

## **PART 1 BUSINESS OPERATION**

### **1. Policy and Business Overview**

Thai Central Chemical Public Company Limited is the producer and distributor of chemical fertilizer, established by the government (under cooperation of the Ministry of Finance) and private sectors, comprised of Metro Co., Ltd., Sojitz Corporation (formerly Nissho Iwai Corporation) and Central Glass Co., Ltd (currently the Company's technical advisor) of Japan, on March 6, 1973, with initial registered capital of THB 120 Million. Later on, the Company registered on the Stock Exchange of Thailand in October 1991, with a registered capital of THB 700 Million and in 1993, the Company became "Public Company".

Thai Central Chemical Public Company Limited (TCCC) is Thailand's largest producer and distributor of compound chemical fertilizers. The Company operates 2 large and international-standard plants, located at Phra Samut Jedee District, Samut Prakarn Province, with total annual capacity of 850,000 metric tons, and at Nakhon Luang District, Phra Nakhon Si Ayutthaya Province, with total annual capacity of 350,000 metric tons, having the combined total capacity of 1.2 million metric tons a year.

#### **1.1 Vision Objective and Strategy**

##### **Vision : The First Choice of Growers**

"We aim to be a top priority choice of agriculturalists in Southeast Asia by delivering excellent products and services that boost quality and productivity in farming."

##### **Mission**

##### **1. We Strive to Create Values**

We are committed to bringing new values to farmers and agriculture, by providing superior quality products and services, continuously invented and developed to increase farming productivity. Our services will spread over to farmers in ASEAN countries and be even diversified further to enhance our value chain in agriculture industry.

##### **2. We Develop our People**

We are committed to growing our people, by providing learning opportunities and by creating a corporate culture where employees encourage each other to grow together. We will keep evolving our organization to accommodate changes in business environment.

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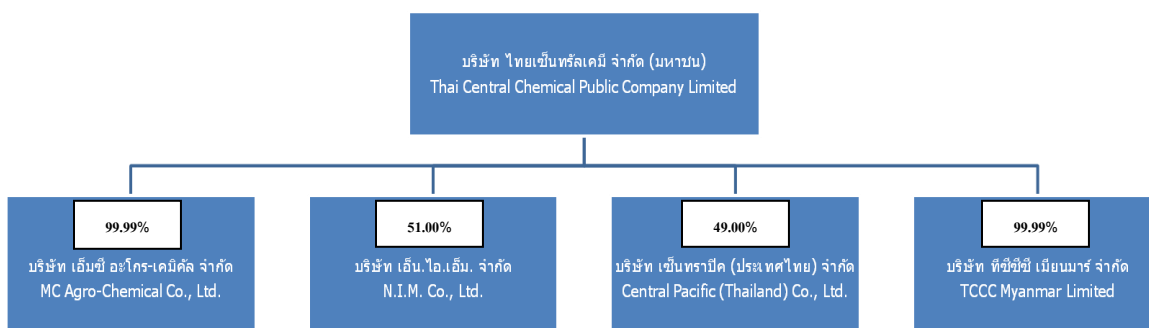
### 3. We Care for Society

We are committed to making environmental friendly and sustainable business processes as well as creating positive influences to society, by integrating corporate citizenship and sustainable development concepts into our business practice.

#### 1.2 Significant Change and Development

There was no significant change and development in 2019.

#### 1.3 Shareholding Structure



#### 1.4 Relationship with Major Shareholders' Business

The Company's business character does not relate or rely on any finance, technique, material supply, sharing trade name of the major shareholders, and does not compete with the major shareholders.



