6. Research and Development for Capability of Sugarcane Production

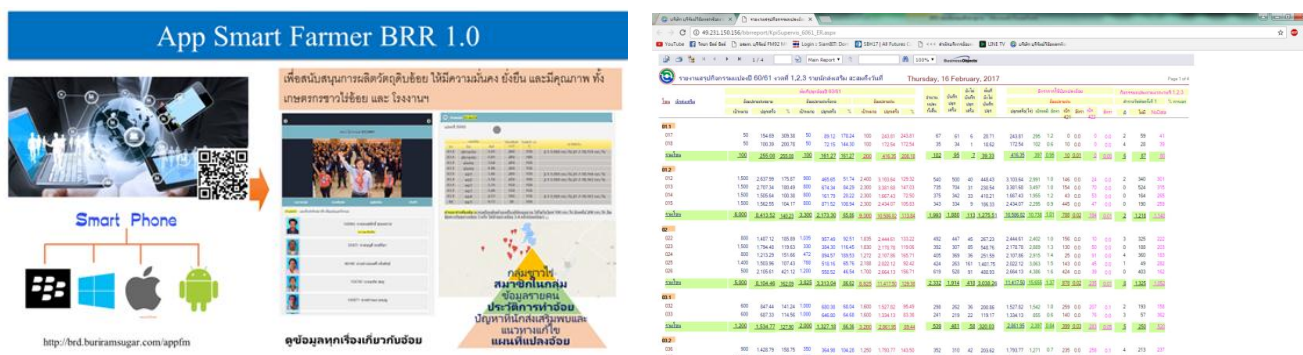
The company has focused on establishing the organizational excellence on academic knowledge and management to ensure the stability of production and sugarcane farmers' living condition. Such production is conducted based on academic issues with the result of every kinds of learning processes such as trainings, coaching, demonstration, as well as activities, seminars, workshops, in order to cultivate the collaborative awareness, determine the same orientation, and build stability of raw materials. Moreover, the company has planned the human resources development of its personnel and sugarcane farmers with theoretical knowledge and practical skill, including domestic and overseas study visits to apply knowledge and technical methods to develop the capability of sugarcane production.



6.1 Use of Information System for Sugarcane Field Management

The company has developed the management system equipped with MIS (Management Information System) and GIS (Geographic Information System) to create online content, activity recording via application program which shows real-time information to ensure the effective sugarcane production management of sugarcane farmers. Moreover, cost and resources at each coordinate can be used and operated properly. There are more than 10,000 sugarcane fields which are monitored and recorded about status or other procedures at every 15 days. Advance of factors of production and procedures are all recorded on MIS to evaluate such information to provide the status of plantation for decision making on individual sugarcane field management as planned.

MIS (Management Information System)



6.2 Experiment and Selection for Appropriate Sugarcane Varieties

The research center has been established to experiment and test sugarcane varieties to enhance knowledge and discover the sugarcane varieties which provide high output and sweetness, and suitable for Buriram plantation area. The sugarcane plantation areas are different according to the landscape types, which is necessary to select proper sugarcane varieties by taking soil condition and upland and lowland into account, leading to the consequential output. Moreover, the development of production, selection and experiment of sugarcane varieties must be conducted together with other approaches to increase production based on academic knowledge in accordance with the company's development policy.

The company has joined the network of sugarcane production and its variety testing, such as Kasetsart University, Khon Kaen University and Department of Agriculture; Ministry of Agriculture and Cooperatives. The company has aimed to apply new sugarcane varieties in every 4-5 years.

6.3 Production Improvement Research and Development

The company has researched to seek the factors generating the increase of sugarcane output by experimenting to find out the proper methods and guidelines for higher and sustainable production, and good sugarcane farmers' living. Moreover, the company has developed innovations with new approaches, experiment, including testing and research to improve productivity and test new products to increase such production prior provide to the sugarcane farmers.

6.4 Soil and Fertilizer Development

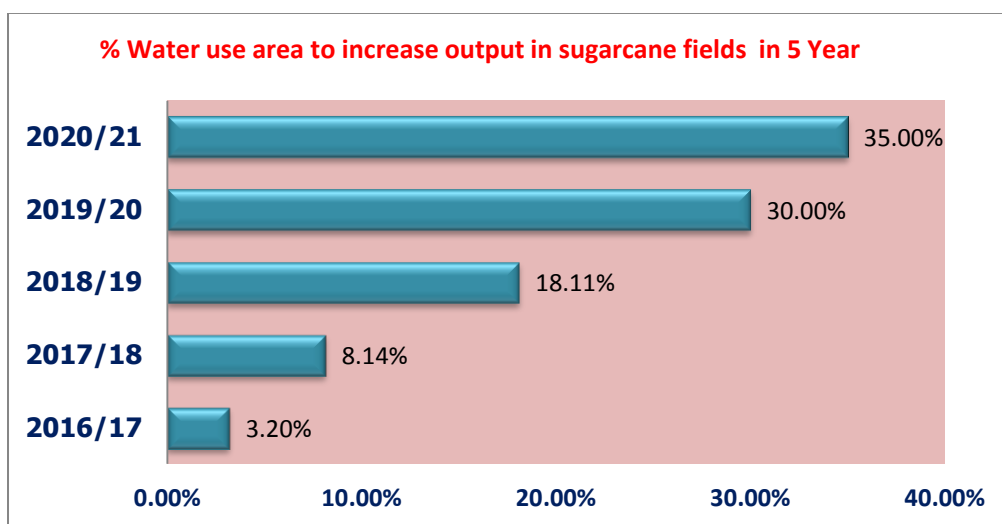
The development of soil quality and soil balance is the main factor and foundation of sugarcane production because soil is the material to cultivate sugarcanes, and sugarcane roots can anchor into the soil which contains nutrients. Hence, the company has developed the fertilizer formula suitable for soil condition for planting sugarcanes with the soil analysis information gathered from farmer representative of each plantation area in order to formulate the proper fertilizer for land of Buriram province. There is also the promotion of fertilizer utilization as targeted with individual plantation area's output because the soil qualification in each sugarcane field is different, which is to be managed on different manner.

Sugarcane farmers can collect example soils for analysis themselves based on trainings such as pH measurement, separation of soil contents, soil group and so on. The remaining example soils are submitted to the lab of sugarcane office in order to find the proper nutrients, and evaluate the analysis results for production increase in each sugarcane field as targeted. Such results are considered as information base to be further assessed on GIS to ensure the precise and effective management at large.

Moreover, the application system has been developed to be disseminated to sugarcane farmers. Then, the sugarcane farmers can use such expert equipment for making decisions as well. Consequently, Key Brand Fertilizers Co., Ltd. can produce fertilizers for sugarcane farmer. Currently, there are 2 fertilizer formulas: 18-8-18 and 22-8-18, and such knowledge has been developed and disseminated to sugarcane farmers to recognize the importance of soil development by promoted using organic fertilizers together with chemical fertilizers.

6.5 Water Irrigation System Development and Promotion of Water Use in Sugar Fields

The water use in sugar fields has been developed in every form of management. The farmer use water for production increases every year, and such areas use water more than 18.11% in 2018/19. The company also considers the water is the top priority factor to improve the production for sugarcane farmers because the sugarcane plantation areas in Buriram have no irrigation system; most of the cultivation relies on rainwater only. This is not able to increase the production as planned, so there has to be the promotion and development for water utilization of sugarcane farmers to be appropriate for the areas and water resources, as well as the company provides low-interest loans of the Office of the Cane and Sugar Board, Ministry of Industry. This is an additional option and supports for factors of production, equipment of water system, including underwater drilling for sugarcane farmers who have no their own water resources or ponds in order to solve the drought and increase the production without waiting for rain, which leads to sugarcane production increasing every year.

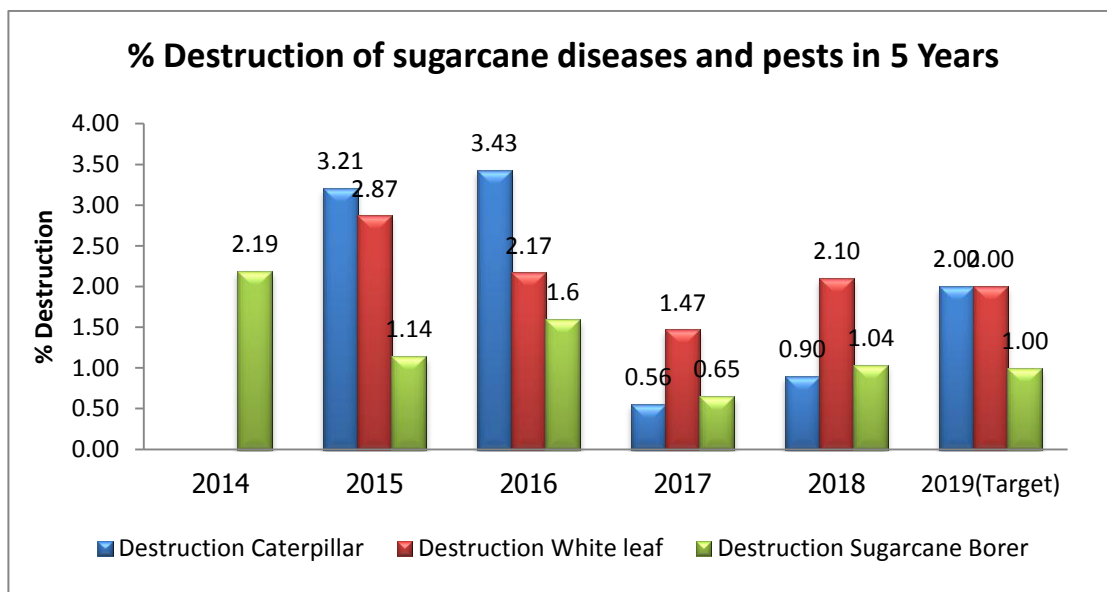


6.6 Management of Diseases and Pests

In order to achieve the development to increase sugarcane production, the issue of diseases and pests must be well controlled and managed and in due time. This is considered as one of factors affecting the quantity and quality of production. In each year, such sugarcane diseases and pests occur differently according to climate condition and period of time. Therefore, the company has prepared for such matter by establishing the unit for controlling and managing diseases and pests based on the integrated approaches and focusing on discovery to acknowledge the situation and asses such potential damages and ruins. Including analyze the conditions and severity trend of the sugarcane diseases and pests by using survey and climate condition data and preventive and control measures have been conducted as

appropriate, implementing biological control by using parasite to cease the spreading such pests such as using cotesia flavipes to get rid of caterpillars, raising fungus *Metarhizium anisopliae* against longhorn beetles, spreading *Trichoderma* sp. to prevent and eliminate the root rot. Moreover, the company has provided the sugarcane farmers with trainings and creates farmers' participation by built the strong sugarcane farmer network to produce and expand beneficial fungus and natural pests. This shall make the sugarcane farmers recognize the importance of plant protection issue, proper management of their own plantations, and manage the sugarcane plantation correctly and appropriately

Useful Pests and Fungus to Protect and Eliminate Harmful Pests



Participation of Strong Sugarcane Farmer Network to Entire Harmful Pests Management



6.7 Technology Transfer

The company has focused on increasing sugarcane production for sugarcane farmers by means of academic knowledge promotion. Thus, it is significant to transfer new technology and innovation for producing qualified sugarcane and enhancing sugarcane farmers' competency. So that knowledge transferring and new technologies must have effective and appropriate tools and process. In 2018, there are the processes as follows;

6.7.1 Trainings for Increase of Production

➤ Human Resources Development

The company's personnel are the key mechanism to the achievement of sugarcane production with their support and development because they perform duties supervising and monitoring from the stage of sugarcane planting to sugarcane treatment. In order to enhance sugarcane farmers' competency, the company has to provide both sugarcane farmers and its personnel with knowledge and skills relating to sugarcane production. Hence, the personnel can provide suggestions and transfer knowledge to sugarcane farmers. Regarding the increase of knowledge and skills upon the sugarcane production, the company has operated such trainings for personnel such as sugarcane basis characteristics and "We Can Do 30 Tons/Rai" trainings project which helps sugarcane farmer to conduct their own business with goal.

Trainings for Human Resources Development



➤ **Enhancement of Sugarcane Farmers' Competency**

Regarding to enhancement of sugarcane farmers' competency, the company has established the strong sugarcane farmer network in order to provide them with skills, management, development of production increment, and accurate knowledge and understandings for sugarcane production. Moreover, sugarcane farmers have received new knowledge and innovation on a regular basis, which includes various kinds of development practices such as trainings and demonstrations for increasing the production, "Field Day" activity which enables them to understand the actual production process as well as new innovative approaches.

Technology Knowledge on Field day



In addition, the company has also enhanced the sugarcane farmers' competency with other forms of trainings such as sugarcane leadership, and sugarcane harvesting in order to instill good attitude between the company and sugarcane farmers. This has cultivated the responsible awareness to recognize the importance of their duties and assignments, which leads to the quality and quantity of sugarcane production as targeted.

Sugarcane Leadership Training in 2018



Sugarcane Harvesting Development Training in 2018



6.7.2 Campaign for Sugarcane Development

The company has developed the sugarcane production and procedures, as well as harvesting, which is started from selecting sugarcane varieties providing high sweetness on the harvesting process according to growth phase and types of sugarcanes, harvesting at a proper time in line with the maturity levels and types (sugarcane crushing seasons) to let sugarcanes increase in sucrose content and high quality. Moreover, the company has placed the importance on harvesting the qualified sugarcanes by providing accurate knowledge and understandings of such harvesting procedures, campaigns, and public relations to encourage the sugarcane farmers to comply with. The company also gives awards to sugarcane farmers for the return of taking this importance into account, dedication, and collaboration for the sugarcane development. In addition, the sugarcane farmers are notified the negative consequence of low-qualified sugarcane production, and during harvesting season the sugarcane leaders, harvesters, and those who control harvesting machines are notified with such knowledge as well.



6.8 Public Relations

In addition to various activities to develop and promote the sugarcane production, the company also designates the printing media for public relations, presentation for understanding of activities, and knowledge media in line with the production policy, as well as such media is conducted with academic matter in order to increase knowledge and understandings upon sugarcane production in every dimension.





Thus, BSF has improved sugarcane rails, and currently using dual rails where more boiling pots were added to support more production. To preserve the sweetness and scent of sugarcanes which are the unique traits of BRR sugar, BSF focuses on quality of sugarcanes supplied to the manufacturer by using only fresh sugarcanes to produce sugar. They also prioritize on machinery maintenance to continuously produce sugar in due time. This is another factor that makes BSF’s sugar production come out in higher quality in comparison with those of average industry.

7. Maximizing Product Value

The Company’s group is aiming to produce the white sugar and refined sugar for oversea distribution. As of which, the price of white sugar in global market is higher than the raw sugar, and the company also planned for domestic distribution through dealership, modern retailer, Industrial clients group, and food and beverage shops. It also aims to develop the products and packaging which response to the consumer’s needs – by planning to bring the natural brown sugar and white sugar into 25 kilogram bag under trademark “**Double Key**” selling through dealers and retails shop; including bringing the exclusive-selected natural cane sugar into bottles packaging under trademark “**BRUM**” for the consumers group of food and beverage shop, by distributing the products through dealers and modern retailer and wholesales store in every region throughout the country.

8. Customer Satisfaction and Relations

The Company Group focuses on developing the quality service, for responding to the targeted client’s needs, and open for opinions and complaint from the clients in order to constantly improve the quality of products and services which are the significant part for creating satisfaction and good client relations among the group of clients. In addition, this can help encourage the

progressive sales as a building of client's base in long-term; and it will also create the brand loyalty which can maintain the client base and the proportion of market share, especially the high-competitive market in the present time.

➤ Distribution Channel and Target Customer

The sugar distribution channel which is both domestic and oversea has designated the targeted customers and proportion of the types of products in each distribution channel. The proportions of revenue from sugar selling in domestic and overseas of 2016-2018 are as below

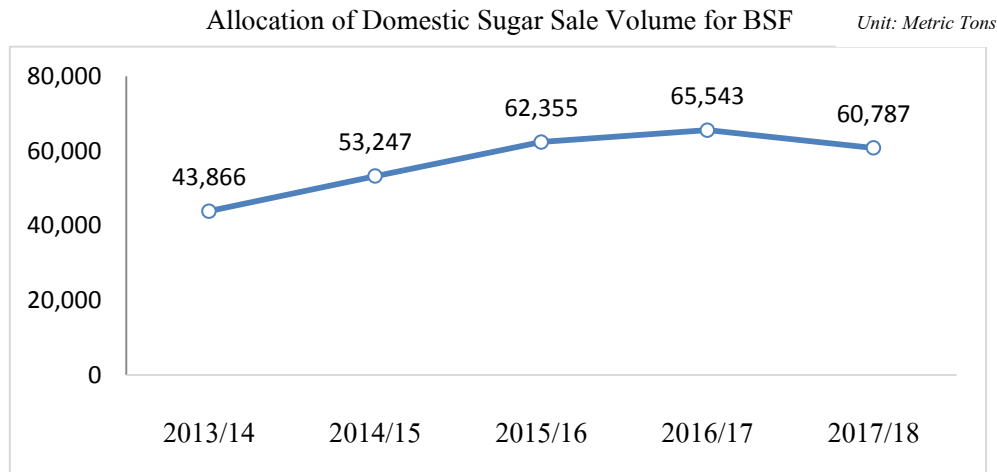
Revenues of Domestic Sugar Sales and Export Sales

	2016		2017		2018	
	Million Baht	%	Million Baht	%	Million Baht	%
<u>Domestic Sales</u>						
Brown Sugar	1,162.02	24.80	1,144.94	19.42	658.77	11.27
<u>Export Sales</u>						
White Sugar	53.29	1.14	6.67	0.11	-	-
Raw Sugar	2,230.29	47.60	3,114.99	52.83	3,207.49	54.88
Total	3,445.60	73.54	4,266.60	72.36	3,866.26	66.15

1. Domestic Sales

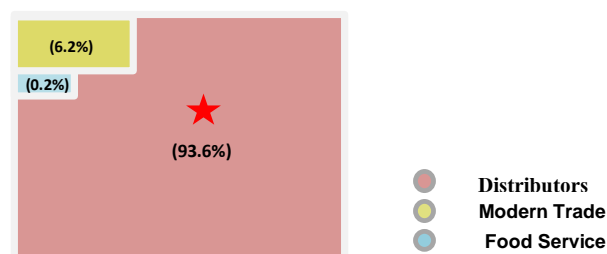
The domestic sugar distribution – crop year of 2017/2018 with approximated storage of 2,600,000 tons or 26 million sacks throughout the country. Whereas, Buriram Sugar Factory Co., Ltd. (“BSF”) has the domestic sugar distribution in amount of 60,787 tons or 607,870 sacks; and, on January 15th, 2018, there was the announcement of sugar selling price floating in respect of domestic consumption, and cancellation of domestic sugar distribution quota system or Quota A. which affected the domestic sugar selling price to drop as per the sugar price in global market during such period.