## 2. Nature of Business

### The Company's Revenue Structure and Shareholding in Subsidiaries

#### Structure of Revenue and Shareholding (as at 31 December 2019)

(Unit : Million Baht)

|   | Company                                  | Established      | Type of Business           | % Shareholding | Registered Capital | Capital Paid Up | 2019     |        | 2018      |        | 2017      |        |
|---|--|------------------|----------------------------|----------------|--------------------|-----------------|----------|--------|-----------|--------|-----------|--------|
|   |  |                  |                            |                |                    |                 | Revenue  | %      | Revenue   | %      | Revenue   | %      |
|   | Thai Central Chemical PLC.               | 6 March 1973     | Chemical Fertilizer        | -              | 1,754              | 1,754           | 8,420.17 | 92.36  | 10,086.90 | 93.86  | 11,149.61 | 95.43  |
|   | <u>Subsidiary and Associated Company</u> |                  |                            |                |                    |                 |          |        |           |        |           |        |
| 1 | MC-Agro Chemicals Co., Ltd.              | 22 January 1988  | Repacking and Formulating  | 99.99          | 50                 | 50              | 261.05   | 2.86   | 351.92    | 3.27   | 411.03    | 3.52   |
| 2 | N.I.M. Co., Ltd.                         | 14 February 1974 | Chemical Tank Yard         | 51.00          | 125                | 125             | 118.51   | 1.30   | 121.95    | 1.13   | 121.27    | 1.04   |
| 3 | Central Pacific (Thailand) Corp., Ltd.   | 16 January 1975  | Trading                    | 49.00          | 200                | 200             | 1.01     | 0.01   | 0.91      | 0.01   | 0.92      | 0.01   |
| 4 | TCCC Myanmar Ltd.                        | 3 October 2016   | Import Chemical Fertilizer | 99.99          | \$ 12.5*           | \$ 12.5*        | 316.44   | 3.47   | 185.29    | 1.72   | 1.01      | 0.01   |
|   | Total                                    |                  |                            |                |                    |                 | 9,117.18 | 100.00 | 10,746.97 | 100.00 | 11,683.84 | 100.00 |

Remark: \* Millions of United States Dollar

## 2.1 Product or Service

### 2.1.1 The Company's Product or Service

Thai Central Chemical Public Company Limited ("TCCC") manufacturing plants are capable of producing standard quality chemical fertilizers. The chemical fertilizer production consists of basic nutrients which are Nitrogen (N), Phosphate (P<sub>2</sub>O<sub>5</sub>) and Potassium (K<sub>2</sub>O) and secondary nutrients such as Magnesium (MgO), Sulphur (S) and other supplementary nutrients such as Boron (B) which promotes healthy growth of crops, both in quantity and quality. TCCC produces **"Ox-Brand"** Fertilizer products that are of quality as registered with Ministry of Agriculture and Cooperatives and its popularity has been affirmed by farmers all over Thailand for more than 40 years. The proper application of chemical fertilizer with suitable timing encourages greater amount and better quality of production to meet the market demand, and helps lower the production cost resulting in an increase of income for Thai Farmers, which eventually contribute to better national economy as a whole.



In addition, the factory located in Samut Prakan Province (Phra Pradaeng plant site), has the total annual capacity of 850,000 metric tons, and has a warehouse with its total storage capacity of 100,000 metric tons for raw materials, and a wharf extended to 310 metres length, 8.4 metres (27 feet) depth below sea level which can accommodate two 20,000-25,000 metric ton vessels simultaneously, and unload 6,000 metric tons of raw materials per day. For the manufacturing process, Phra Pradaeng plant site has utilized the natural gas which helps lower the cost and produce less pollution, substituting for the fuel oil since 2007. We also have installed and operated the Cogeneration power plant which can produce electricity at the capacity of 4 MW. in order to supply electricity within the plant site. The excess of electricity will be sold to Metropolis Electricity Authority (MEA). Moreover, the heat from the cogeneration system has been used in the chemical fertilizers' manufacturing process in order to save the cost and energy, and to help reduce global warming effect since 2013.

Another factory, located in Nakhon Luang, Phra Nakhon Si Ayutthaya Province (Nakhon Luang plant site), has the total annual capacity of 350,000 metric tons, and has a warehouse with its total storage of 90,000 metric tons, and a wharf extended to 189 meters length, 5 meters (16 feet) depth below sea level which is capable to accommodate three 500-2,500 metric ton cargo ships simultaneously, and also unload 4,000 metric tons of raw materials and imported commodities per day. In addition, Nakhon Luang plant site has utilized LPG which is the clean and eco-friendly fuel in production of steam, substituting the oil fuel.

For quality control, the two company's laboratories, located at both plant sites, have been certified ISO/IEC 17025:2017 international standard assuring the quality of nutrient values of chemical fertilizers. Moreover, both plant's laboratory have been certified as a high-quality analysis lab for chemical fertilizer registered from the Department of Agriculture, and the lab also provides the nutrient analytical services for external organizations.

Furthermore, Both TCCC's plant sites have been certified ISO 9001:2015 Quality Management System for Quality Management System, Manufacture of Fertilizer, Manufacture of Plastic Bag and Co-Generation of Electricity. As well as, ISO 14001:2015 Environmental Management System and ISO 45001:2018 Occupational Health & Safety Management System. Moreover, TCCC have been certified as a Green Industry "Green Culture" Level 4 by the Ministry of Industry Thailand and the company is in the process of upgrading to level 5 in the near future. The green industry project has been set up by the Ministry of Industry Thailand that regulated 5 levels of "Green Industry" to evaluate the environmentally-friendly factories.

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The character of the products is granular chemical fertilizer for agricultural use by adding into soil. The crucial factor affecting limitation of this business is none as the government sector still promote use of fertilizer.

**Chemical Fertilizer** produced by the Company is granular chemical fertilizer N-P-K which are Nitrogen (N), Phosphorus ( $P_2O_5$ ), and Potassium ( $K_2O$ ), and some grades contain secondary plant nutrients such as Magnesium ( $MgO$ ) for certain crops. The chemical fertilizer is normally packed in 50 kilograms plastic woven bag bearing "OX" brand and other brands which can be used with plants such as:

**N-P-K Chemical Fertilizer : Quality Product of OX-Brand Fertilizer**

Orchard Fertilizer

| Formula             | Rate                   | Application                          |
|---------------------|------------------------|--------------------------------------|
| 15-15-15<br>Premium | 1-2<br>kgs./plant/year | general growth                       |
| 8-24-24<br>Premium  | 1-2<br>kgs./plant/year | flower and fruit stage / prematurity |
| 13-13-21<br>Premium | 1-2<br>kgs./plant/year | improve fruit quality                |

Total not over than 5 kgs./plant/year

Vegetable and Flower & Ornamental Plant Fertilizer

| Formula                      | Rate                                | Application   |
|------------------------------|-------------------------------------|---|
| 15-15-15 CIS<br>16-16-16 CIS | 30-50 kgs./rai<br>basal application | sowing cover the plot after planting 3-5 days or basal application before planting or apply alongside far from tree 25-50 cm. after that 15-30 days apply again |



### Sugarcane Fertilizer

| Formula   | Rate              | Application  |
|---|-------------------|--|
| 16-12-8, 16-16-8,<br>18-12-6, 25-7-7,<br>15-15-15 Premium                       | 40-50<br>kgs./rai | 1 <sup>st</sup> application, <b>new planting</b> apply basal application or after planting 1 month <b>ratoon planting</b> apply after trimming 1 month |
| 12-9-21, 15-7-18,<br>20-8-20, 21-7-18,<br>12-10-18 Premium,<br>13-13-21 Premium | 40-50<br>kgs./rai | 2 <sup>nd</sup> application, 2-3 months after planting   |

Remark: Should apply after weed eradication

### Rice Fertilizer

| Formula   | Rate              | Application  |
|---|-------------------|--|
| <b>Clay soil</b><br>16-8-8, 16-12-8,<br>16-20-0, 25-7-7<br><b>Sandy soil</b><br>16-8-8, 16-16-8,<br>18-12-6, 25-7-7 | 25-40<br>kgs./rai | <b>Sown-field</b><br>1 <sup>st</sup> application for 20-30 days plant or basal application<br>2 <sup>nd</sup> application 30 days after first application<br><b>Transplant</b><br>1 <sup>st</sup> application for after transplant 5-7 days<br>2 <sup>nd</sup> application 30 days after first application |

### Maize Fertilizer

| Formula   | Rate              | Application   |
|---|-------------------|---|
| <b>Clay soil</b><br>16-8-8, 16-12-8,<br>16-20-0, 25-7-7<br><b>Sandy soil</b><br>16-8-8, 16-16-8,<br>18-12-6, 25-7-7 | 30-40<br>kgs./rai | 1 <sup>st</sup> application for 3-5 days plant germination or basal application<br>2 <sup>nd</sup> application 30-45 days after first application |