The domestic sugar distribution from January – December 2018 is 2,498,517 tons or 24,985,170 sacks; and after compared it to 2017 which had the domestic distribution in amount of 2,603,351 tons or 26,033,510 sacks. As of which, the amount of domestic sugar distribution or consumption in 2018 decreased 104,833 tons or 1,048,330 sacks or equivalent to 4% when compared to 2017 during the same period.



Buriram Sugar Factory Co., Ltd. has determined the domestic distribution plan of white sugar by distribute it through various channels; the distributors (Yee-Pua) both big and small in each region, or importing the products into distribution for Modern Trade which have branches throughout the country, including distributing the products to food and beverage shops under the trademark “Double Key” that have various sizes of packaging.

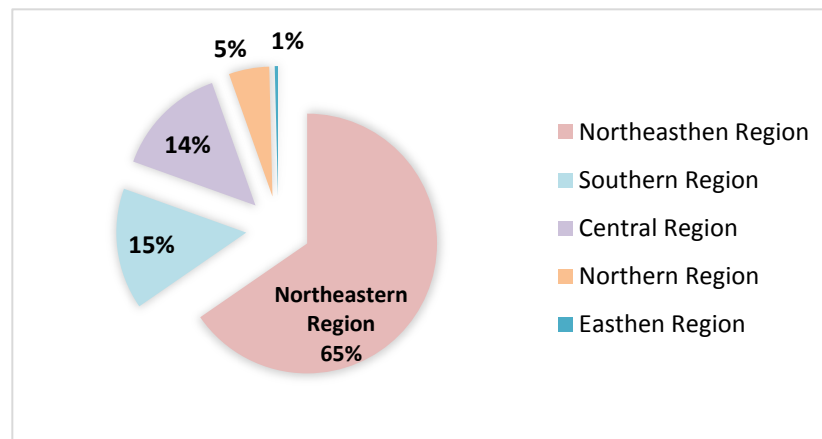
Proportion of domestic sugar sale volume in each distribution channel in 2018



1.1 Distributors (Yee-Pua)

Natural Brown sugar; trademark "Double Key" is natural cane sugar consisting of luscious sweet flavor as the unique feature of the product. As of which, the distributors (Yee-Pua) both big and small in each region will distribute the product to the retails, industrial factory and consumers. The method of distributor's (Yee-Pua) operation is passed-on from generation to generation with long-lasting business partnership with the manufacturers. Therefore, they are significant factor as the primary channel for distributing the products to customers throughout the country.

Distributor classification by regions in 2018



1.2 Modern Trade

The Modern Trade Market is another channel for products distribution directly to the customers through the trademark “Double Key”, and it also can promote the recognition of the trademark. Nowadays, the Modern Trade has provided convenience to the consumer for accessing variety of products with branches throughout the country. Moreover, it is a channel for products sales promotion activity for expanding the direct customer base, and create good image of the trademark. The Sugar by “Double Key” has been released through Villa Market and The Mall in every branch throughout the country, and it also has a plan to expand the channel to other topnotch department stores as well.

1.3 Domestic Sales and Marketing Plan and Strategy

During the market situation of high-competitive among the industry; planning the marketing strategy in accordance with the demand of the targeted customers, is a tool for achieving the success and complete the planned marketing objectives. Whereas, the Sales and Marketing Strategy Plan is as below;

Sales Plan: The product’s proportion of each category and package size have been arranged with diversity suitable with each distribution channel, and keep monitoring on the market situation factors which may affect the revenue and distribution amount, including estimating the monthly sales revenue in order to maintain the original customers and add new customers which have potential for products distribution in each region throughout the country.

Marketing Strategy Plan: This focuses on inventing and developing the products and the new kind of packaging for responding to the consumer’s behaviors in the present time, including the plan for expanding the customer base into new distribution channels, as well as sales promotion activity, which

can help adding the market share and increasing the sales and purchase of product revenue continuously. Also, this will promote the recognition and acknowledgement of the trademark “Double Key” upon releasing to the market.

Packaging size of brown sugar “Double Key”:

1. 50 kilograms
2. 1 kilogram each in 50 bags
3. 1 kilogram each in 25 bags
4. 500 grams each in 50 bags

Packaging size of brown natural sugar “BRUM”

1. 300 grams each in 25 bags

In 2019, the company has the plan for producing and distributing the Premium Selected Natural Brown Sugar in bottle packaging designed for functional usage of convenience, cleanliness, and beautiful appearance under the trademark “BRUM” to target the Food Service customer and Modern Trade in order to expand the customer base, create diversity and add value to the company’s product. In addition, the company also has a plan to pack the white sugar and natural brown sugar into 25 kilogram sack packaging for more convenience on transporting and decrease the products stocking required space which is another priority factor for the customers nowadays.

2. International Sales

International sales consist of two parts which are; the company has to deliver some sugar to Thai Cane and Sugar Co., Ltd. (“TCSC”) for sale, and the sugar that the factory can sell and export it independently. BSF can export through 7 authorized exporting companies .The company has associated with other 19 sugar factories founding The Thai Sugar Trading Co., Ltd., to be a representative for sugar export of BSF. The Thai Sugar Trading Co., Ltd. has responsibilities as follows:

- The Thai Sugar Trading Co., Ltd. , delivers products, provides necessary documents for export and customs procedures, as well as charges services from BSF’s customers.
- The Thai Sugar Trading Co., Ltd., has signed loan contract for BSF’s export with a commercial bank on behalf of The Thai Sugar Trading Co., Ltd .for financial support.
- The Thai Sugar Trading Co., Ltd. will transfer amount of money received from export loan with the commercial bank to BSF. BSF then issues promissory note to The Thai Sugar Trading Co., Ltd. as evidence on transaction. The interest rate that BSF pay to The Thai Sugar Trading Co., Ltd.

in the promissory note is same as interest rate that The Thai Sugar Trading Co., Ltd., pay to the commercial bank.

For international trading of mill's portion, BSF will make a contract for each transaction. A contract lasts approximately 3 months and specifies quality and quantity of sugar required to deliver without specific price. The price of products delivered will be set later based on world market price at delivering date. Most customers of BSF are large international traders like Sucden, Olam, Wilmar, Alvean, Itochu and Cofco, etc., which have good financial position. Thus, the inspection of customers' financial position will be performed through The Thai Sugar Trading Co., Ltd.

➤ Pricing Policy

Since January 15, 2018, the government has invoked Article 44 per the Order 1/2562 of the Chairman of the National Council for Peace and Order (NCPO) which stipulated:

1. Abolishing the Notification of the Cane and Sugar Board on Price Setting for Domestic Sugar, therefore, there was no longer sugar price setting for domestic market at factory gate. Sugar price was floated and sugar mills were free to sell in the local market.

2. Abolishing of Quota A, B and C, therefore sugar mills were free to sell domestic or export.

3. Abolishing of Quota B that sugar mills had usually contributed to the Thai Cane and Sugar Corporation Limited (TCSC). The amount is to be set instead by Sugar Association and sugar mills have to directly make a contract with TCSC.

4. The Office of Cane and Sugar Board (OCSB) is to set buffer stock for all sugar mills. The stock is to be calculated from average one month domestic consumption of the previous season.

1. Domestic sales

For the old regime, sugar price determination, since 1980, had been administrated by 2 ministries, namely the Cane and Sugar Board of the Ministry of Industry whose task was to set domestic sugar price at factory gate and the Central Committee on Price of Goods and Services of the Ministry of Commerce who set domestic sugar retail price. Ex-factory prices for white sugar and refined sugar were 19 Baht/Kg and 20 Baht/Kg respectively. The ceiling retails price was capped at 23.50 Baht/Kg.

Since the floating of local sugar price and abolishing of quota system in accordance with Thailand's commitment under the World Trade Organization (WTO) and ASEAN Free Trade Agreement

(AFTA), local price has moved along with the world sugar price (London Sugar No. 5) resulted in the decrease of local price from 19 – 20 Baht/Kg to 17 – 18 Baht/Kg.

Source: 1) Office of Cane and Sugar Board <http://www.ocsb.go.th/th/faq/index.php?gpid=18>

2) Cabinet Resolution on the Restructuring of Cane and Sugar Industry, the Secretariat of the Cabinet, January 16, 2018

<http://www.cabinet.soc.go.th/soc>

2. Foreign Sales

Sale Price for sugar under the Thai Cane and Sugar Corporation Limited (TCSC).

Sugar exported under TCSC is mainly aimed to get export's reference price to use in cane price calculating formula. The company also sets policy on sales proportion, selling price, and exchange rate approximated to Thai Cane and Sugar Co., Ltd. to reduce risk from fluctuating of sugar price and exchange rate.

Selling price for sugar under mill

The company has set pricing policy on international sugar selling price based on world market, for example, forward contract of New York Sugar No.11 and London Sugar No.5.

2.4 Market and Competition

1) Overview

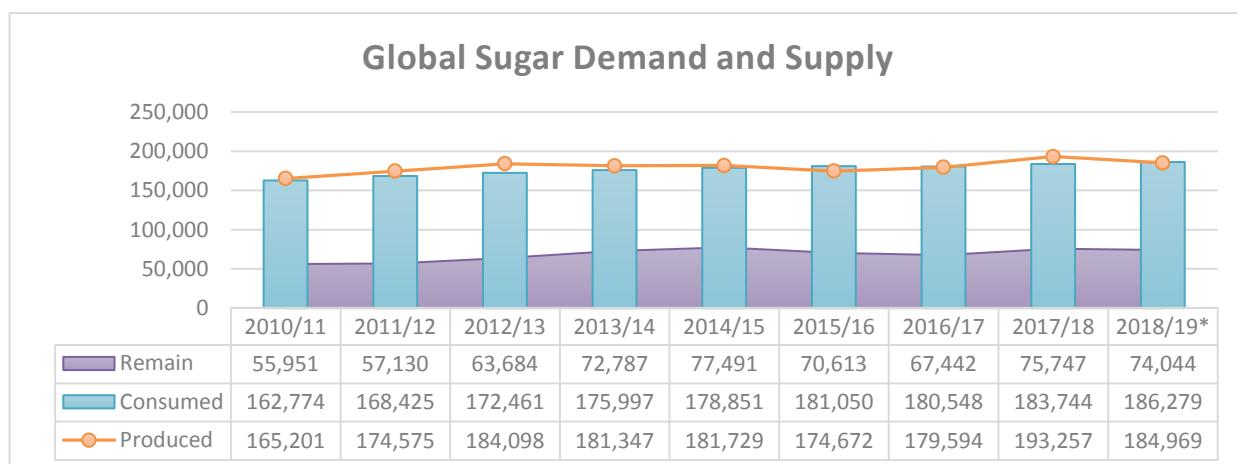
1.1) Global Sugar Demand and Supply

Unit: million MT¹

	Production, Consumption and Stock (October – September)								
	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19 ²
Production	165,201	174,575	184,098	181,347	181,729	174,672	179,594	193,257	184,969
Consumption	162,774	168,425	172,461	175,997	178,851	181,050	180,548	183,744	186,279
Stock	55,951	57,130	63,684	72,787	77,491	70,613	67,442	75,747	74,044

Source: World Sugar Balances 2009/10 - 2018/19 F.O. Licth's International Sugar and Sweetener Report, 20.12.2018

Notes: 1. Metric Ton Raw Value 2. Forecast



The 2017/18 crop year was among the most price fluctuated in a decade. New York No. 11 price fall to 9.83 c/p in September. The annual average price was 20% lower than 2016/17. The market was shaken by global sugar surplus of over 10 million MT, turbulence macro-economic landscape and oil prices.

1.2) Global Sugar Industry

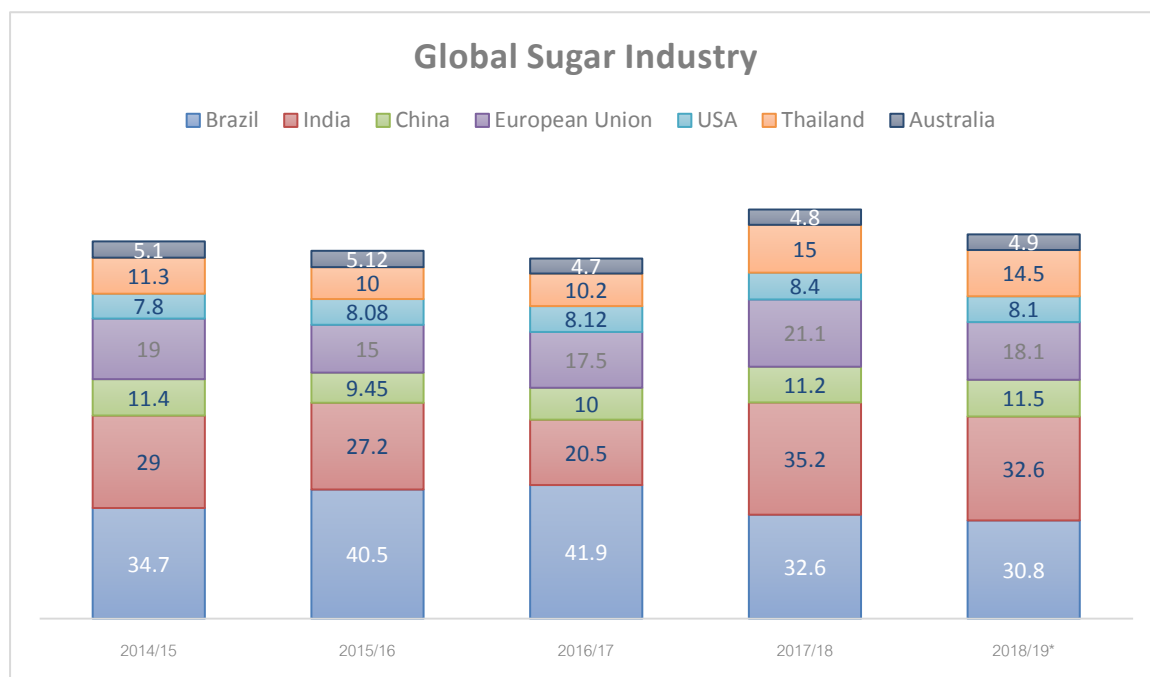
 Unit: million MT¹

Major Producers	Sugar Production (October – September)				
	2014/15	2015/16	2016/17	2017/18	2018/19 ²
Brazil	34.7	40.5	41.9	32.6	30.8
India	29.0	27.2	20.5	35.2	32.6
China	11.4	9.5	10.0	11.2	11.5
Europe Union	19.0	15.0	17.5	21.1	18.1
USA	7.8	8.1	8.1	8.4	8.1
Thai	11.3	10.0	10.2	15.0	14.5
Australia	5.1	5.1	4.7	4.8	4.9

Source: 1. World Sugar Balances 2009/10 - 2018/19 F.O. Lieth's International Sugar and Sweetener Report, 20.12.2018

2. Office of Cane and Sugar Board

Notes: 1. Metric Ton Raw Value 2. Forecast



Sugar productions in several major producers has remarkably risen particularly in India, Thailand and the European Union (EU), while production in Brazil's Center – South of Sao Paulo, the world major cane belt, has decreased due to financial advantages of producing ethanol over sugar and the flexibility to switch between sugar and ethanol. Sugar production in this region dropped from 35 million MT to 27 million MT or 8 million MT. Though Brazil's sugar volumes decreased, it didn't reflect on world sugar price much due to the abundant of sugar in the market. Besides, another price's pressure was on the consumption side. Growth for consumption was lower due partly to the cut in sugar uses especially in the food and beverage industries from the aggressive health campaign. Sugar was also facing strong competition from High-Fructose Corn Syrup (HFCS) in the EU, the US and China, etc.

1.3) Key Consumption Countries

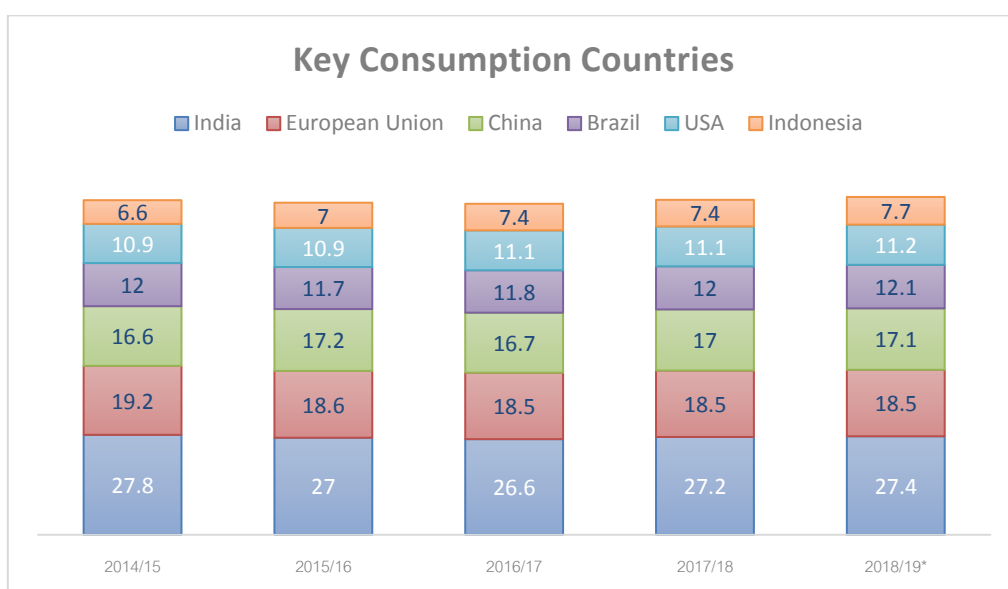
Unit: million MT¹

Countries	Consumption (October - September)				
	2014/15	2015/16	2016/17	2017/18	2018/19 ²
India	27.8	27.0	26.6	27.2	27.4
European Union	19.2	18.6	18.5	18.5	18.5
China	16.6	17.2	16.7	17.0	17.1
Brazil	12.0	11.7	11.8	12.0	12.1
USA	10.9	10.9	11.1	11.1	11.2
Indonesia	6.6	7.0	7.4	7.4	7.7

Source: 1. World Sugar Balances 2009/10 - 2018/19 F.O. Lieth's International Sugar and Sweetener Report, 20.12.2018

2. Office of Cane and Sugar Board

Notes: 1. Metric Ton Raw Value 2. Forecast



India and the European Union still assumed the helm of sugar consumption champion. However, world sugar consumption's growth is lower than 2% from the traditional growth of over 2% a year. Health campaign played bigger role in influencing food & beverage industries to reformulate their sugar contents in their products to serve new trending demands, while household consumption didn't change much.

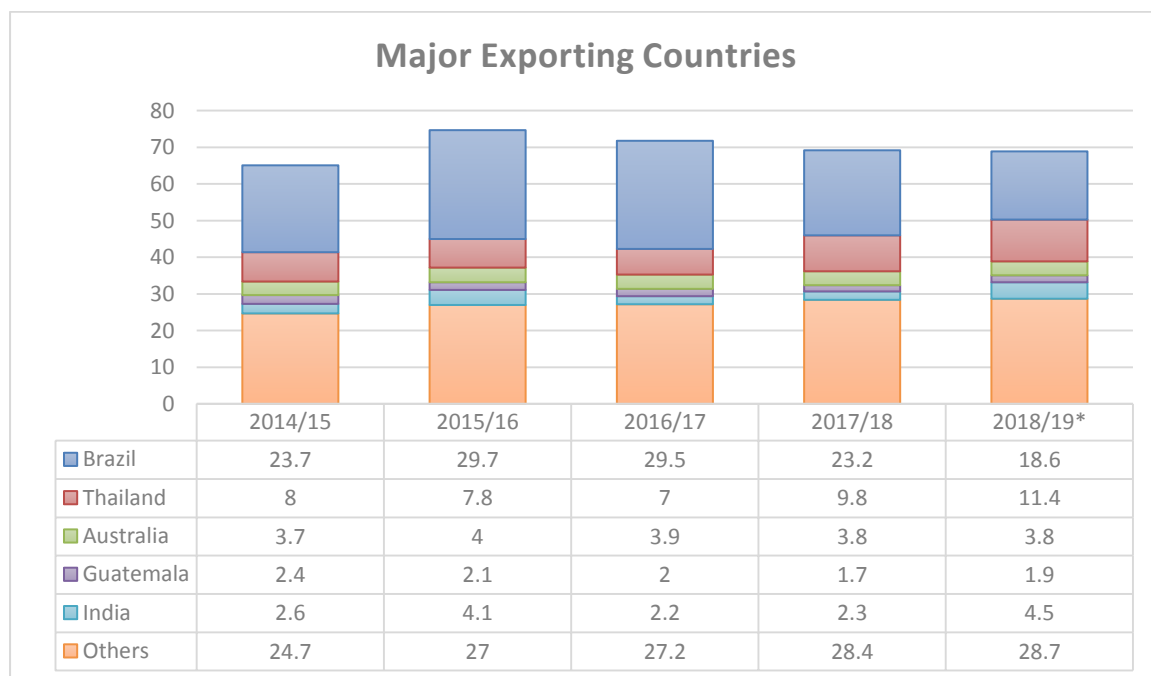
1.4) Major Exporting Countries

 Unit: million MT¹

Major Exporters	Volumes (October - September)				
	2014/15	2015/16	2016/17	2017/18	2018/19 ²
Brazil	23.7	29.7	29.5	23.2	18.6
Thailand	8	7.8	7	9.8	11.4
Australia	3.7	4	3.9	3.8	3.8
Guatemala	2.4	2.1	2	1.7	1.9
India	2.6	4.1	2.2	2.3	4.5
Others	24.7	27	27.2	28.4	28.7

Source: 1. World Sugar Balances 2009/10 - 2018/19 F.O. Lich's International Sugar and Sweetener Report, 20.12.2018

Notes: 1. Metric Ton Raw Value 2. Forecast



Brazil and Thailand were the first and second biggest sugar exporters. Most of Thai sugar destinations were within Asia where Thailand has strategic advantage in term of location. However, the afore mentioned factor particularly sugar surplus of over 10 million MT capped the price down and subsequently lengthened sugar delivery period from the first half of the year to throughout the year.

Total Thailand's export volume from January to December was 10.7 million MT. Most important destinations included Indonesia, Myanmar, Cambodia, South Korea, Taiwan and Malaysia.

1.5) Major Importing Markets

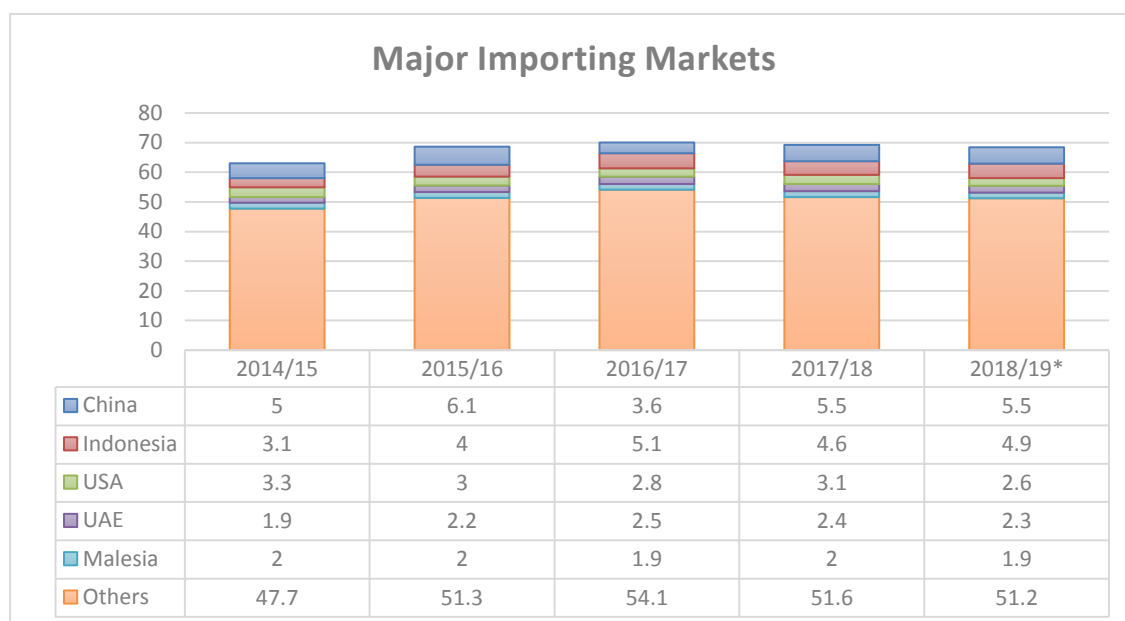
 Unit: Million MT ¹

Major Importers	Volumes (October - September)				
	2014/15	2015/16	2016/17	2017/18	2018/19 ²
China	5.0	6.1	3.6	5.5	5.5
Indonesia	3.1	4.0	5.1	4.6	4.9
USA	3.3	3.0	2.8	3.1	2.6
UAE	1.9	2.2	2.5	2.4	2.3
Malaysia	2.0	2.0	1.9	2.0	1.9
Others	47.7	51.3	54.1	51.6	51.2

Source: 1. World Sugar Balances 2009/10 - 2018/19 F.O. Lieth's International Sugar and Sweetener Report, 20.12.2018

2. Office of Cane and Sugar Board

Notes: 1. Metric Ton Raw Value 2. Forecast



China was the biggest importing market with the volumes of over 5 million MT while the average demand was 16 million MT and domestic production was 11.5 million MT. Major concern factor for Chinese market was the increasing demand for high-fructose corn syrup (HFCS) which hindered sugar consumption's growth. Indonesia was still the top importer with the volumes of 4.9 million MT to serve annual demand of 6 million MT. In 2018, Thailand alone shipped 4.1 million tons to Indonesia or over 1.6 million MT higher than the same period of last year where 2.5 million MT was exported. The increasing amount was the lower than expected shipment from Thailand's competitors, Australia and Brazil, the former diverted its sugar to Japan instead and the latter produced lower amount of sugar.

Analysis

1) The 2017/18 crop year was a volatile period in terms of price, production and trade. Sugar price dropped to the lowest level in a decade. In September, the NY No. 11 price hit 9.83 c/p before bouncing to the 12 c/p level at the end of the year. The sugar market was rocked by uncertain factors, such as macro-economic landscape, fluctuated oil price and US – China trade war, etc. These factors combined with the sugar surplus spurred concern over world economic growth's potential and eroded confidence over demand of commodity products.

NY No. 11 Raw Sugar Price Movement (March 2018 – February 2019)



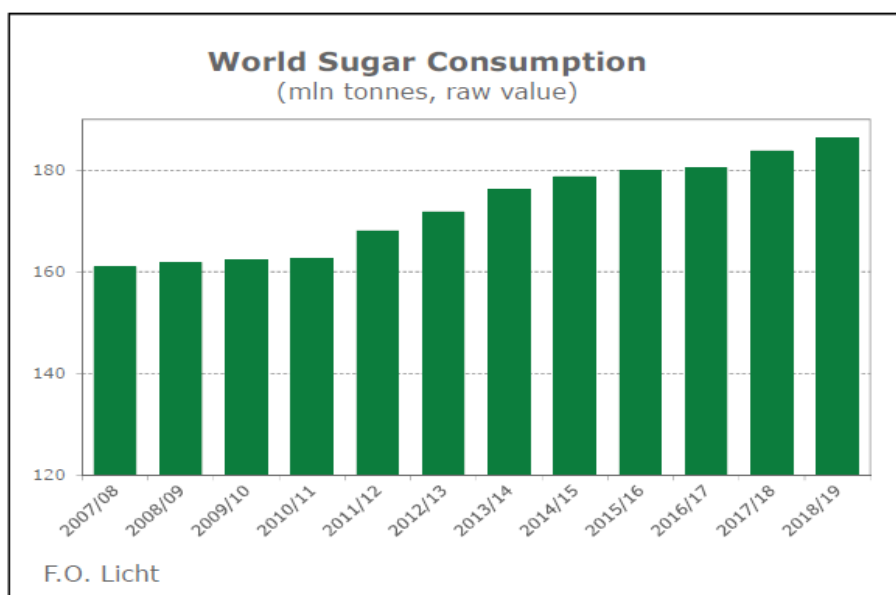
Source: <https://www.barchart.com/futures/quotes/SBH19/interactive-chart>

2) Fundamental reasons influencing sugar price were a surplus of over 10 million MT which was a result of higher production in India, Pakistan, Thailand and the European Union. The situation was further deteriorated by export subsidies for sugar from India and Pakistan. However, Brazil with the

advantage of its flexibility to produce sugar and ethanol came as supporting factor. Mills in the Center – South of Sao Paulo, the world biggest cane belt, diverted 64.4% of cane juice to produce ethanol, while allocated 35.6% for sugar production. Compared with the previous season, ethanol VS sugar ratio was just 53:47, therefore sugar production for 2017/18 decreased from 35 million MT to 27 million MT. It can be said that Brazil's great flexibility reduced the world sugar supply by 7 million MT.

3) World sugar consumption's growth in 2017/18 was modest at 1.4 – 1.5%, clearly below traditional 2% per annual. Parts of the reasons that hindered the growth was an aggressive health campaign to reduce sugar taking and the implementation of sugar tax in 28 countries including Thailand. Food and beverage industries were the main group adjusting their formula to reduce and replace sugar with other sweeteners, while household consumption remained stable. Moreover, consumption growth was affected from competing sweetener product like High-Fructose Corn Syrup (HFCS), especially in the European Union, China, the US, Mexico, Argentina, Colombia and Chile. Other influential factors included population growth and per capita income (PCI).

Region wise, the growth existed in Some Asian and African countries where population growth and per capita income were still rising. In Asia alone, consumption in 2018/19 is expected to rise to 89.3 million MT, up from 87.5 million MT from previous year. Sugar consumption in Africa is forecasted to be around 23 million MT or 600,000 MT increased from 2017/18. Consumptions in Europe, North and Central America, South America and Oceania plus Australia are stable at 31 million MT, 21.2 million MT, 20.1 million MT and 1.6 million MT and 1.3 million MT respectively.



Source: F.O. Lichts' International Sugar & Sweetener Report, Vol. 150 No. 36, December 20, 2018

The consumption still resumes continuous growth but at a lower pace compared to the traditional rate of 2% per year for the above mentioned reasons.

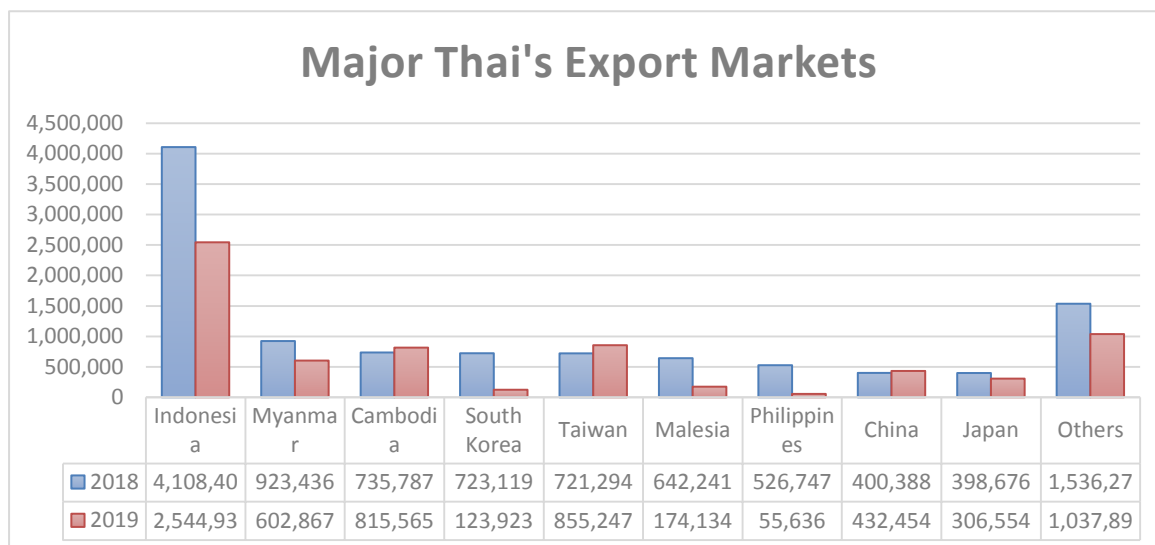
4) In term of sugar trade, demand for raw sugar was relatively quiet throughout the year despite the low prices. Demand for raw sugar was also hampered by the Chinese government's announcement in August 2018 to increase out-of-quota imported tariffs from 50% to 90% for all origins. Moreover, sugar exporting countries were suffering from India's sugar export and transport subsidies at 150 US\$/MT for 5 million MT's quota for 2018/19. India's export subsidy seriously affected Thai's export, especially in South Asia and African markets.

Major Thai's Export Markets

Comparison of the amount of Thai sugar exports in January - December 2018 and 2019

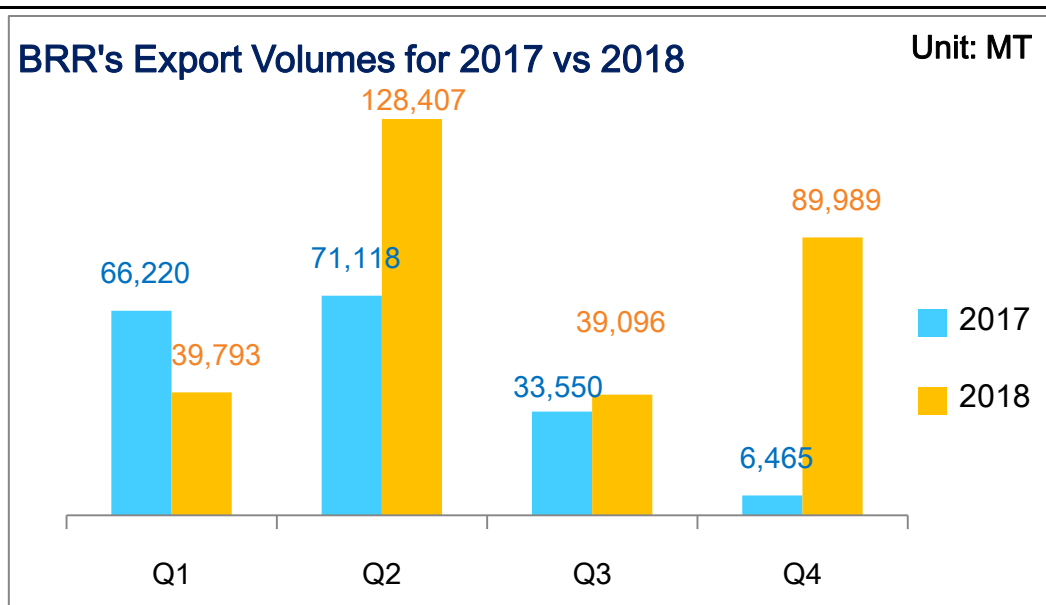
Destinations	2018	2019
Indonesia	4,108,404.875	2,544,934.433
Myanmar	923,435.740	602,866.520
Cambodia	735,787.400	815,565.256
South Korea	723,118.556	123,922.570
Taiwan	721,293.810	855,246.610
Malaysia	642,240.950	174,134.070
Philippines	526,747.086	55,636.000
China	400,387.540	432,454.400
Japan	398,675.850	306,554.100
Others	1,536,275.140	1,037,894.700
Total	10,716,366.930	6,949,208.650

Source: Thai Sugar Millers Corporation Limited



Indonesia was Thailand's biggest raw sugar destination with 4 million MT shipped throughout 2018, compared with just 2.5 million MT last year. The surge in export was the lower Brazil's sugar output and high freight cost. Australia had also reduced its export to this market and directed its sugar to Japan where it has comparative advantages on low tariffs from the recently concluded free trade agreement (Japan – Australia Economic Partnership Agreement). Other markets with significant export volumes were Myanmar, South Korea, Malaysia and the Philippines. South Korea and Malaysia had reduced their import volumes from Brazil and Australia, while the Philippines was suffering from drought and had to import more for domestic consumption.