### Cassava Fertilizer

| Formula   | Rate              | Application   |
|---|-------------------|---|
| 16-8-8, 16-12-8,<br>18-12-6, 25-7-7   | 30-40<br>kgs./rai | 1 <sup>st</sup> application, basal application before planting or<br>after planting 1 month |
| 12-9-21, 15-7-18,<br>20-8-20, 21-7-18,<br>12-10-18 Premium,<br>15-15-15 Premium | 30-50<br>kgs./rai | 2 <sup>nd</sup> application, 2-3 months   |

Remark: Should apply after weed eradication

### Para rubber Fertilizer

| Formula                   | Rate                    | Age of Para rubber                      |
|---------------------------|-------------------------|---|
| 16-8-4, 25-7-7            | 0.2-0.4 kgs./plant/year | less than 3.5 years                     |
| 14-4-9, 18-4-5, 20-8-20   | 0.6-0.8 kgs./plant/year | 3.5-7 years                             |
| 15-7-18, 21-7-14, 21-7-18 | 1-1.5 kgs./plant/year   | over 7 years or after tapping<br>period |

### Oil palm Fertilizer

| Year              | Formula  | Rate                  | Enhance Fertilizer  |
|-------------------|--|-----------------------|---|
| 1                 | 25-7-7,<br>15-15-15 Premium                                | 1.5 kgs./plant/year   | - kieserite 0.2 kgs./plant/year   |
| 2-4               | 12-9-21, 20-8-20,<br>21-7-14, 21-7-18,<br>13-13-21 Premium | 3.5-6 kgs./plant/year | - kieserite 0.4-1 kg./plant/year<br>- borax 35-100 gm./plant/year                               |
| Over<br>5<br>year | 12-9-21, 13-13-21,<br>20-8-20, 21-7-18                     | 5-7.5 kgs./plant/year | - 0-0-60 rate 1-2 kgs./plant/year<br>- kieserite 1 kg./plant/year<br>- borax 150 gm./plant/year |

Remark: Please select only one product per each application.

Apart from producing and marketing chemical fertilizers, the Company's subsidiary, MC-Agro Chemicals Co., Ltd., also handle crop protection products (agro-chemicals) for farmers to control and protect pest and diseases. Product ranges include insecticides, herbicides, fungicides and hormone & plant regulators.



## 2.1.2 Product of subsidiaries and associated companies

### Subsidiary Companies

| Company                                | Business Line.  | Address  |
|--|---|--|
| MC Agro-Chemicals Co., Ltd.            | Import and distribute both technical pesticide and finished product which used in Agriculture, Public Health and Livestock. The business sector includes the marketing of formulated, finished products, repacking service and quality control checks by modern laboratory.<br><b>Policy on Dividends :</b> No policy on Dividend | 581 Moo 4, Bangpoo Industrial Estate, Soi 12B, Sukhumvit Road, Praekasa Sub-district, Muang District, Samutprakarn 10280 |
| N.I.M. Co., Ltd.                       | The Company is engaged in liquid chemical storage tank terminal operation for the storage of liquid chemicals mostly the raw materials for use in various industries.<br><b>Policy on Dividends:</b> Dividend will be allocated depending upon Company's profit.  | 205 United Flour Mill Building, 8 <sup>th</sup> Floor, Ratchawong Road, Samphanthawong, Bangkok 10100.                   |
| Central Pacific (Thailand) Corp., Ltd. | Importer and distributor of fertilizers, agro-chemicals, minerals and etc.<br><b>Policy on Dividends :</b> None   | 180-184 Ratchawong Road, Samphanthawong, Bangkok 10100.  |
| TCCC Myanmar Limited                   | Importer and distributor of chemical fertilizer in Myanmar.<br><b>Policy on Dividends :</b> None  | Lot No. C-15 & C-18, Thilawa Special Economic Zone A, Yangon Region Myanmar  |

## 2.2 Marketing and Status of Industry and Competition

### 2.2.1 Marketing

Chemical fertilizer is selling in both cash and credit. Selling prices in cash will be cheaper than selling on credit. As most of the customers are in the provincial area, remittance of draft or money transfer with 7 days will also be regarded as cash sales. Selling credit term will rely on many factors such as competition, seasonal climatic conditions and fertilizer grades. Since fertilizer is classified under seasonal products, peak selling period will be in the rainy season, season is one of the important factors in setting up marketing plan for the company.