For BRR, total export in 2018 was 297,285 MT or 40% higher than last year where the company exported 177,353 MT which is different at 119,932 MT's exported increase was due to almost 1 million MT of cane volumes increased. In 2016/17 crop year, BRR crushed 2.21 million MT of cane, while in 2017/18 the volumes was 3.15 million MT. Major markets for company sugar included Indonesia, Tanzania, South Korea, Taiwan and Vietnam, etc. For 2018/19 crop year, it is expected to crushed 2.8 million MT of cane with around 310,000 – 320,000 MT of sugar.



Market Trend for 2018/19

For situation in the Crop year 2018/19, the important variables are Brazil, India, China and Thailand is four major key influences to world sugar market direction.

Projection: World Sugar Production

Unit: Million MT

Institutes	2018/19	2019/20
Green Pool	2.64	- 1.36
ISO	+ 2.1	- 2
F.O. Licht	- .7	N/A
Marex	- 1.05	N/A
Datagro	- 2	N/A
Kingsman	N/A	- 3.29
Rabobank	.5	N/A
INTL FC Stone	-.7	N/A

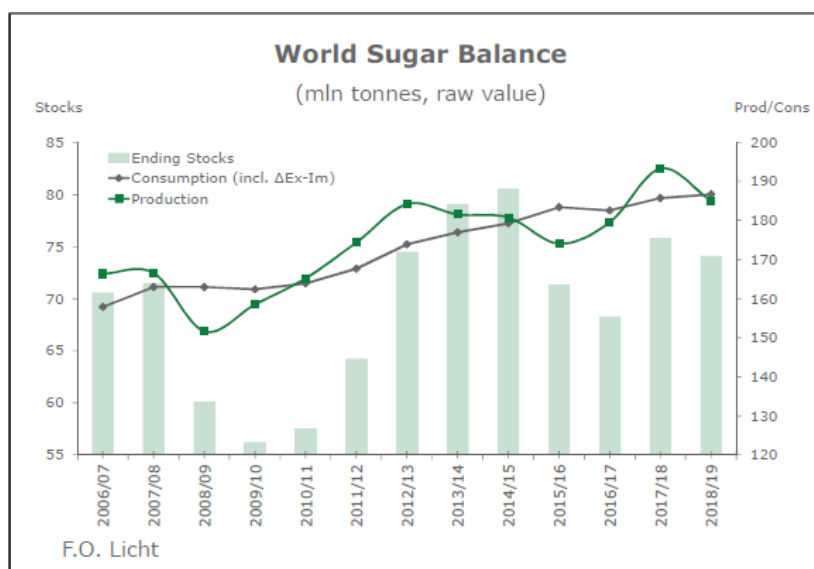
Source: Thai Cane and Sugar Corporation Limited and Thai Sugar Trading Corporation Limited

1) During the past year, Brazil's sugar production has dropped from 35 million MT to 28 million MT as it has diverted cane juice to ethanol for better return compared to sugar. Therefore, world sugar supply has decreased. In 2019, analysts predict that cane volumes would decrease from 596 million tons in 2017/18 to 575 million tons or less in 2018/19 due to dry weather and aged canes. If product mix ratio is

in favor of ethanol, sugar production would decrease by another 1 – 2 million MT. However, the end result is very much depending on the return of each product with the advantage of its flexibility of product mix.

2) India is always the key to world sugar price movement. Indian Sugar Mills Association (ISMA) has predicted that sugar output in 2018/19 is above 30 million MT, compared to 32.5 million MT last year. Consumption stays at 26 million MT, the moderate level, therefore stocks from previous season plus current season are piling up at large amount. This stock combined with the subsidized export quota of 5 million MT at 150 US\$/MT are expected to put pressure on world price. Even though exported volumes might not reach its target.

3) After the Chinese government increased imported tariffs for out-of-quota sugar from 50% to 90% in the middle of last year, imported volumes to one of the world biggest sugar importers have remarkably dropped from 2.79 million MT in 2015/16 to 1.8 million MT in 2016/17 and even went down further to 1.4 million MT in 2017/18. It is expected that for the current 2018/19 crop year, total imported volumes might not exceed 2 million MT. Therefore, China's role in term of export destination and price's support for raw sugar is said to be minimal. On the other hands, analysts are expected that there is a possibility of China taking around 500,000 MT of white sugar from late 2018 and throughout 2019. On the consumption's growth, sugar demand is not very strong due to the competition from other sweeteners like High-Fructose Corn Syrup (HFCS).



Source: F.O. Licht's International Sugar & Sweetener Report, Vol. 150 No. 36, December 20, 2018

4) Based on initial estimated, Thailand is expected to crush around 120 – 127 million tons of cane with around 13 million MT of sugar. Last crop, Thailand crushed 134.9 million tons of cane and produced 14.6

million MT of sugar. Cane reduction is said to be the effects of drought in some cane growing areas as well as acreage's decreases mostly from farmers switching to other competing crops after cane price has dropped flow low world price and changing of sugar regime in Thailand.

5) World's sugar production and consumption of sugar in 2018/19 is moving to the balanced state with possible of small deficits as believed by several analysts. The world sugar supply and demand is also expected to enter deficit period for another 2 years before moving back to surplus. This cycle is usually repeating itself in every 2 – 3 years.

Sources: 1) F.O. Licht's International Sugar & Sweetener Report, Vol. 150 No. 29, October 19, 2018

2) F.O. Licht's International Sugar & Sweetener Report, Vol. 150 No. 36, December 20, 2018

3) S&P Global Platts' Kingsman Sugar Editorial, January 4, 2019

Appendix

In 2017/18 crop year, There were 55 sugar factories in Thailand with the combined crushing capacities of over 120 million tons/year, producing 14.6 million MT of sugar. Crushing period usually starts from November to April of the following year (except in 2017/18 where rainfall was favorable coupled with acreage expansion, the crushing dragged till early June).

Thai Sugar Mills at the crop year ended 2017/18

Group	No. of Factory (s)	Sugar (Metric Ton)	Market Share (%)
Mitr Phol	6	2,722,840	18.55
Thai Roong Ruang	9	2,500,704	17.04
KSL	5	1,196,657	8.15
KTIS	3	1,181,641	8.05
Korach	2	906,470	6.18
Wangkanai	4	785,036	5.35
Chonburi	4	674,088	4.59
Ban Pong	2	521,704	3.55
Kumphawapi	2	409,576	2.79
Buriram Sugar Factory	1	378,185	2.58
Thai Kanchanaburi	2	347,263	2.37
Mitr Kaset	2	320,014	2.18
Ratchburi	2	225,105	1.53
Rayong	2	220,050	1.50
Others	9	2,290,218	15.6
Total	55	14,679,558	100

Source: Thai Sugar Millers Corporation Limited

(3) By-Product Business

3.1 Biomass Power Plant Business operated by Buriram Energy Co., Ltd. (“BEC”), Buriram Power Co., Ltd. (“BPC”) and Buriram Power Plus Co., Ltd. (“BPP”). Power plant business group has operated the business with the commitment concept as *"The electrical energy for community and society"*. Apart from the efficiency of electrical production, saving environment and taking community, society and stakeholders into account are the important mission for business operation of power plant business group of BSG which is reflected from the awards and the certificates that the company received, for example, 2016 Good Governance Business Group Award in the provincial level. Moreover, the company received the Green Industry Level 2 (Green Activity) and Green Industry Level 3 (Green system). In 2018, BPC received the Excellence Award for the bagasse-fired cogeneration power plant project from Air Chief Marshal Prajin Jantong, Deputy Prime Minister and Minister of Justice in Thailand Energy Awards 2018 Event, hosted by the Department of Alternative Energy Development and Efficiency - Ministry of Energy, and it also achieved the First-runner up Award on the cogeneration category at the 36th ASEAN Ministers on Energy Meeting (36 AMEM) in Singapore.

Excellence Award

Thailand Energy Awards 2018



First-runner up Award

36 AMEM 2018



3.1.1 Products and Services

Buriram Sugar Group has operated its businesses by producing biomass power and the company has installed the production capacity of 9.9 MW that is the Very Small Power Producer (“VSPP”), using bagasse derived from sugar production process as the main fuel, and also cane leaves, chopped woods, and rice husk as the raw materials to generate the electricity. There are 3 biomass power plants of BSG as below:

1. Buriram Energy Co., Ltd. (“BEC”)
2. Buriram Power Co., Ltd. (“BPC”)
3. Buriram Power Plus Co., Ltd. (“BPP”)

1. Buriram Energy Co., Ltd. (“BEC”)

BEC is the first biomass power plant of BSG which has installed the production capacity of 9.9 MW. The company sells the electricity to the Provincial Electricity Authority (PEA) at 8 MW and uses 1.9 MW within the factory. Nevertheless, on 11 March 2016, BEC amended the power purchase contract by changing from Adder system to Feed-in-Tariff (“FiT”) which has affected to the increasing price of electricity sales approximately 23%.

2. Buriram Power Co., Ltd. (“BPC”)

BPC registered and operated its company in the year 2011. At present, the BEC holds its shares at 99.99%. BPC is the second biomass power plant of BSG which has installed the production capacity of 9.9 MW. BPC sells the electricity to the Provincial Electricity Authority (PEA) at 8 MW in the FiT system on April 2015, and uses 1.9 MW within the factory.

Details of Power Purchase Agreement between BEC, BPC and PEA

Company	BEC	BPC
Agreement No.	VSPP-PEA 044/2554	VSPP-PEA 008/2556
Agreement Date	December 30, 2011	April 4, 2013
Commercial Operation Date (“COD”)	May 11, 2012	April 7, 2015
Capacity	The 8 megawatts of the maximum power quantity at 22,000 volts	
Validity	5 years and automatically extend for additional 5 years (FiT Agreement remaining 10 years/ PPA Expire on August 10, 2028)	20 years from the start of COD (FiT Agreement remaining 17 years/ PPA Expire on April 6, 2035)
Selling Price in FiT System	4.54 Baht/Unit	4.54 Baht/Unit

3. Buriram Power Plus Co., Ltd. (“BPP”)

BPP was registered in 2015 after the BSG internal re-organization in which BRR currently holds its shares by 99.99% of total shares. BPP is the third power plant of BSG and started to generate the electricity on December 1, 2016 to support the increasing production capacity of BSF. However, BPP has planned to sign the power purchase agreement with PEA in the future as well.

The 3 power plants are located nearby the sugar factory of BSG therefore it is convenient for transportation of bagasse derived from the sugar production process to be used as fuel, which helps reduce the cost of transportation of raw materials, and facilitate the generation of electricity and steam to the sugar factory.

3.1.2 Market and Competition

➤ Competitive Strategy

Lower Production Costs and Efficient Resource Management

BEC, BPC and BPP generate electricity from biomass fuel: bagasse, a by-product derived from sugar production process of BSF, one part of the electricity generated including high pressure steam and low pressure steam from cogeneration system, which will be sent back to use in the sugar factory and another part of electricity generation will be sold to the Provincial Electricity Authority. Thus, the utilization of bagasse is to increase the value of the renewable energy from the electrical production. It is the efficiency of resourcing management and maximum benefit.

In addition, the 3 power plants are located nearby BSG's sugar factory where the raw materials sold; therefore, the company uses a conveyor system to deliver the bagasse to keep in fuel storage building in the power plants. As the results, the company can save time and logistic transportation cost in the same time.

Responsibility for Community, Society and Environment

The commitment of the power plant business is able to get along with the community and society sustainably and also can run the business smoothly; therefore: the power plant group emphasizes environmental conservation as the first priority. In 2016, BEC was certified by ISO 14001:2004 which can guarantee the international organization for standardization in the scope of the environment management system which defines that the environmental improvement must be compatible with business improvement though focusing on the prevention of pollution continuously. Other two power plants are in the process of development in order to qualify the ISO certification. However, these two power plants had received awards with the more details in this annual report in the Attachment 11: Awards and Quality Certifications. All of the awards and certificates prove that the BSG is aware of, and takes this commitment seriously.

➤ **Customer Features and Trading Channels**

BEC and BPC have an installed electricity capacity total of 19.8 megawatts . The 16 megawatts of the electricity generation will be sold to the only one customer, the Provincial Electricity Authority, under the power purchase agreement on December 30, 2011 and April 4, 2013 respectively, while the remaining 3.8 megawatts will be reserved for the operations within the BSG . BPP generates and distributes electricity to support the sugar factory's production. The maximum capacity is 9.9 megawatts which shall be purchased by BSF 8 megawatts as needed. In addition, the three power plants also produce the high-pressure and low-pressure steam for BSF.

➤ **Price Policy**

Power purchasing price of PEA has specified in the policy of the Very Small Power Plant Project under the purchasing price section. BEC and BPC contribute electricity to the Provincial Electricity Authority referred to the purchasing price for electricity of FiT system that is around 4.54 Baht per unit (kilowatt per hour). BPP contribute electricity for the sugar factory by using the reference price of purchasing electricity in Fit system of Provincial Electricity Authority.

1.1.3 Industry Situation and Competition

In the past, both the government and the relevant sectors have given the priority to the development of the renewable energy more seriously .Consequently, the government encourage the use of the domestic resources effectively, especially the renewable energy because it is the clean energy and can be used continuously .Besides, all of the raw materials used in the electric production are low-cos. The support of the renewable energy can reduce the reliance on electricity from commercial power, which can reduce the cost of importing fuel from abroad, reduce the environmental impact, and help lessen the financial burden of the governmental investment in the electricity generation and distribution system.

In 2018, there were 2,050 projects of the biomass power plant for VSPP type in Thailand. There were 620 projects in the Northeast. In this number, there were 952 projects for on the power generation on the commercial operations (COD). The total installed capacity was 11,035.93 MW and the total sales quantity under the power purchase agreements was 8,789.30 MW.

2018 Status and VSPP Biomass Power Plants in Thailand

Status	VSPP Biomass Power Plant		
	No. of Project (s)	Installed Capacity (MW)	Contracted Sales Quantity (MW)
Submit a request but not receive any responding	0	0	0
Already received the respond but not sign PPA yet	0	0	0
Already signed PPA but not COD	43	235.21	210.66
Already COD	952	5,102.18	3,876.45
Cancelled purchases	134	422.7	375.14
Cancelled requests	265	1,357.75	1,113.33
Cancelled agreements	656	3,918.09	3,213.73
Projects under trial	0	0	0
Project under appeal	0	0	0
Total	2,050	11,035.93	8,789.30

Source: Energy Regulatory Commission (ERC) <http://www.erc.or.th/ERCSP/>

The Ministry of Energy in cooperation with the Electricity Generating Authority of Thailand has considered the development plan of the country's electricity capacity of Thailand B.E. 2558-2579 (2015 – 2036) (PDP 2015) with an emphasis on enhancing the stability of the electrical system with the distribution of the fuel to produce electricity. In addition, it is to decrease reliance on the natural gas, increase the proportion of electricity generated from coal, a clean technology, supply more electricity from other countries, and upsurge the proportion of electricity produced from renewable energy sources; this also includes the development of power transmission systems, and power distribution systems to support the renewable energy development and enter the ASEAN Economic Community (AEC).

For the detail of the electricity producing and using in Thailand of the development plan of the country's electricity capacity of Thailand B.E. 2558-2579 (2015 – 2036) (PDP 2015) is as follows:

- Electric capacity at December 2014	37,612	megawatts
- New electric capacity during 2015 – 2036	57,459	megawatts
- Electrical capacity detaching from the system during 2015 – 2036	-24,736	megawatts
- Total of electric capacity at the end of the year 2036	70,335	megawatts

The proportion of using renewable energy to produce electricity					
Renewable Energy	2012	2013	2014	2015	Target in 2036
Solar energy	376.72	823.46	1,298.51	1,419.58	6,000.00
Wind energy	111.73	222.71	224.47	233.90	3,002.00
Biomass	1,959.95	2,320.78	2,451.82	2,726.60	5,570.00
Garbage	42.72	47.48	65.72	131.68	500.00
Micro-Hydropower	101.75	108.80	142.01	172.12	376.00
Macro- Hydropower	-	-	-	2,906.40	2,906.40
Total	2,592.87	3,523.23	4,182.53	7,590.28	18,354.40

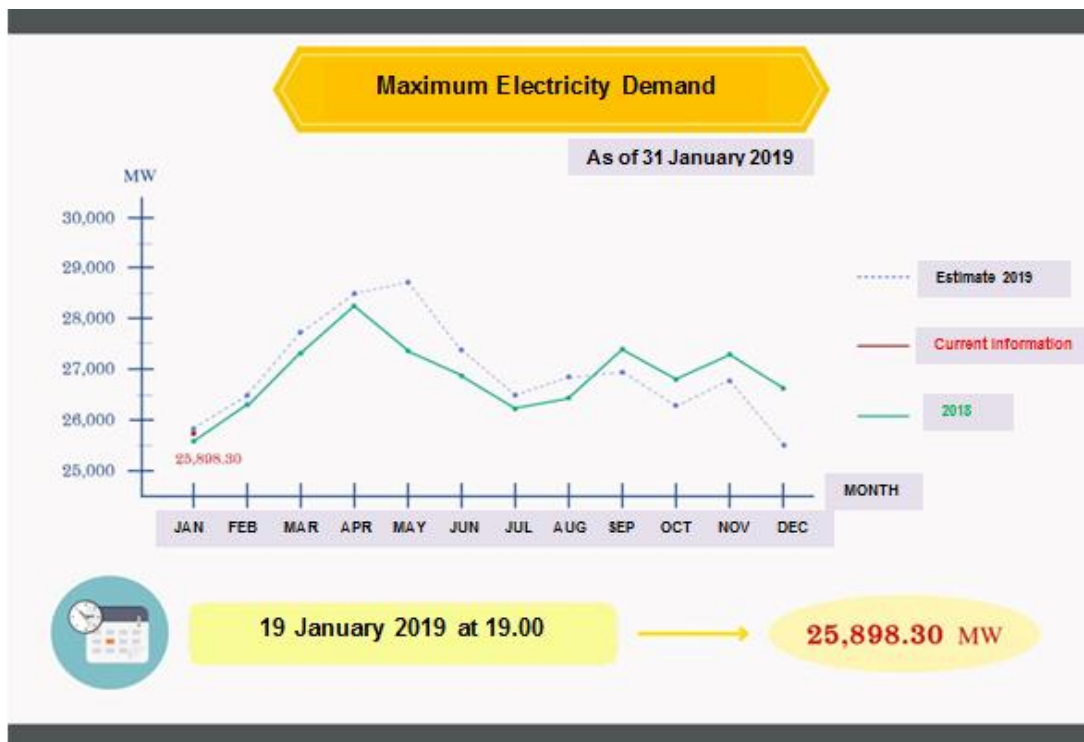
Source: Energy Regulatory Commission (ERC)

Electricity Demand Forecasting

From the preparation of the electricity demand forecasts of the country, the government officer has estimated the likely long-term gross domestic product (GDP) 2014-2036, which is in the average of 3.94% per year. For this estimation, the average rate of the population increase, which is in 0.03% per year, is engaged, and also the Energy Efficiency Development Plan (EEDP) has been applied with the aim to reduce the power consumption in the year 2036, which is equal to 89,672 million units. The officer also considers the framework of the Alternative Energy Development Plan (AEDP) for the manufacturing sector in the year 2036, which will have the capacity of electricity from renewable energy sources into the system with the number of 19,634.40 MW.

For the electricity demand forecast, which was used in the preparation of the PDP 2015, when the summation of the energy conservation plan, the renewable energy development plan, and the alternative energy has been counted, during the years 2014-2036, the total net electric power demand of the country will upsurge to the rate of 2.67% per year. In the year 2036, the total net electricity power demand (Energy) and the total maximum power (Peak) of the country will approximately be at 326,119 million units and 49,655 and MW.

Maximum Electricity Demand



Source: Information Technology and Organization Communications Section, Electricity Generating Authority (EGA)

The maximum power demand of the running system of January occurred on January 19, 2019, at 19.00 p.m., which was equal to 25,898.30 MW was decreased by 773.90 MW or equivalent to 2.90% comparing to the previous month. The maximum power demand of the running system occurring on May 11, 2016, at 22.28 p.m. was 29,618.80 MW.

3.1.4 Raw Materials Supply

The biomass power plant of the business group uses bagasse as the fuel to produce electricity. Bagasse is a byproduct of sugar production process from the sugar factory. Besides, the biomass power plant is designed for supporting other materials, for example, sugar cane leaves, wood chips and rice husk. The BSG builds more biomass power plant for supporting the expanding of sugar production. This is a cause of the increasing demand of material. In previous crop year, BSG purchased sugarcane leaves from more than 20,000 sugarcane farmers to for being used as a fuel to generate electricity due to sugarcane leaves have lower moisture content than bagasse. Thus, it is good and appropriate to use as a fuel for electricity generation, as well as it is able to control the risk of shortage of raw materials for electricity production. In the crop year of 2018/19, the company expects to use wood chips as a secondary material. Moreover, from the estimate of cane crushing that there will be 3.1 million tons of sugarcane in

the crop year 2019/20, it will make the quantity of bagasse that is enough for being used as a fuel to generate electricity with full production capacity for three power plants.

3.1.5 Future Plan

After establishment the Buriram Sugar Group Power Plant Infrastructure Fund (BRRGIF) was approved by the Securities and Exchange Commission on August 1, 2017, and offering of all investment units. The company has taken such investment funding used for the expansion of power plant business, refined sugar project and also bagasse packaging project, as well as other projects of Buriram Sugar Group for value added creation and sustainable growth for Buriram Sugar Group. In addition, the 3rd power plant (BPP) has already operated; meanwhile BPP still keeps negotiating with the PEA whenever they open the round of negotiation to purchase electricity.

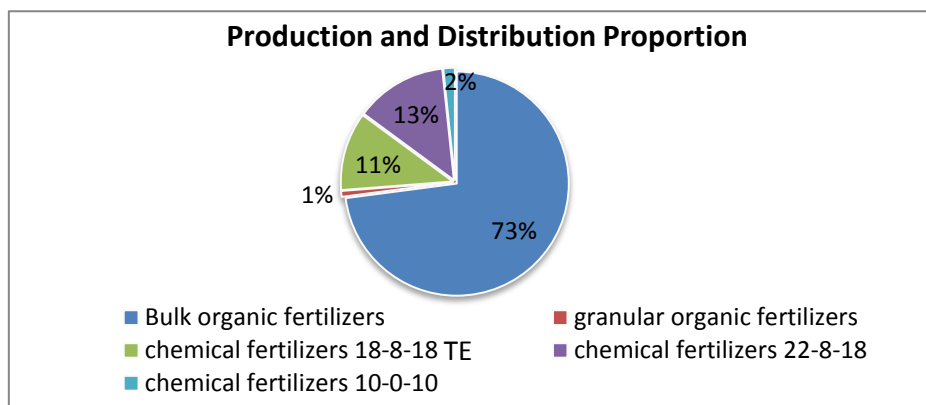
3.2 Organic Fertilizer Business operated by Key Brand Fertilizer Co., Ltd. (“KBF”)

3.2.1 Products and Services

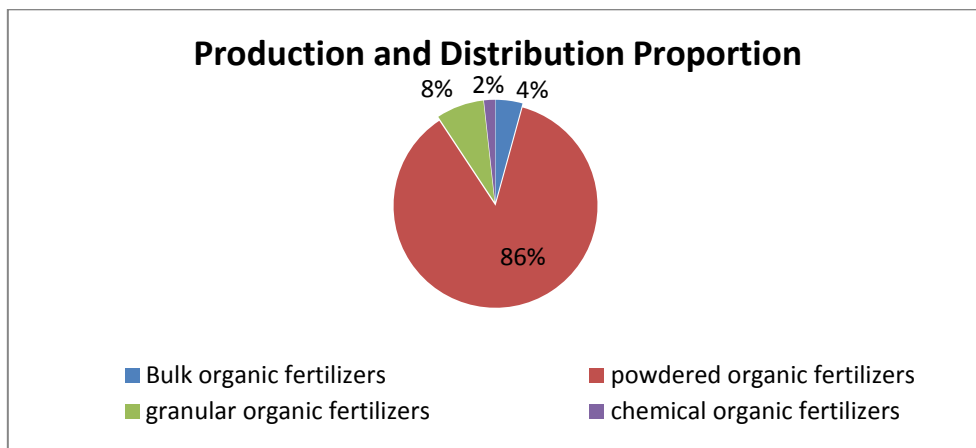
The Key Brand Fertilizer Company Limited or KBF registered in the year 2011, and currently, the 15 million Baht of its registered capital has already paid up .KBF has operated its production business and sold the organic fertilizers on December 2012 by using the decomposed filter product, which is a by-product of the sugar production of BSG as the raw material in the production of organic fertilizers and started producing chemical fertilizers a year later to respond to the sugarcane farmers’ need to nurture their sugarcanes.

KBF is located in the nearby area to the sugar factory to facilitate the transportation of filter cake, main raw material, in manufacturing the fertilizers and to save the cost of transportation charge .KBF manufactures and distributes three types of fertilizer which are granular organic fertilizers, powdered organic fertilizers and granular chemical fertilizers.

Production and distribution proportion of each type of fertilizers to BRD



Production and distribution proportion of each type of fertilizers to external market



3.2.2 Market and Competition

➤ Strategic Competition

The main goal of running this business of KBF is to provide the sugarcane farmers the best fertilizers and appropriate price so as to reduce the cost in manufacturing for the sugarcane farmers and to value the production per rai, which will make the sugarcane farmers gain more earnings.

■ Good Products and Suitability for Each Plantation

KBF aims to grow high quality sugarcanes as well as increase the number of harvest per rai. KBF and BRD have conducted research and developed fertilizer formulas in order to meet the best formula that suits the soil and crops in each plot.

In 2016, KBF encouraged the use of powdered organic fertilizers in sugarcane plots with the objective to increase the organic substance in the soil. Thus, the use of powdered organic fertilizers is acceptable to sugarcane farmers who order the fertilizers with the great amount, tending to have high consumption. In 2018-2019, KBF is under process of development the new formula of powdered organic fertilizer to ensure the effective output. However, this experiment has to be further researched and considered.

In 2017, KBF has installed the fertilizer-manufacturing machines to enhance the capacity and competency of qualified fertilizers in every sack. The products can be applied to several industrial crops given that before introducing them to the market, KBF had already carried out research and experiment in the demonstration plots with the purpose of studying and keeping track of the growing rate of sugarcane in response to the fertilizer. Once it was proved that the product was effective, KBF then suggested it to the sugarcane farmers. Throughout the years, KBF products have created positive outcome in terms of sugar

cane growth rate by strictly complying with the quality standard stated in the Fertilizer Act B.E. 2518 and provided low-cost nourishment for crops that has been very well received by sugarcane farmers.

■ **Distribution Centers in Every Supporting Center**

KBF has conjoined BRD establishing the goods distribution center across the support area in order to facilitate the sugarcane farmers to get support from the company, which is another way of supporting business affiliates. This is because when the sugarcane farmers have the facility to purchase travel and get the fertilizers, they can improve the soil in the right time and appropriate for the condition of soil which not only will boost the quality and productivity of crops per rai, but also benefit the company in terms of sufficiency and superiority of the raw materials.

3.2.3 Customer Features and Distribution Channels

■ **Sugarcane Farmers of Buriram Sugarcane Research and Development Co., Ltd. (“BRD”)**

Currently, KBF supplies powdered organic fertilizers and granular chemical fertilizer accounted for 100% to Buriram Sugarcane Research and Development Co., Ltd. (“BRD”) to distribute to sugarcane farmers later. Then, BRD will subsequently sell them to the sugarcane farmers by supporting production factor or giving advance credit so that they can lower the production cost. At the same time, with these fertilizers, their production per rai will be high and has the good quality, and also, this will make them be able to bring their products to the factory to compensate the advance credit supported by BRD, which is beneficial to both the company and the sugarcane farmers.

99% of KBF’s products have been sold to BRD to resale to sugarcane farmers. This is to assist them in their cultivation, since they will all get an access to the fertilizers. KBF, therefore, initiated 11 distribution centers in sugarcane promoting area of BRD in Buriram province as follows:

Promotion Zones	Distribution Center
1	Ban Saw Ae, Khu Muang District
2	Ban Nong Khrue, Muang District
3	Ban Nong Khaw and Ban Nong Chan, Stuek District
4	Ban Lakor, Stuek District
5	Ban Lamthamenchai, Lamphaimas District
6	Ban Na Sinual and Ban Lung Muang, Lamphaimas District
7	Ban Nong Phai and Bam Sawaitana, Stuek District
8	Ban Samet and Ban Thungwang, Stuek District
9	Ban Chai Dan and Ban Kra Dueng, Nangrong District
10	Ban Palad Puk and Ban Dan, Ban Dan District
11	Ban Chomptra, Satuk District

■ External Market

KBF has expanded its products to the external market, starting from the area close to the factory. In the previous year, KBF initiated a market plan for powdered organic fertilizers, granular organic fertilizers, chemical organic fertilizers throughout many agricultural shops and user channel directly so that farmers can try KBF's high quality and low-cost products. Moreover, it helps with the branding strategy among general farmers. In 2018, KBF has promoted products in 7 districts: Khu Mueang, Kaen Dong, Baan Mai Chaiyapoj, Bhudthaisong, Nong hong, Pakam and Mueang (Surin province) separated into 2 provinces: Buriram and Surin. Moreover, there were products exhibitions, outdoor conferences with related organizations, as well as plantation visits of which sugarcane farmers use KBF's fertilizers for the main crops namely, rubber tree, cassava, melon and vegetable such as limes, beans, bananas and so on.

3.2.4 Price Policy

Since the chemical fertilizers and organic fertilizers are the production factor that BRD supports the sugarcane farmers, specifying the fertilizer's price is divided into 2 cases; the prices of the instant chemical fertilizers, which are purchased in to sell out, in line with the price of the general market, while the prices of the organic fertilizers produced by the company itself are decided by the cost-plus method. This is to provide the sugarcane farmers the qualified fertilizers with the formula to suit their needs in the growth of the sugarcanes, with the cheap price, and in reducing the cost for the sugarcane farmers.

3.2.5 Marketing and Promotion Plan

In 2018, KBF together with BRD and the shops have regularly organized many kinds of campaigns by designing the business plan and also performing the trading supporting activity together . The KBF's trading supporting team will work together with its partner company in each area to study the cultivated areas, learn on-site problems, analyze and solve the problems together and also adjust the decided plan suiting the needs of each area on a regular basis, as well as monitor customer's plantations constantly.

Besides, KBF has the plan to broadcast its products through various channel, such as KBF webpage, KBF and BRR Line application, the local cable TVs, community radios, and printing media (Rural Technology Magazine). Additionally, the trading supporting team will evaluate or follow the growth of the sugarcanes periodically to make the products be recognized and to grasp the sugarcane farmers the product's symbol; this is to make the product be more dependable, which will emphasize the sugarcane farmers to trust the products of the company.

3.2.6 Industry Situation and Competition

Obviously, the chemical fertilizer industry is one of the most important industries of the country because Thailand, as we all know, is the agricultural country since the fertilizers plays an important role in increasing the agricultural products. However, Thailand cannot produce enough fertilizers to suit the farmers' needs because its producing capital is very high, so mostly importing those fertilizers from overseas is the best solution.

The Ministry of Agriculture and Cooperatives has continued to educate farmers in the use of the chemical fertilizers and organic fertilizers to cause the balance and suitability of the soil conditions and encourage the farmers to mix the chemical fertilizers themselves. This is to promote the farmers to benefit the left-over products (farm wastes) as their own fertilizers. Furthermore, the Ministry of Agriculture promotes the integrated use of fertilizers, that is to say, the farmers can use in conjunction with the chemical fertilizers, organic fertilizers, and/ or bio-fertilizers at an appropriate rate suiting to each plant. Additionally, the use of the mixed fertilizers can reduce the use of chemical fertilizers and it also helps add other organic objects in the soil, making it more naturally plentiful. Actually, this is one of the measures in place to help reduce production costs for farmers because, as we all know, the chemical fertilizers are one of the important production factors that affect the farmer's production costs.

Regarding to agriculturists in Thailand have faced with a long drought and a slump in price of agricultural products. Consequently, the government encourages organic farming with the focus on the healthy consumer market. In addition, the price of organic products is higher than the normal ones which directly advantageous to KBF's business in the organic fertilizer market.

For fertilizer price, since Thailand is not yet able to produce the chemical fertilizers to support the farmers' needs across the country. So, it is required to import from the country that can manufacture the chemical fertilizers. However, the Ministry of Agriculture and Cooperatives will have to keep track of the fertilizer's prices to make sure that they are suitable for the farmers and also to protect them from such exploitation.

3.2.7 Raw Material Supply

The KBF has used the decompose filter, which is a by-product of the sugar production from the BSF as its raw materials to produce the fertilizers. In addition, the decompose filter is accounted for about 5 % of the quantity of the sugarcane crushing of each operation year.

3.2.8 Future Plan

Presently, the production and distribution plan of KBF's fertilizer is implemented due to the need of sugar cane farmers who have been supported by BRD. The company uses the raw material, which is a byproduct of sugar production process to manufacture fertilizers with the purpose of decreasing the production cost while increasing its value at the same time. However, KBF has continuously aspired to develop the organization and enhance the product quality. The company has planned to extend the market and distribution channels, as well as selling machines along with other agricultural products that will help escalate the revenue. Thus, there are the important issues of the market expansion plan as follows;

1. To strengthen the manufacturing efficiency and the fertilizer distribution to the internal market by producing diverse formulas that can adapt to individual type of soil.

To facilitate the sugarcane cultivation on different types of soil and other conditions found in each plot, KBF has collaborated with BRD to conduct studies which will help improve the productivity and quality of crops by providing tailor-made fertilizers according to the condition of separately cultivated area. As every sugarcane growing area presents different nature of soil, using the same fertilizer formula may not be entirely competent. With this reason, KBF is determined to respond to the in-depth sugar cane cultivation promotion policy by producing distinct formulas that can accommodate the sugarcane farmers' need.

2. To increase selling efficiency to the external market by distributing integrated agricultural products

KBF has incessantly developed the effective and efficiency production of granular organic fertilizers and continued to do better to satisfy the farmers' need. In 2019, KBF will add another one product namely, chemical fertilizers that will meet the needs of the external market. KBF expects to further distribute to external market in the second quarter of 2019. Moreover, the company plans to sell integrated agricultural products and equipment such as liquid fertilizer, liquid microbe and agricultural machinery to bring variety to the business which will advance the quality of farmers' products. In addition, there will be the increment of distribution channels to the external market in order to generate more profit for the company. To reach that goal, KBF has registered the company's trademark "**Pla Bin**" (Flying Fish) for further distribution.

KBF's Selling Promotion Activities

Booth Activities at the Stores



Boots Activities at 2018 Annual General Meeting of Buriram Farmers

(Organized by Buriram Sugarcane Farmer Association and Buriram PLC).



Company Visit Activity for Eastern Sugar and Cane PLC.



Company Visit for Leader of the Sugarcane Agriculturist Businessman Group of

Buriram Province in total 200 Persons



Company Visit Activity for Foreign Customers such as Japan and Vietnam



Customer Visit Activities (Pla Bin Products)



**Seminar on the Benefits of Organic Fertilizer with the Organic Compost Fertilizer Career Promotion Group
Non Tao Thong Community, Buriram Province**



3.3 Packaging for Environment Business Operated by Sugarcane Ecoware Co., Ltd. ("SEW")**3.3.1 Products and Services**

Sugarcane Ecoware Co., Ltd. or SEW was registered in 2018. Currently, the registered capital of the company is 75,000,000 Baht and fully paid-up. The company manufactures packaging for environment, whether for food, drinks, appliances and equipment. Product will be distributed in modern retail store and wholesale store including restaurant, hotel business, cruise line, air-line, and other businesses. The packaging products are made from bagasse as a main raw material and other pulps. The manufacturing capacity is 300 million pieces per year. The operation is expected to be started in the 3rd quarter of 2019.

Currently, the project is more than 60% completed in construction. The main advantage to other competitor is its ability to produce pulp to be mold into all kind of packaging product. The company has received knowledge on pulp production from the expert in making paper pulp from plant, which will help the company has 60% less cost compare to other operator. When the factory construction is completed, the company plans to export more than 75% of product.