(1) Marketing Strategies  
Under the marketing principles:

- PRODUCT: The company emphasizes on manufacturing and importing good quality products that are well accepted by the farmers and help farmers boost up production and income.
- PRICE: The company has set the policy to sell quality products at optimal cost in order to help farmers increasing yield of production and able to compete in the world market.
- PLACE: The company provides distribution channel throughout the country by appointing dealers to facilitates the customer.
- PROMOTION: Sales promotion has been continuously enforced to increase the sales volume and to maintain product's brand-name to be well recognized by customers. The sales promotion at various levels of customers includes:
- TV commercial and mass media
  - Raffle at various level of customers
  - Regular Dealers' meeting and farmers' meeting
  - Advertising posters and banners
  - Coordinating in Technical Meeting/Symposium
- PACKAGING : The company emphasizes on developing strong and attractive packaging designed to match with farmers demand and to resist rough handling during transportation.

(2) Marketing and Distribution Channels

Pricing and distributing process

Fertilizers are mainly delivered to the customers and farmers by 10-wheel trucks as contracted by the customers themselves to pick up the fertilizers at the quantity as stipulated in each Delivery Order (D/O) from the company's warehouses. Price quotation is quoted by metric ton. One metric ton will consist of 20 sacks and each sack contained 50 kilograms of fertilizers. The payment methods can be both cash and credit. With cash payment, customers can obtained lower price than credit payment.

Selling prices of fertilizers have to be approved by the Ministry of Commerce under the law on commodity price and service B.E. 2542, which abolished the law on commodity and anti-profiteering.

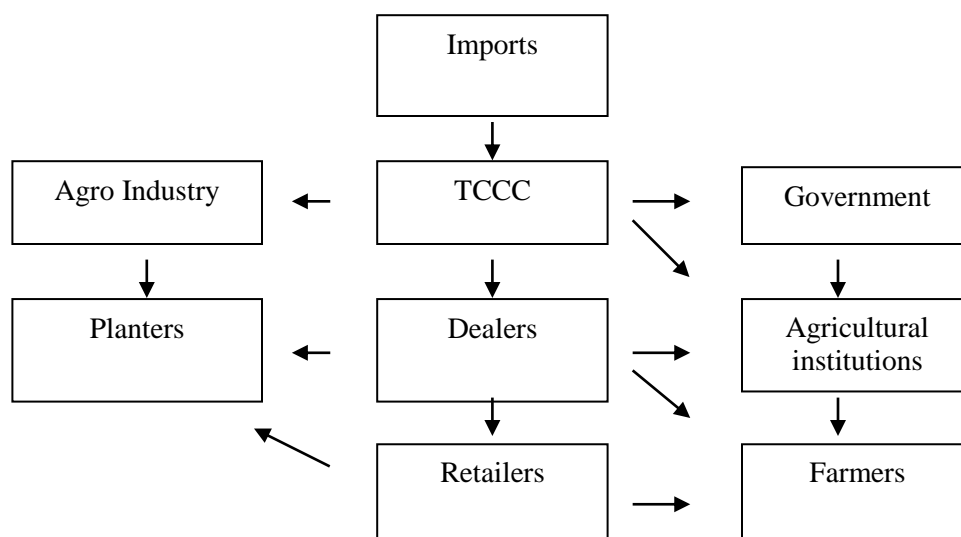
(3) Distribution Channels

The company has dealers throughout the country.

The appointment of dealers will be considered under the following criteria:

1. No dealer has been appointed in such area or otherwise the existing dealer does not perform well in expanding the outlet.
2. Marketing area of the dealers must not duplicate each other.
3. The dealers must have the fair financial status covering the business volume.
4. The dealers must not be involved with illegal activities.
5. Business in the first year must be in cash basis, or having to submit Bank Guarantee or having securities mortgaged for credit terms which has to be approved by the Company.