Advantage of sugarcane container

- Available in many models, can be mold as needed.
- Can be used with oven and microwave
- Naturally degrades for 100% in 45 days
- Long shelf life
- No harmful chemical during production
- Requires less energy for production
- Produce no waste from production
- Can be used in -40 to 250 °C
- Can contain hot water and oil for 150 °C
- Not toxic to environment
- Cheap price
- No additive and substance that cause cancer
- Promote positive image for organization that use this type of packaging.

3.3.2 Market and Competition

Currently, the demand of biodegradable packaging is raised continuously due to increasing number of waste and environmental impact; the company's product is in demand that is moving toward environmental-friendly product. Therefore, environmental-friendly product will replace demand for foam and plastic in the future.

➤ Strategic Competition

1. Customer Features and Distribution Channels

Short-term The company's target is modern retail store, wholesale store and general store, including restaurant, hotel, cruise line, air-line, and other business related to food which currently creates high demand volume for product made from foam and plastic.

Long-term Enter lower market and strive to replace container made from foam and plastic which has high volume of demand. The main factors for this condition are as follows.

- The consumer must know and understand the benefit of product to environmental-friendly and understand the negative impact of product made from foam and plastic.
- The price must be able to compete with product made from foam and plastic.
- The model must be cover a variety of the demand and needs of consumer.

2. Price Policy

Although, the price of packaging made from plant pulp is lower than plastic product and higher than foam product and in similar range to competitor which unable to reach lower market. However, the initial price setting should be lower than plastic products and higher than foam products and later the pricing push lower to compete with product made from foam which has increasing price. The different from profit per each unit will be sufficed by higher consumption. When more consumer turns to bagasse packaging to replace product made from foam, the price of foam and plastic in the future will help decrease price gap in the future.

3. Promotion

Advertisement and public relation will be used for communicate with user directly. With emphasize on the message on package label that can be easily seen and understand such as health safety – no toxicity, environmental-friendly and degrades naturally in 45 days.

4. Raw Material Supply

As the BSG is sugar producer and produces bagasse from sugar production process 900,000 ton per year, which requires for packaging production only 18,000 ton per year. Therefore, the company has enough raw materials for production.

5. Product Development

Currently, the consumer consumption trend is changing and the demand for one-time-use packaging was raised continuously. Thus, the development of one-time-use packaging product is consistent with the consumer's demand at present and future market. Environmental impact is also one of the topic that influence consumer's decision, especially for one-time-use packaging that is environmental friendly. For this reason, there is the development of product that is consistent with this trend both within the country and globally, along with material and production technique to innovate new packaging product for the future. The quality and property of this packaging is on par with those made from foam, plastic, or paper, and can be applied as packaging for other product other than food. In addition, the company has also plan to set up a research unit to evolve and research about packaging from bagasse.

3.3.3 Industry Situation and Competition

Currently, the demand for one-time-use packaging continues to rise. There are developments in many raw materials and production technique to meet consumer's demand in the present and future. Most of products are made from foam and plastic. However, due to the environment problem is serious in the present and in the future. According to Pollution Control Department data from 2012-2016, the amount of foam waste increased from 56 to 61 million pieces per day. In 2016 the amount of foam waste was reached to 1.3 million ton per year or 3,704 ton per day – 61 million pieces per day. On average, a Thai population creates 1 foam waste per day.

Foam is resistance to natural degradation and will take more than hundred years comparing to other material. Foam is mostly used in food container, which after uses it requires complicated process to recycle which leads to higher cost. Related department tries to solve this problem, notably the Office of the Consumer Protection Board, in cooperation with other entity try to find solution on how to decrease the use of foam material which is expected to be in effect in short years. In addition, the toxicity found in food container from foam and plastic materials decrease the quality of life and health of the consumer in the long run.

Source: http://www.tnnthailand.com/v1/news_detail.php?id=132980&t=news_special

Domestic market trend, the government sees the importance of environment and creates more policy to enforce environmental friendliness. However, operator still requires better support and promotion from government to raise awareness of the environmental friendly trend and to inform consumer of the benefit of naturally degradable product.

Global market trend, many countries in Europe and Asia has put in place or is in the process to reduce the use of plastic and foam. These measures cause plastic and foam product manufacturer to bear more waste management cost – directly leading to higher price. On the other hand, the demand for environmental-friendly container is increasing but there is only small number of capable business to meet demand. Most developed country pay attention to environment to improve quality of life of its population. The company will aim to market its product to the country which cares about environment, especially in the country where there is a legal limit to the use of foam or plastic container, or the country in the process to do so such as in China, Japan, USA, and Europe, etc.

From the trends as mentioned above, the trend is consistent both in Thailand and foreign. Therefore, there is development of both raw materials and production processes for creating new innovations to respond the need as mentioned.

3. Risk Factors

Risk from business operation of the company

Business of the Company and its subsidiaries are as follows:

1. Raw sugar and brown sugar manufacturing and distribution operated by Buriram Sugar Factory Co., Ltd. (“BSF”).
2. By-product business as follows:
 - Biomass-fired power plants operated by Buriram Energy Co., Ltd. (“BEC”), Buriram Power Co., Ltd. (“BPC”) and Buriram Power Plus Co., Ltd. (“BPP”).
 - Organic fertilizer manufacturing and distribution business operated by Key Brand Fertilizer Co., Ltd. (“KBF”).
3. Supporting business operated by Buriram Sugarcane Research and Development Co., Ltd. (“BRD”).

Risk from Business Operation of Buriram Sugar Factory Company Limited (“BSF”)

1.1 Risk Factors from Raw Material Sourcing

BSF produces and distributes raw sugar and brown sugar by using sugarcanes as main raw material. However, BSF does not own sugarcane farm sufficiently for production capacity, thus to allocate sufficient sugarcanes for crushing is the most important factor affecting the operations and the performance of the company. The quantity of sugarcane available each season is depended on these main factors:

(a) The risk from changes of the amount of planting areas which may cause by the decrease of the sugarcane price affecting to the farmers to grow other agricultural plants that gain the higher price instead or the government supporting policy to appropriately allocate the planting zone, also known as zoning. Nevertheless, Buriram province is one of the pioneer areas to switch from rice to sugarcane plantation according to the policies issued by the Ministry of Agriculture and Cooperatives. Additionally, the company has conducted the surveys for evaluating the changed factors and also solved those problems since 2012 until 2018. Hence, the amount of the sugarcane plantation has gradually increased but there will be some years that the company meet with drought as result of sugarcane planting area are decreased as shown in the following table:

Crop Year	Sugarcane Plantation (Rai)	Number of Plots (Plot)	Average Production (Ton/Rai)
2012/13	129,571.31	21,876.00	13.51
2013/14	168,763.90	28,460.00	10.43
2014/15	177,167.67	30,934.00	11.01
2015/16	185,062.64	32,876.00	12.15
2016/17	181,202.71	30,872.00	13.22
2017/18	247,090.68	40,003.00	13.76

(b) The risks from climate change, rainfall, irrigation, soil fertility, sugarcane varieties and other sugarcane diseases affect the crop yield of sugarcane per Rai. The changes of each factor can cause agricultural output diminution. According to the climate change and rainfall, the company has supported the watering system during the drought through drip irrigation system in the sugarcane farms by cooperating with the Office of the Cane and Sugar Fund (OCSF) to provide a long-term loan with 2% interest rate per annum for sugarcane farmers to install such drip irrigation system.

(c) The risk from soil fertility. The company has the policies which focus on soil improvement to recover the soil fertility in sugarcane plantation areas, for example, harvesting freshly sugarcane, preserving organic matter, adjusting pH for fertilizer efficiency. The company produces the fertilizers from filter cake as a main raw material which is a by-product from sugar production process.

(d) The risk from sugarcane varieties. The company has selected and procured sugarcane varieties which are appropriate for the plantation areas and also provide the sugarcane varieties testing area for the selection of a new sugarcane variety in order to replace deteriorated ones, including the arrangement of the sugarcane varieties for planting, and use of qualified sugarcane varieties to provide higher crop yield for higher returns for the farmers, as well as higher sugar production per ton.

(e) The risk from the purchasing competition of local sugarcane. If other sugar factories in local areas offer higher price of sugarcane than BSF's, sugarcane farmers may trade their sugarcane to those factories instead; therefore, the amount of sugarcane crushing will be decreased respectively. As the result, BRD provides the solution for this matter through conducting the contract farming between the company and sugarcane farmers by providing fund, fertilizer, chemical, sugarcane variety, or other agricultural machines and equipment in the plantation of 40 kilometers around the factory in order to

legally transfer the rights of such products to the company in advance before cane crushing season. Additionally, BRD aims to keep good relationship with sugarcane farmers through using the support strategies by providing 17 teams of agriculture specialists to give advices to sugarcane farmers in individual planting area such as recommending suitable sugarcane variety for each plantation, managing and examining soil and water conditions and supporting all facilities in the crop period from material preparation to harvesting and selling to BSF by using online and GPS system to ensure that every sugarcane plot is monitored and supported appropriately so that sugarcane farmers can operate the quality production and gain more crop yield per Rai which means that sugarcane farmers will gain more revenue and stable household economic status. Consequently, BSF has not encountered the sugarcane insufficiency for the sugarcane crushing season.

Besides, the company has allocated the sugarcane plantation or zoning among sugar factories in Buriram province, Surin province and Nakhonratchasima province in order to prevent the purchasing competition of sugarcanes.

BRD has the additional risk management plan to earn more sugarcane output and efficiency from the sugarcane farmers by mean of supporting sugarcane farmers in each plantation area with the focus on the precision agriculture policy consisting of 3 elements: information technology, know-how technology and management. Such policy is based on the concept that agricultural plants and environmental factors such as soil, water, sunlight, and wind in a planting area affect the agricultural output differently in line with each environmental condition. Thus, agricultural plants in the same area are monitored in a different manner by taking the most efficient output into account. Regarding the sugarcane cropping season in 2019/2020, BRD has the policy for supporting the complete irrigation system in the sugarcane plantation – by applying the irrigation system for managing the water supply in the sugarcane plantation with efficiency, in order to increase the sugarcane's productivity and create sustainability in sugarcane production.

BRD's goal is to implement every sugarcane farm adhered to the precision agriculture in order to ensure the higher efficient output and the consequent benefits received: lower cost, more output, acceptable quality, achieving the maximum benefits from using resources, and environmental conservation.

1.2 Risk from Fluctuation in Global Sugar Market Prices

Regarding to sugar trading in global market, sugar is one of the agricultural products which have the highly price fluctuation compared to other agricultural products. The fluctuation in global sugar market price depends on demand and supply of manufacturing and consuming countries, the export and import volume in each country, the arbitrage by arbitrageurs in commodity market and the proper climate for planting in each countries issuing the promotion policies, trade invention policies, export and import policies of sugar industry group by the government sectors especially for developed countries. Furthermore, sugar price currently corresponds to fuel price since cane juice and molasses can be used to produce ethanol which can be mixed with gasoline for automobile fuel. The factors as mentioned above affect the fluctuation in global sugar market prices.

According to the Sugarcane and Sugar Act, B.E. 2527, Thai sugar factories can export sugar through agencies as indicated only and the export price is primarily based on the global sugar market price which has been changed pursuant to global demand and supply. Hence, the revenue of the company shall be affected according to the global market change. In 2018, the price of New York Sugar No. 11 was averaged at 12.24 cent per pound.

Average Price of New York Sugar No.11

Fiscal year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Average Price (Cent/Pound)	11.37	18.08	22.14	27.09	21.55	17.47	16.32	13.12	18.18	15.78	12.24

Average Price of London Sugar No.5

Fiscal Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Average Price (US\$/Ton)	351.38	487.86	614.79	706.39	587.68	489.71	440.04	373.40	500.39	433.25	343.79

Source: Investing.com

Nevertheless, the main cost of sugar production is sugarcane price which is changed according to the revenue of the company (70:30 Profit Sharing System set up by Thai government and regulated by the Office of the Cane and Sugar Board). Therefore, in the event that global sugar market prices decrease, the sugarcane cost will be decreased in the ratio as of 70% pursuant to the Profit Sharing System which can minimize the effects of sugar price fluctuation.

However, the operating results of the company depend on the of sugar and molasses business only which means that the fluctuation of global sugar market price has the influence on the operating results of the company definitely. However, BSG has invested in many projects related to the sugar and molasses business such as the biomass power plant by using bagasse, the factory producing and distributing organic fertilizer, which will be decreased the impact on revenue or operating results base on the mechanics of the sugar price in global market.

1.3 Risk from Non-Performing Loans on Sugarcane Advance Payment Loans

BRD/BSF support the sugarcane farmers by providing the sugarcane advance payment loans in individual planting areas according to each step of crop-growth period by using the database and GPS (Global Position System) to survey the plantation in order to assure that each area is exactly supported and monitored appropriately in order to receive such support in line with the actual results.

The support from sugarcane advance payment loans is proceeded by transferring to sugarcane farmers' bank accounts so that the sugarcane farmers shall spend the investment in term of sugarcane variety, land, watering system, fertilizer and so on. This kind of advance payment loan is similar to the reservation of sugarcane in advance which is that the sugarcane farmers who are provided the advance payment loans have to sell sugarcanes only to the factory after harvesting, in the period of sugarcane crushing season. Those sugarcane farmers shall harvest and send to the factory accordingly, after that the factory will pay the returns to the sugarcane farmers by deducting from the sugarcane advance payment loan.

According to such advance payment loans mentioned above, if the sugarcane farmers were unable to bring the sugarcane for crushing as per agreement, which may be subject to many causes such as; drought problem, flood or epidemic, etc. Hence, the company shall be at risk of doubtful accounts from non-performing loan in the event that the sugarcane farmers unable to pay the debts on the due date, and the company will be forced the doubtful accounts increase, and it also directly affected the BSF's operating results during 2014 until 2018. Whereas, the company has set the allowance for doubtful accounts as below;

(Unit: Million Baht)

Item	2014	2015	2016	2017	2018
Allowance for Doubtful Accounts	1.05	3.44	0.74	10.28	4.56
Sugarcane Farmers Account Receivable	880.52	782.61	1,069.92	957.07	682.56
Percentage of Doubtful Accounts	0.12	0.44	0.07	1.07	0.67

The ratio of allowance for doubtful accounts during 2014 to 2018 was approximately 0.47% of sugarcane farmers account receivable at the end of the accounting period. The company has emphasized this advance payment loans and managed its risk through specifying the qualification of sugarcane farmers and classifying them according to their performance so that the loan payment shall be offered and paid into performance terms. In addition, the securities or guarantor specification are also taken into account as well. Besides, the company has also provided the agricultural specialist teams to look after the planting process and used GPS system to survey the planting areas in order to precisely collect the data in real time and solve the problems timely.

1.4 Foreign Exchange Risk

The company has recognized the export revenue in term of US Dollars (USD), approximately equivalent to 70% of the total sugar selling revenue; therefore, the revenue of the company shall be fluctuated according to the exchange rate of USD/THB (Thai Baht).

However, the company has a preventive measure by hedging the foreign exchange risk with forward contracts. The exchange currency rate in the forward contracts shall be higher than the rate specified by Thai Cane and Sugar Company Limited (TCSC) in calculation of quota B sugar. In this regard, such matter depends on the consideration of the executives about the trend of exchange rate at that time.

In addition, the company also closely monitors the movement of the currency exchange rates, in order to take any actions required due changed situation on time. However, the prevention of the mentioned risk factors may not be able to prevent from the risks, if Thai Baht currency tends to rise consecutively in long-term.

1.5 Risk from Governmental Control

1.5.1 Risk from Government Policy

Sugarcane and sugar industry in Thailand has faced the significant change which comes with quite great impact. On January 15th, 2018, the Council of Ministers had the resolution of acknowledgement of order by the Head of National Council for Peace and Order 1/2561 – regarding of Law amendment for bearing the restructuring of sugarcane and sugar industry for whole system, in order to cancel the determination of sugar selling price which was consumed within the Kingdom, and it shall be according to the mechanic of sugar price in global market. The occurred difference from the average price survey of actual sugar selling price in the Kingdom in one month, and the average price of white sugar price in London Market number 5 plus Thai Premium Sugar in one month. Then, send it the fund for maintaining the stability of sugarcane and sugar industry system, and issue the regulations of Sugarcane and Sugar Committee in respect of collecting money from sugar distribution in the Kingdom into Sugarcane and Sugar Fund B.E. 2561.

Moreover, there is the restructuring of sugarcane and sugar industry - cancellation of all 3 quotas system of sugar which are; domestic consumption (Quota A), export for selling price (Quota B), and export by factory (Quota C). Also, the new management system will determine the factory to organize sufficient sugar for domestic consumption, while the competent authorities shall appoint representative to discuss on the export criteria.

Nonetheless, the floating sugar price will not have issue with the sugar quota. Office of Cane and Sugar Board (OCSB) will determine that the sugar factory shall reserve sugar for 1 month, to prevent insufficiency, and import the sugar under the ASEAN Free Trade of 0% tax in order to prevent the monopoly and increase the efficiency of production and Cane and Sugar Fund management which will be determined to collect the money from the differences between the factory price and the average actual selling price into the Cane and Sugar Fund in order to save it for maintaining the stability of the cane price for the farmer's strength. However, by the principle, Department of Internal Trade will remain the sugar to be in the Restricted Goods Account because sugar is a necessary product for living, and it is also consumable goods with the price that changes by the global market, for simple management without wide impact on the consumers.

1.5.2 Risk from the Fluctuating Income from Sugar Sales

According to the cane crushing in the period of November to April, the company gradually sells sugar since December until January to the end of cane crushing season. However, the company will sell sugar based on Quota A for domestic sales within 52 weeks. Moreover, Quota C for export will be distributed according to the existing amount of sugar, crop yield, global sugar market price and the selling price of Quota B sugar set by Thai Cane and Sugar Company Limited in order to standardize the selling price of Quota C sugar.

Nevertheless, in each year, the amount of sugar revenue is different. Therefore, the revenue from sugar selling of the company in each quarter might increase or decrease based on the mentioned factors and the sales amount of each quarter. It is also related to the restructuring of sugarcane and sugar industry that cancel the quotas system and also cancel the determination of sugar selling price which is consumed in the Kingdom to be according to the mechanics of the sugar price in global market. However, the company has the risk management measures in term of domestic distribution for bearing with the change of regulations, and closely monitor on announcement/regulations from government authorities. In 2019, the company will be focusing on the marketing through 3 major channels which are; distributors channel (Yee-Pua), modern trade channel and food service channel as the new channels for the company. Anyway, the company has the proportion of domestic sugar selling calculated as 30%.

1.6 Risk from the Cost of Raw Materials

The price of sugarcane is formulated in the profit allocation of 70:30 Profit Sharing System. The sugarcane farmers gain 70% of profits from sugar sales. The calculated sugar price on the sugarcane price that has to pay to sugarcane farmers is from average selling price formulated by Thai Cane and Sugar Company Limited, therefore, if Thai Cane and Sugar Company Limited sell the sugar in higher price, the cost of raw materials will be increased respectively, whereas, if Thai Cane and Sugar Company Limited sell the sugar in lower price, the cost of raw materials will be decreased respectively. The fluctuation of raw materials cost will affect to the profit margin of the company as well.

Consequently, in order to minimize this risk, the company has to sell sugar in higher price than the average price formulated by Thai Cane and Sugar Company Limited to prevent losses from the increasing price of raw materials. As the results, the company has followed up the status of sugar sales from Thai Cane and Sugar Company Limited closely for determining the appropriate price of sugar in comparison with the average price of Thai Cane and Sugar Company Limited.

Risk from Business Operations of Byproducts**Biomass Power Plant Business operated by Buriram Energy Company Limited (BEC), Buriram Power Company Limited (BPC), and Buriram Power Plus Company Limited (BPP)****1.1 Risk from Insufficiency of Fuel Material for Electricity Generation**

Currently, Buriram Sugar Factory Company Limited or BSF provides the bagasse which is the byproduct of sugar manufacturing to BEC, BPC and BPP as a biofuel material for electricity generation. Therefore, if the amount of sugarcane in the crop year is small, it will affect to the insufficiency of bagasse for electricity generation and the break-off of the generator accordingly.

In the production year 2017/2018, the company had bagasse after crushing in amount of 903,607.57 tons which is 28.64% of the sugarcane for crushing, which the sugar factory uses it as the fuel for heat generation in the process of sugar production in amount of 303,349.04 tons. For each power plant has the requirement of fuel around 600 to 1,000 tons per day, however, the power plant's machines can use other replacement fuel materials such as; wood chips, sugarcane leaves, and chaff. In the previous production year, Buriram Sugar Group has added the project for purchasing the sugarcane leaf from sugarcane farmers more than 20,000 families, in order to use the sugarcane leaf as the fuel. Since, the sugarcane leaf has less humidity than the bagasse; therefore it is suitable as fuel for generating electricity. Hence, the company can control the risk of insufficiency on materials for generating electricity. Nonetheless, if the company uses other raw materials to replace, it might cause the cost of electricity generating to rise which will affect the net profits accordingly.

1.2 Environmental Risks

The operation of power plant is under the Acts and regulations concerning to the environmental protection and management which is included the pollution control such as soil, water, and air. Thorough the period of business operation, the company has followed these measures to protect and prevent any kinds of environmental impacts, for example, the water drainage system, the control system of substances, wastewater management system and waste elimination system. The company also provides green space or open space reserve within the area of power plant location, totaling 25 Rai, as well as the following and verifying the operation in term of environmental impacts closely in order to regulate the electricity generation process pursuant to laws and regulations, and reduce environmental pollution such as a dust suppression by using scrubbing steam to change dust into soil by the wet scrubber system and applying

the exhaust from the chimney onto the sugar product development process in order to decrease the amount of the occurred exhaust.

In July 2012, BEC was awarded the Green Industry Level 2 (Green Activity) and promoted to level 3 (Green Activity) in July 2016 for the enhancement of environmental conservation, and also certified by ISO14001:2004 in March 2016.

Furthermore, BPC was promoted from Green Industry Level 1 (Green Commitment) in 2015 to Level 2 (Green Activity) in April 2016 from the Provincial Industry Office and Provincial Industrial Estate Authority. Such certificate can be explained that the company has emphasized the environmental management systematically, assesses and review the practices continuously.

In 2017, BEC received 2 awards; that is, the alternative energy of the cogeneration project in the event of Thailand Energy Awards 2017 by the Minister of the Ministry of Energy, and the winner cogeneration category in the event of 35th ASEAN Ministers on Energy Meeting at Pasay, Philippines.

In addition, the companies continue to develop and focus on preserving the environment continuously. In 2018, BPC received the Excellence Award for the bagasse-fired cogeneration power plant project from Deputy Prime Minister and Minister of Justice in Thailand Energy Awards 2018 Event, and it also achieved the First-runner up Award on the cogeneration category at the 36th ASEAN Ministers on Energy Meeting (36 AMEM) in Singapore.

Manufacturer and Distributor of Fertilizer operated by Key Brand Fertilizer Company Limited (KBF)

1.1 The Risk from Existing Consumption Behaviors

Key Brand Fertilizer Company Limited or KBF was initiated the business of organic fertilizer manufacturer in order to provide the soil improvement and nutrition since December 2012. The target customers are mostly the sugarcane farmers. During the 3-5 years ago, the sugarcane farmers have more understanding and knowledge about the soil improvement by organic substance and soil pH adjustment by Dolomite which increase the efficiency of chemical fertilizer and highly improve the physical and chemical property of soil.

Currently, the company has the method of using organic powdered fertilizer which can improve the efficiency of the sugarcane farmer's performance. As of which, it has been developed for three years – it was started from developing the machine and designing the transportation of big bag packaging, and the cane stacker truck will put the big bag into fertilizer machine. Then, the machine had been developed with

installation of hydraulics system for putting the organic powdered fertilizer on the pile in each farm, and it can be applied in the farm instantly. Therefore, the farmers no longer need to wait in the queue of the cane stacker truck for putting the organic powdered fertilizer in the big bag into the fertilizer machine. It decreases the step of working process, duration of plantation preparation for rain season, and improves the use of organic powdered fertilizer to be more well-known.

However, the company also conveys the knowledge of organic fertilizer and organizes a plant visit on the demonstration farm applying the organic fertilizers, including the academic information support which influences the change of sugarcane farmers consuming behaviors to increasingly apply the powdered fertilizer.

1.2 Environmental Risks

The business operation of fertilizer manufacturer and distributor for soil improvement is under laws and Acts B.E. 2518 amended by No.2 B.E. 2550 concerning to the quality control to sustain the benefits for farmers and agricultural industry which included the pollution control such as soil, water, air and toxins, waste management, health and safety in workplace and dangerous material management. These regulations are complicated, and have been changing continuously; in addition, the law enforcement sometimes depends on the individual interpretation by relevant departments.

In the past, KBF received the factory establishment license and the fertilizer manufacturing license pursuant to the laws and relevant regulations. Additionally, KBF also set the measures of environmental protection and prevention for employees and surrounding areas such as the utilization of microbe to accelerate biodegradation and elimination of waste disposal smell, the utilization of waste water ponds in the rainy season, the utilization of dust collector chamber, wet scrubber system, water cannon vehicle, and providing safety equipment for employees in order to reduce the machines' acoustic impact.

The CSR activities were organized in order to sustainably develop the community. The manufacturing plant of KBF is located far away from the community areas; therefore, it can be assured that the environmental risk is leveled low. In August 2018, KBF has achieved the award for implementing environmental governance principles in the operation of the business under the environmental governance project by the Ministry of Industry.

Other Risks

1.1 The Risk from High Debt to Equity Ratio (D/E Ratio)

According to the financial statements year ended on December 31, 2018 and December 31, 2017, the D/E ratio of the company is equivalent to 3.11% and 2.73% respectively. However, the company is a holding company; therefore, the bank loan agreement with the financial institutions, the agreement of Buriram Sugar Group Power Plant Infrastructure Fund, and the business operations of its subsidiaries such as BSF, and so on in which each subsidiary calculated and maintained D/E ratio separately, not calculating the entire business group. On December 31, 2018, D/E ratio of BSF was in compliance with commercial bank loan contracts.

Such D/E ratio is separately calculated as follows:

Case 1 Debt to Equity: D/E ratio equivalent to 3.11 times

Case 2 Interest Bearing Debt to Equity: IBD/E ratio equivalent to 2.76 times

Case 3 Debt to Equity: D/E ratio excluding Infrastructure Fund equivalent to 1.84 times

Case 4 Interest Bearing Debt to Equity: IBD/E Ratio excluding Infrastructure Fund equivalent to 1.49 times

In 2017, the company launched the investment unit “Buriram Sugar Group Power Plant Infrastructure Fund (BRRGIF)” to the financial institution and people in the Stock Exchange of Thailand. However, there is no accounting standard for recording the infrastructure fund, but to be accounted as a liability. Consequently, the D/E ratio of the company was increased.

In order to mitigate the risk on the loan from the commercial banks, the company has dealt the agreement on the D/E ratio and related agreement with the company and its subsidiaries without any obligations to maintain other financial ratio other than the D/E ratio.

1.2 The Risk from the Influences of Major Shareholders on Policy Formulation and Administration

The family of Tangtrongwechakit and Buriram Capital Company Limited, in which the major shareholders is the family of Tangtrongwechakit, holding shares by 74.93% of the registered capital which was issued and paid-up after offering the ordinary shares. In addition, the family of Tangtrongwechakit has taken positions of the executives and authorized directors. The company and/or the minor shareholders may have the risk from the influence of major shareholders on policy formulation and administration somehow, and the policy and management control, as well as voting control in the shareholders’ meeting

which requires the majority votes, except for any agenda which required 3/4 of the total votes at the shareholders' meeting. Therefore, other shareholders may not control the votes to balance the power of major shareholders. However, the company has determined the good corporate governance principles for the Board of Directors and executives to be comply with relating to the right of shareholders and information disclosure and transparency, etc.

Regarding to the transparency, accountability and the power balance of the executives and directors, the company has the Internal Audit Unit to be subject to the Audit Committee, and External Audit outsources to audit and balance the power of consideration and approval of any agenda items before proposing at the shareholder's meeting in order to prevent the conflict of interest, and to enhance the transparency of business operations. Additionally, the Risk Management Unit was appointed under the supervision of the Risk Management Committee to manage risk management of the entire organization to be an acceptable level (Risk Appetite). Moreover, the company appointed the Nomination and Remuneration Committee, and Corporate Governance Committee to ensure the transparency, clarity, and maintaining the best interest of all stakeholders.

4. The Operational Assets

4.1 Core operational assets of the company and its subsidiaries

As of December 31, 2018, the core operational assets of the company and its subsidiaries had net value after deduction of the accumulated depreciation on the consolidated financial statements 5,432,152,570 Baht with details as follows:

Items	Net value after deduction of the depreciation (Baht)	Ownership	Encumbrance
Consolidated Financial Statements			
Land and Land Development	412,396,841	Owner/ long-term rental	Collateral ¹
Building and Building Development	959,091,934	Owner	Collateral ¹
Machinery, Furniture, Equipment and Vehicles	3,507,505,783	Owner	Collateral ¹
Assets in Construction	553,158,012	Owner	-
Total	5,432,152,570		

Remark: ¹ The company has mortgaged land, building and machinery as collateral to secure long-term loans from financial institutions.

Thus, the details of land and objectives of ownership for business operation of the company and its subsidiaries as of December 31, 2018, are described as follows:

4.1.1 Land

Asset	Location	Area	Objective of Ownership	Ownership	Encumbrance
Land	- Hinlekhai, Kumueang, Buriram	- 1,240 Rai, 3 ngan, 47 sq. wah	Sugar factory	Owner	Some in collateral ¹
Land	- Hinlekhai, Kumueang, Buriram	- 636 Rai, 1 ngan 26 sq. wah	Biomass-fired power plant and organic fertilizer factory	Owner and some in long-term rental agreement	Some in collateral ¹

Asset	Location	Area	Objective of Ownership	Ownership	Encumbrance
Land	- Nong Plong, Chamni, Buriram	- 660 Rai, 2 ngan, 74 sq. wah	Sugar factory	Owner	-
Land	- Thai Charoen Lahan Sai, Buriram	- 51 Rai, 3 ngan, 93 sq. wah	Sugarcane plantation experiment for research and development	Owner	-
Land	- Na Nuan Sanom, Surin	- 188 Rai, 2 ngan, 94 sq. wah	Sugar factory	Owner	-
Total		2,724 Rai, 8 ngan, 241 sq. wah			

Remark: ¹ The company has mortgaged some land as collateral to secure long-term loans from financial institutions.

The long-term rental agreement of land is made between Buriram Energy Co., Ltd. and Mr. Adisak Tangtrongweachakit who is director and executive director (please see details in Part 2, Item No. 12 “Related Transactions”). Thus, the agreement is valid for 25 years from January 1, 2011 to January 1, 2036.

4.1.2 Building and construction of the company and its subsidiaries

Asset	Location	Objective of Ownership	Ownership	Encumbrance ¹
<u>Sugar Factory (BSF)</u> - Factory building; 11,967 square meters - Sugar and raw materials warehouse; 24,236 square meters - Office, maintenance building - Accommodation, guardhouse, warehouse and others	Hinlekfai, Kumueang, Buriram	Sugar production and warehouse	Owner	Collateral

Asset	Location	Objective of Ownership	Ownership	Encumbrance ¹
<u>Power Plant (BEC)</u> - Power generation building; 1,440 square meters - Plant and building; 50,192 square meters - 1 bagasse storage; 3,170 square meters - Wastewater treatment pond; 430 square meters - Office of subsidiary - Accommodation, guardhouse and warehouse	Hinlekfai, Kumueang, Buriram	Power generation and distribution	Owner	Collateral
<u>Power Plant (BPC)</u> - Power generation building; 19,500 square meters - Plant and building; 12,100 square meters - Wastewater treatment pond; 430 square meters - 1 bagasse storage; 3,170 square meters	Hinlekfai, Kumueang, Buriram	Power generation and distribution	Owner	Collateral
<u>Power Plant (BPP)</u> - Power generation building; 19,500 square meters - Plant and building 12,100 square meters - Wastewater treatment pond; 430 square meters - 1 bagasse storage; 3,170 square meters	Hinlekfai, Kumueang, Buriram	Power generation and distribution	Owner	-
<u>Fertilizer Factory (KBF)</u> - Area for filter cake before production; 48,000 square meters - Production building; 2,000 square meters - Warehouse; 3,000 square meters - Factory building and office; 5,000 square meters - Wastewater treatment system area; 60 square meters	Hinlekfai, Kumueang, Buriram	Fertilizer production and storage	Owner	Collateral

Asset	Location	Objective of Ownership	Ownership	Encumbrance ¹
13 Offices of Extension in 16 District - Office of Extension, District 2 - Office of Extension, District 3.1 and 4 - Office of Extension, District 9 - Office of Extension, District 10.1 - Office of Extension, District 10.2	Buriram Ban Nongkrue A.Mueang, Ban Lakoh A.Sa Tuek, Ban Kradueang A.Nangrong, Ban Pladpook A.Baandan, Bandan A.Bandan	Offices of Extension to provide services to farmers relating to plantation	Rental	-
- Office of Extension, District 5	Nakhon Ratchasima Ban Nong Bua Wong A.Lam Tamenchai		Rental	-
- Office of Extension, District 1.1 and 1.2 - Office of Extension, District 3.2 and 7.1 - Office of Extension, District 6.1 - Office of Extension, District 6.2 - Office of Extension, District 7.2 - Office of Extension, District 8.1 - Office of Extension, District 8.2	Buriram Ban Sao Ae A.Kumueang, Ban Nongphai A.Satuek, Ban Nasrinual A.Lamplaimat Ban Taladpho A.Lamplaimat Ban Sawai Ta Nguan A.Sa Tuek, Ban Samet A. Sa Tuek, Ban Tungwang A. Sa Tuek		Owner	-

Asset	Location	Objective of Ownership	Ownership	Encumbrance ¹
Office Building - Room No.128/77-78 - Room No.128/80 - Room No.128/75	7 th Floor, Phayathai Plaza Building	Bangkok Office	Owner	-

Remark: ¹ The company has mortgaged buildings as collateral to secure long-term loans from financial institutions.

4.1.3 Machinery of the company and its subsidiaries

Asset	Location	Objective of Ownership	Ownership	Encumbrance ¹
<u>Main machine for sugar production (BSF)</u> - Machine for sugarcane juice extractor with capacity of 17,000 tons/ day ■ 7 machines for sugarcane receiving and uploading ■ 2 machines for sugarcane preparation ■ 10 machines for sugarcane crushing - Machine for juice clarification with capacity of 14,000 tons/ day ■ 6 warming boilers ■ 3 heating-up boilers ■ 4 filters - Machine for crystallization with capacity of 1,680 tons/ day ■ 6 boilers for crystallization process - Machine for centrifuging to separate sugar crystals and dry with capacity of 1,680 tons/day ■ 11 centrifuging machines for separating sugar crystals from the mother liquor - Machine for drying sugar with capacity of 1,680 tons/ day ■ 2 machines for drying sugar	Hinlekfai, Kumueang, Buriram	Sugar production	Owner	Collateral

Asset	Location	Objective of Ownership	Ownership	Encumbrance ¹
- Power Generator ■ 1 generator ■ 9 transformers ■ 9 cranes				
<u>Power Plant (BEC)</u> - Power Generator ■ 2 generators ■ 2 transformers ■ 1 boiler	Hinlekfai, Kumueang, Buriram	Power generation	Owner	Collateral
<u>Power Plant (BPC)</u> - Power Generator ■ 2 generators ■ 2 transformers ■ 1 boiler	Hinlekfai, Kumueang, Buriram	Power generation	Owner	Collateral
<u>Power Plant (BPP)</u> - Power Generator ■ 2 generators ■ 2 transformers ■ 1 boiler	Hinlekfai, Kumueang, Buriram	Power generation	Owner	Collateral
<u>Fertilizer Factory (KBF)</u> - 2 machines for classifying granular fertilizers - 3 machines for mixing raw materials and granulating - Equipment and appliance in the factory, furniture, office equipment, and vehicles	Hinlekfai, Kumueang, Buriram	Fertilizer production	Owner	Collateral

Remark: ¹ The company has mortgaged machinery of BSG as collateral to secure long-term loans from financial institutions.





4.1.4 Equipment

BRD's Equipment	Objective of Ownership	Net Value as of December 31, 2018
3 sugarcane harvesters	Sugarcane harvesting service for sugarcane farmers	9,393,907.30

4.1.5 Intangible assets of the company and its subsidiaries

Asset	Objective of Ownership
Computer software	Acquired computer software licenses for general affairs, as well as accounting program, farm-recording program, and information of sugar production, etc.