**Dealer Flow Chart:**



(4) TYPE OF CUSTOMERS

Type of customers and relationship

Customers are mainly local traders undertaking business on any one type of the following businesses:

| Type of Business Operations of the Customers | Agricultural Institutions       |
|--|---------------------------------|
| 1. Chemical fertilizer and agro-chemicals    | 1. Agricultural Cooperatives    |
| 2. Chemical fertilizer                       | 2. Farmers Groups               |
| 3. Construction materials                    | 3. Various Paddy Farming Groups |
| 4. Miscellaneous goods retailers             |                                 |
| 5. Drug store                                |                                 |
| 6. Agricultural produce trading              |                                 |
| 7. Rice mill operator                        |                                 |

(5) Structure of Revenue from Sales During the Past 3 Years

|  | 2019            |                | 2018            |               | 2017             |               |
|--|-----------------|----------------|-----------------|---------------|------------------|---------------|
|  | Million Baht    | %              | Million Baht    | %             | Million Baht     | %             |
| <b>Revenue from Local Sales</b>                  |                 |                |                 |               |                  |               |
| Chemical Fertilizers                             | 7,872.66        | 95.04          | 9,502.97        | 95.79         | 10,235.51        | 92.90         |
| <b>Total Revenue from Local Sales</b>            | <b>7,872.66</b> | <b>95.04</b>   | <b>9,502.97</b> | <b>95.79</b>  | <b>10,235.51</b> | <b>92.90</b>  |
| <b>Revenue from Export</b>                       |                 |                |                 |               |                  |               |
| Chemical Fertilizers                             | 410.74          | 4.96           | 417.17          | 4.21          | 784.28           | 7.10          |
| <b>Total Revenue from Export</b>                 | <b>410.74</b>   | <b>4.96</b>    | <b>417.17</b>   | <b>4.21</b>   | <b>784.28</b>    | <b>7.10</b>   |
| <b>Revenues from Local Sales And Export</b>      |                 |                |                 |               |                  |               |
| Chemical Fertilizers                             | 8,283.40        | 100.00         | 9,920.14        | 100.00        | 11,019.79        | 100.00        |
| <b>Total Revenue from Local Sales And Export</b> | <b>8,283.40</b> | <b>100.00</b>  | <b>9,920.14</b> | <b>100.00</b> | <b>11,019.79</b> | <b>100.00</b> |
| <b>Growth Rate from Sales (%)</b>                |                 | <b>(16.50)</b> |                 | <b>(9.98)</b> |                  | <b>(6.93)</b> |

## **2.2.2 Status of Industry and Competition**

### **Thailand Agriculture and Chemical Fertilizer Industry Overview in 2019**

The agricultural sector continued to see slow growth in 2019. The productions of major economic crops such as rice and sugarcane were badly hit by the severe drought in key cultivation areas. However, the slight price recoveries in these crops, as a result from low supply and government price guarantee schemes, had cushioned Thailand agriculture in 2019 from further drop.

In the same direction of agricultural production, the chemical fertilizer consumption decreased compared to the previous year owing to less cultivation areas. Despite the government support to control the chemical fertilizer price, the severe drought in Central, North and Northeast region during the growing season when large amount of fertilizer should have been used significantly lessen the overall chemical fertilizer consumption in 2019.

### **Thailand Agriculture and Chemical Fertilizer Industry in 2020**

The agricultural sector growth in 2020 will be dependent on the level of agricultural price and the production of key crops. Besides, the adequacy of rainfalls and water supplies will be the monitoring issue as the risk of drought still remains high. The government policies supporting farmers in several forms are another key factors to strengthen the growth of agricultural sectors and boosting the chemical fertilizer demand. In addition, the fluctuation of raw material prices could have significant impact to the demand and consequently determine the direction of the chemical fertilizer industry in 2020.

## **2.3 Production and Product Procurement**

Thai Central Chemical Public Company Limited (TCCC) is Thailand's largest producer and distributor of compound chemical fertilizers. The Company operates 2 large and international-standard plants, having the combined total capacity of 1.2 million metric tons a year.