4.1.6 Trademarks of the company and its subsidiaries

Trademarks	Objective of Ownership	Registration Date
	Trademark for brown sugar and raw sugar	White sugar Submission date: September 11, 2013 Announcement date: July 18, 2014
	Trademark for organic fertilizers	Organic fertilizers Submission date: August 28, 2013 Announcement date: June 26, 2014
	Trademark for chemical fertilizers	Chemical fertilizers Submission date: May 20, 2014 Announcement date: August 20, 2014
	Trademark for organic and chemical fertilizers	Organic and chemical fertilizers Registration date: September 3, 2013 (the company purchased the trademark and already transferred the trade certificate)

Remark: Registrar will announce the trademark registration on the official gazette issued by Trademark Division, Department of Intellectual Property, Ministry of Commerce for 90 days. Unless objection occurs, the officer will register the trademark.

4.2 Insurance for businesses and operational assets

Insurances of the company and its subsidiaries include risk insurance and fire insurance, the sum assured as of December 31, 2018 was 8,414,410,000 Baht with details as follows:

Company	Details of Assets Insured	Type of Insurance	Beneficiary	Insurance Date	Termination Date	Insurance Limit (Baht)
BSF	<ul style="list-style-type: none"> - Construction of factory building (foundation excluded), sugar warehouse - Machinery for sugar production - Product stock; White sugar, raw sugar, Molasses and Bagasse 	Fire insurance	Financial institution	October 31, 2018	October 31, 2019	6,730,000,000
BEC	<ul style="list-style-type: none"> - Construction of factory building (foundation excluded) - Machinery for power generation - Office equipment - Raw materials stock 	Property insurance	Financial institution	October 31, 2018	October 31, 2019	914,400,000
BPC	<ul style="list-style-type: none"> - Construction of factory building (foundation excluded), Office equipment - Machinery for power generation - Raw materials stock 	Property insurance	Financial institution	October 31, 2018	October 31, 2019	953,900,000

Company	Details of Assets Insured	Type of Insurance	Beneficiary	Insurance Date	Termination Date	Insurance Limit (Baht)
BPP	<ul style="list-style-type: none"> - Construction of factory building (foundation excluded), Office equipment - Machinery for power generation - Raw materials stock 	Property insurance	Financial institution	October 31, 2018	October 31, 2019	527,010,000
KBF	<ul style="list-style-type: none"> - Construction of factory building (foundation excluded) - Machinery for fertilizer production - Product stock 	Fire insurance	Financial institution	September 10, 2018	September 10, 2019	85,200,000
Total						8,414,410,000

Fire insurance: Buriram Sugar Factory Company Limited has made additional insurance from the fire insurance as follows:

Liability	Liability Limit
The insurance coverage includes loss or damage to electrical appliance, electrical equipment and others related, which is occurred by overloading power generation, overused voltage, short circuit, power flash, burnout wires, leakage current resulted from any incidence as well as thunderbolt.	-Maximum 100 Million Baht per time in the insurance validity
The insurance coverage includes loss or damage to permanent mirrors, temporary mirrors, glasses, porcelains, ceramics, marbles or others fragile or breakable, which is occurred by robbery, burglary,	-Maximum 100 Million Baht per time in the insurance validity

Liability	Liability Limit
housebreaking or any other incidence such as dropping, hitting, and crashing.	
The insurance coverage includes loss or damage to insured property, which is occurred from robbery with clearly appearing damaged marks on the buildings or area insured.	-Maximum 100 Million Baht per time in the insurance validity
The insurance coverage includes loss or damage occurred by wind, rain, hail, hoarfrost, snow, flood, sand or dust, which causes damage to property at outdoor, or in a clear and airy building, or in a building with one side wide-open or gate.	-Maximum 20 Million Baht per time in the insurance validity
The insurance coverage includes loss or damage to machinery, equipment and/or electronic appliance.	-Maximum 25 Million Baht per time in the insurance validity
The insurance coverage includes loss or damage to steam boiler and pressure tank, which is occurred by explosion, flattening from inside or outside pressure.	-Maximum 50 Million Baht per time in the insurance validity
The insurance coverage includes loss or damage to electronic appliance, computers, and data processing equipment, which is occurred by robbery clues or clueless robbery in the area insured as well as water damage incidents, and other incidents such as dropping, hitting, and crashing.	-Maximum 20 Million Baht per time in the insurance validity
Public liability Insurance pays compensation on behalf of the insuree. The amount of compensation, which the insuree is liable for, covers injuries or death, damage or loss to public property occurred by the insuree's business operation and/or the insuree's employees and/or the insuree's representative and/or those who are assigned to do any actions.	-Maximum 5 Million Baht per time in the insurance validity

Property insurance: Buriram Energy Co., Ltd. and Buriram Power Co., Ltd. have insurance covering directly property damage caused by fire, thunderbolt, storm, flood, hail, earthquake, or volcano eruption, or tidal, or tsunami, vehicles, pollution, aircraft, explosion, water, strike, riot, or any actions with malicious intent, flames, or eruption, or natural disasters, and unpredictable incidents from external factors. The liability limit is described as follows:

Liability	Each Liability Limit	Liability Limit of the Insurance Validity
The insurance coverage includes loss or damage to electrical appliance, electrical equipment and others related, which is occurred by overloading power generation, overused voltage, short circuit, power flash, burnout wires, leakage current resulted from any incidents as well as thunderbolt.	Maximum not exceeding 20 Million Baht	Maximum not exceeding 20 Million Baht
The insurance coverage includes loss or damage to permanent mirrors, temporary mirrors, glasses, porcelains, ceramics, marbles or others fragile or breakable, which is occurred by robbery, burglary, housebreaking or any other incidence such as dropping, hitting, and crashing.	Maximum not exceeding 20 Million Baht	Maximum not exceeding 20 Million Baht
The insurance coverage includes loss or damage to insured property, which is occurred from robbery without clearly appearing damaged marks on the buildings or area insured.	Maximum not exceeding 20 Million Baht	Maximum not exceeding 20 Million Baht
The insurance coverage includes loss or damage occurred by wind, rain, hail, hoarfrost, snow, flood, sand or dust, which causes damage to property at outdoor, or in a clear and airy building, or in a building with one side wide-open or gate.	Maximum not exceeding 20 Million Baht	Maximum not exceeding 20 Million Baht

Liability	Each Liability Limit	Liability Limit of the Insurance Validity
The insurance coverage includes loss or damage to machinery, equipment and/or electronic appliance and damage to steam boiler and pressure tank, which is occurred by explosion, flattening from inside or outside pressure.	Maximum not exceeding 100 Million Baht	Maximum not exceeding 100 Million Baht
The insurance coverage includes loss or damage to electronic appliance, computers, and data processing equipment, which is occurred by robbery clues or clueless robbery in the area insured as well as water damage incidents, and other incidents such as dropping, hitting, and crashing.	Maximum not exceeding 20 Million Baht	Maximum not exceeding 20 Million Baht
Public liability Insurance pays compensation on behalf of the insuree. The amount of compensation, which the insuree is liable for, covers injuries or death, damage or loss to public property occurred by the insuree's business operation and/or the insuree's employees and/or the insuree's representative and/or those who are assigned by the insuree to do any actions within the insured area.	Maximum not exceeding 5 Million Baht	Maximum not exceeding 5 Million Baht

Property insurance: Buriram Power Plus Co., Ltd. has insurance covering directly property damage caused by fire, thunderbolt, vehicles, pollution, aircraft, water, wildfire, explosion, storm, flood, hail, earthquake, or volcano eruption, or tidal, or tsunami, strike, riot, or any actions with malicious intent, flames, or eruption, or natural disasters, and unpredictable incidents from external factors. The liability limit is described as follows:

Liability	Each Liability Limit	Liability Limit of the Insurance Validity
- Storm, earthquake, hail	Maximum not exceeding 20 Million Baht	Maximum not exceeding 200 Million Baht
- Flood	Maximum not exceeding 50 Million Baht	Maximum not exceeding 50 Million Baht
- Damage occurred from robbery or plunder with damaged marks	Maximum not exceeding 500 Million Baht	Maximum not exceeding 500 Million Baht
- Damage to building mirrors	Maximum not exceeding 20 Million Baht	Maximum not exceeding 20 Million Baht
- Damage to electrical appliance	Maximum not exceeding 20 Million Baht	Maximum not exceeding 20 Million Baht
- Public liability for life, body, and property due to the company's negligence and carelessness	Maximum not exceeding 5 Million Baht	Maximum not exceeding 5 Million Baht
- Damage to machinery and/or other electronic appliance	Maximum not exceeding 25 Million Baht	Maximum not exceeding 25 Million Baht
- Damage to electronic appliance, computers, and data processing equipment	Maximum not exceeding 20 Million Baht	Maximum not exceeding 20 Million Baht
- Damage occurred from robbery without clearly appearing damaged marks	Maximum not exceeding 20 Million Baht	Maximum not exceeding 20 Million Baht
- Damage to steam boiler and pressure tank	Maximum not exceeding 25 Million Baht	Maximum not exceeding 25 Million Baht

Fire insurance: Key Brand Fertilizer Co., Ltd. has additional conditions other than such fire insurance with details as follows:

Liability	Each Liability Limit	Liability Limit of the Insurance Validity
- Exclusion of war and terrorist attack	-	-
- Coverage of storm damage	Maximum not exceeding 1 Million Baht	Maximum not exceeding 1 Million Baht
- Coverage of flood damage	Maximum not exceeding 1 Million Baht	Maximum not exceeding 1 Million Baht
- Coverage of earthquake, or volcano explosion, tidal wave, or tsunami damage	Maximum not exceeding 1 Million Baht	Maximum not exceeding 1 Million Baht

4.3 Policy of investment in subsidiaries

The company has the policy to invest in the businesses related to the core business that gives the mutual benefit and reasonable return, or supports the business operation to earn more income and increase competitive advantage. Thus, the directors, who manage and monitor the business operations of its subsidiaries, are the same persons of the company in order to lead the business goals for the best interest of the company as a whole. Currently, the company has 9 subsidiaries as follows:

Subsidiaries	Investment Proportion (%)
Buriram Sugar Factory Company Limited (“BSF”)	99.90
Buriram Energy Company Limited (“BEC”)	99.99
Buriram Power Company Limited (“BPC”)	BEC holds 99.99% of its shares
Buriram Power Plus Company Limited (“BPP”)	99.99
Chamni Sugar Factory Company Limited (“CSF”) (Former Name: Buriram Super Power Company Limited (“BSP”))	99.99
Buriram Sugar Capital Company Limited (“BSC”) (Former Name: Buriram Agro Energy Company Limited (“BAE”))	99.99
Buriram Sugarcane Research and Development Company Limited (“BRD”)	99.99
Key Brand Fertilizer Company Limited (“KBF”)	99.99
Sugarcane Ecoware Company Limited (“SEW”)	99.99

5. Legal Disputes

As of December 31, 2018, the company did not encounter a legal dispute impacting the company's assets higher than 5% of the equity, and no any legal dispute had a negative impact on the business operation in a significant matter.

6. General Information and Other Important Information

6.1 General Information

A. Company

Name (listed on SET)	:	Buriram Sugar Public Company Limited (BRR)
Head Office/Factory	:	237 Moo. 2, Hinlekhfai, Kumueang, Buriram 31190
Bangkok Office	:	128/77-78 Phayathai Plaza Building 7th Fl., Phayathai Road, Thungphayathai, Ratchathewi, Bangkok 10400
Business Type	:	Conduct business in investment by holding shares in subsidiary companies (Holding company) which are sugar manufacturing and distribution business, byproduct from sugar business, for example, electricity business and fertilizer business, and support business which is research and development
Registered Number	:	0107556000523
Telephone	:	+66-4465-9020, +66-2216-5820-2
Fax	:	+66-4465-9020, +66-2216-5823
Website	:	www.buriramsugar.com

B. Subsidiaries

1. Buriram Sugar Factory Co., Ltd. (BSF)

Business Type	:	Manufacture and distribute sugar
Head Office/Factory	:	237 Moo.2, Hinlekhfai, Kumueang, Buriram 31190
Bangkok Office	:	128/77 Phayathai Plaza Building 7th Fl., Phayathai Road, Thungphayathai, Ratchathewi, Bangkok 10400
Telephone	:	+66-4465-9020, +66-2216-5820-2
Fax	:	+66-4465-9020, +66-2216-5823

2. Buriram Sugarcane Research and Development Co., Ltd. (BRD)

Business Type	:	Research and development to improve efficiency of cane growing and caring
Head Office/Factory	:	237 Moo.2, Hinlekhfai, Kumueang, Buriram 31190
Bangkok Office	:	128/77 Phayathai Plaza Building 7th Fl., Phayathai Road, Thungphayathai, Ratchathewi, Bangkok 10400
Telephone	:	+66-4465-9020, +66-2216-5820-2
Fax	:	+66-4465-9020, +66-2216-5823

3. Buriram Energy Co., Ltd. (BEC)

Business Type : Biomass power plant

Head Office/Factory : 289 Moo.2, Hinlekkhai, Kumueang, Buriram 31190

Bangkok Office : 128/77 Phayathai Plaza Building 7th Fl., Phayathai Road,
Thungphayathai, Ratchathewi, Bangkok 10400

Telephone : +66-4466-6368, +66-2216-5820-2

Fax : +66-4466-6368, +66-2216-5823

4. Buriram Power Co., Ltd. (BPC)

Business Type : Biomass power plant

Head Office/Factory : 289 Moo.2, Hinlekkhai, Kumueang, Buriram 31190

Bangkok Office : 128/77 Phayathai Plaza Building 7th Fl., Phayathai Road,
Thungphayathai, Ratchathewi, Bangkok 10400

Telephone : +66-4466-6368, +66-2216-5820-2

Fax : +66-4466-6368, +66-2216-5823

5. Key Brand Fertilizer Co., Ltd. (KBF)

Business Type : Produce and distribute organic and chemical fertilizer

Head Office/Factory : 161 Moo.16, Hinlekkhai, Kumueang, Buriram 31190

Bangkok Office : 128/77 Phayathai Plaza Building 7th Fl., Phayathai Road,
Thungphayathai, Ratchathewi, Bangkok 10400

Telephone : +66-4465-9020, +66-2216-5820-2

Fax : +66-4465-9020, +66-2216-5823

6. Buriram Power Plus Co., Ltd. (BPP)

Business Type : Biomass power plant

Head Office/Factory : 317 Moo.2 Hinlekkhai, Kumueang, Buriram 31190

Bangkok Office : 128/80 Phayathai Plaza Building 7th Fl., Phayathai Road,
Thungphayathai, Ratchathewi, Bangkok 10400

Telephone : +66-4466-6368, +66-2216-5820-2

Fax : +66-4466-6368, +66-2216-5823

7. Chamni Sugar Factory Co., Ltd. (CSF)**[Former Name: Buriram Super Power Co., Ltd. (BSP)]**

Business Type : Manufacture and distribute sugar

Head Office/Factory : 289 Moo.2 Hinlekhai, Kumueang, Buriram 31190

Bangkok Office : 128/77 Phayathai Plaza Building 7th Fl., Phayathai Road,
Thungphayathai, Ratchathewi, Bangkok 10400

Telephone : +66-4466-6368, +66-2216-5820-2

Fax : +66-4466-6368, +66-2216-5823

8. Buriram Sugar Capital Co., Ltd. (BSC)**[Former Name: Buriram Agro Energy Co., Ltd. (BAE)]**

Business Type : Manufacture and distribute sugar

Head Office/Factory : 237 Moo.2, Hinlekhai, Kumueang, Buriram 31190

Bangkok Office : 128/77 Phayathai Plaza Building 7th Fl., Phayathai Road,
Thungphayathai, Ratchathewi, Bangkok 10400

Telephone : +66-4465-9020, +66-2216-5820-2

Fax : +66-4465-9020, +66-2216-5823

9. Sugarcane Ecoware Co., Ltd. (SEW)

Business Type : Manufacture and distribute bagasse and other natural material
consumer packaging products, equipment, and appliance

Head Office (Bangkok) : 128/77 Phayathai Plaza Building 7th Fl., Phayathai Road,
Thungphayathai, Ratchathewi, Bangkok 10400

Buriram Office/Factory : 237 Moo.2, Hinlekhai, Kumueang, Buriram 31190

Telephone : +66-4465-9020, +66-2216-5820-2

Fax : +66-4465-9020, +66-2216-5823

C. Contact Details**1. Investor Relations Department**

Address : 128/77-78 Phayathai Plaza Building 7th Fl., Phayathai Road,
Thungphayathai, Ratchathewi, Bangkok 10400

Telephone : +66-2216-5820-2

Fax : +66-2216-5823

E-mail : ir@buriramsugar.com

2. Director Office/ Company Secretary

Address : 128/77-78 Phayathai Plaza Building 7th Fl., Phayathai Road,
Thungphayathai, Ratchathewi, Bangkok 10400

Telephone : +66-2216-5820-2 ext. 301, 302 or 303

Fax : +66-2216-5823

E-mail : companysecretary@buriramsugar.com

6.2 Reference**1. Security Registrar**

Name : Thailand Securities Depository Co., Ltd.

Head Office : The Stock Exchange of Thailand Building,
93, 14th Floor, Ratchadaphisek Road, Dindaeng, Dindaeng,
Bangkok 10400

Telephone : +66-2009-9999

Website : www.set.or.th/contactcenter

2. Auditor

Name : PricewaterhouseCoopers ABAS Ltd.

Head Office : 179/74-80, 15th Floor, Bangkok City Tower
South Sathorn Road, Sathorn Bangkok, 10120

Telephone : +66-2344-1000

Fax : +66-2286-5050

6.3 Whistle Blowing and Suggestion Channel

Attention to : Chairman of Corporate Governance Committee or Internal
Audit Office

Address : Buriram Sugar Public Company Limited
128/77-78 Phayathai Plaza Building 7th Fl., Phayathai Road,
Thungphayathai, Ratchathewi, Bangkok 10400

Telephone : +66-2216-5820-2

Fax : +66-2216-5823

“Investors can find further information of the listed company from Form 56-1 of the company shown in www.sec.or.th or the company’s website (if any). To display the information, the listed company can consider using explanation format consistent with appropriateness. The company may use communication methods to aid shareholders in ease of understanding, for examples, graph, picture, and etc. however, such disclosed information in any formats shall not show information that is untrue, concealing truths, or leading to misunderstanding.”