1<sup>st</sup> Plant: 284, Kilometer 17.5<sup>th</sup>, Suksawad Road,  
Tambon Pakklong Bang Plakod,  
Amphoe Phra Samut Chedi, Samut Prakan Province 10290  
Telephone: (662) 462-5904, 463-3715-20, 463-5572-5  
462-7870-7  
Fax: (662) 816-1276 816-1263 816-1268



2<sup>nd</sup> Plant: 50 Mu 5, Nakhon Luang-Phachi Road,  
Tambon Khlong Sakae, Amphoe Nakhon Luang  
Phra Nakhon Si Ayutthaya Province 13260  
Telephone: (035) 359 011-9  
Fax: (035) 359 377

Warehouses

Hat Yai 124 Moo 1, Thakam Sub-district, Hat Yai District,  
Songkhla Province 90110, Thailand  
Tel. (6674) 333-035-7 Fax: (6674) 333-034

(1) PRODUCTION CAPACITY AND OUTPUT:

Production, Production Capacity:

(Unit : Metric Tons)

|                     | 2019      | 2018      | 2017      |
|---------------------|-----------|-----------|-----------|
| Production Capacity | 1,200,000 | 1,200,000 | 1,200,000 |

(2) RAW MATERIAL SOURCES OF SUPPLY

Raw materials and main sources of supply:

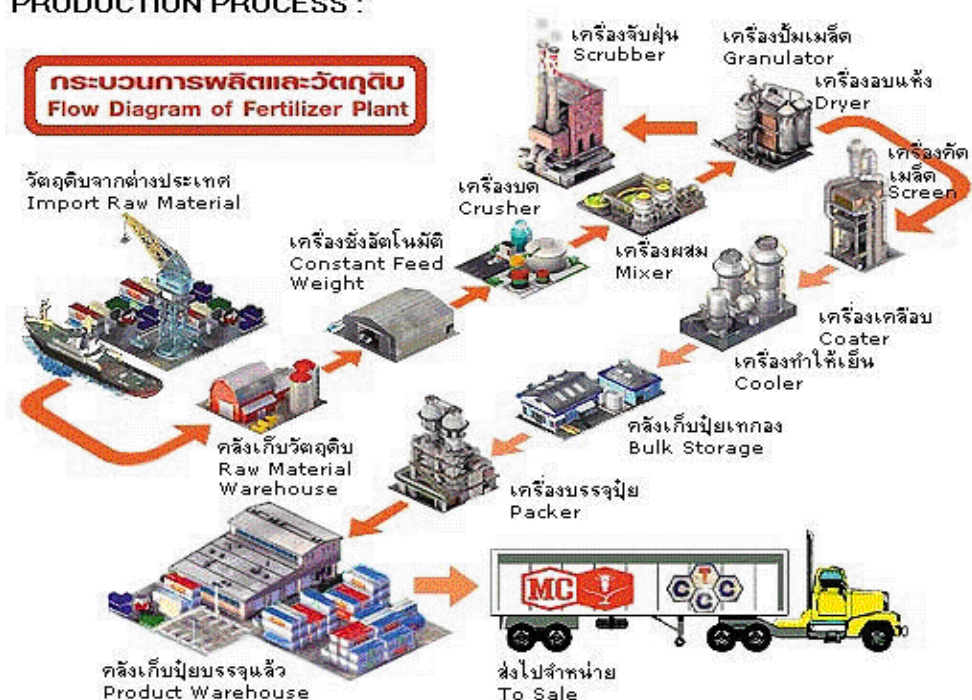
|  |   |
|--|---|
| Ammonium Sulphate  | Thailand, China, Taiwan                         |
| Urea   | Malaysia, Bahrain, Qatar                        |
| MAP(Mono-Ammonium Phosphate) and DAP (Di-Ammonium Phosphate) | Morocco, Saudi Arabia, China, Russia, Australia |
| Potassium Chloride   | Canada, Germany, Taiwan                         |
| Potassium Sulphate   | Taiwan, Germany                                 |
| KAOLIN   | Thailand  |

Almost 80% of raw materials for the production process are imported and the rest such as Ammonium Sulphate and kaolin are acquired locally. Since raw material prices are fluctuated following the international market price trend which will be mainly based on demand and supply of each time interval or each year; therefore, the Company has laid down the policy to procure raw material from many nearby supply sources in different locations and entering into long term contract. This will ensure that there is less risk on shortage of raw material and the raw material will meet the Company's required specification at the appropriate price. Procurement from some suppliers will be on FOB term and shipped by chartered vessels to Thailand for the best benefit in term of international trade.

### (3) PRODUCTION PROCESS

1. Store each raw material in its individual warehouse
2. Deliver each raw material by belt conveyor to the automatic weighing machine
3. Pass through the crusher and then the mixer which controls steam and water as prescribed
4. After mixing homogeneously, the product will be delivered to the Granulator
5. Deliver the product to the Dryer to control moisture content in accordance with the fertilizer standards (3% maximum)
6. Fertilizer granules will be screened through mesh size control. Offsized granules will be recycled through the process.
7. Standard granules will be delivered to the Cooler to make it cool in order to avoid caking
8. The cooled granules will then pass through the coating process by spraying coating agent to prevent moisture absorption
9. The processed products will be delivered by belt conveyor to the Bulk Storage for further packing

#### PRODUCTION PROCESS :





### **3. Risk Factors**

Thai Central Chemical Public Company Limited has regularly reviewed and considered key risk factors together with risk mitigation plans. The major business risks together with mitigation actions are described below. However, in addition to such risk factors, there would be other risks which the Company may not currently aware of, or the Company considered that they may not have significant impact to the Company's operation at this moment.

#### **1. Farmers' purchasing power**

Not only the overall economy situation but changes in crop prices in local and international markets are also out to key factors that could affect farmers' purchasing power of agricultural materials including chemical fertilizers. This problem is mainly caused by the inconsistency between low demand and high supply of agricultural crops in the market, resulting to the decrease of farmers' purchasing power. Drop of crop prices causes the decrease of farmers' income, that makes farmers' purchasing power reduce, and this leads to the decrease of fertilizer demand at the end. In addition, such problem would impact farmers' payment ability to dealers, which might also subsequently cause a delay of payment from dealers to the Company.

##### Risk Management

The Company has a variety of fertilizer products for rice, vegetables, fruits, rubber, etc., not relying on particular agricultural crops. By focusing more on high demand crops, the Company could mitigate the risk of low demand of specific crop's fertilizers. In addition, trade credits provided to dealers have been regularly reviewed to avoid overdue payments or bad debts.

#### **2. Climate changes**

Demand of chemical fertilizers depends on climate conditions and such demand is usually peak on rainy season and cultivation periods. Therefore, changes of season and climate are direct factors affecting the demand of chemical fertilizer in agricultural sector and business performance of the Company. During the year 2019, there were several forms of climate changes, e. g. , severe off-season drought resulting in low water level in rivers and irrigation system that were insufficient for farmers' demand. As a result, these events caused lower demand of fertilizer as opposed to the Company's expectation.

##### Risk management

The Company keeps monitoring on weather conditions to adjust marketing and production plans in consistency with the farming situation and to control inventories at the optimum level in each season.

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### **3. Government Policies**

Chemical fertilizers are price-controlled products under the Goods and Services Prices Act B.E. 2542 by Department of Internal Trade, Ministry of Commerce. Fertilizer producers and sellers shall distribute specified fertilizer formulas not higher than the controlled price. Such price control policy may not be consistent with fertilizer prices in the global market, therefore it might negatively impact the Company's performance.

#### **Risk Management**

The Company has a policy to cooperate with government to support farmers. At the same time, the Company uses best endeavor to maintain flexibility of management and strategy to correspond with changes of the government's price-controlled policy. Meanwhile, the Company is able to adjust production plan focusing on other fertilizer formula not affected from the price control policy. This strategy is one of directions that can mitigate the impact of such government's price-control.

### **4. Fluctuation of raw material prices**

The Company imports majority of raw materials from abroad for fertilizer production. Therefore, changes of raw material prices might significantly affect fertilizer production cost, product price, as well as profitability of the Company. In general, raw material price fluctuates according to international market situations as raw materials are commodity goods whose prices are depended on several uncontrollable factors, e. g. , global economy, weather condition, crop price, oil price, price speculation, etc. If the Company is able to manage the selling price to be in line with the change of raw material cost, such fluctuation shall have minimal impact to the Company's performance. However, chemical fertilizer is one of controlled goods subject to the Goods and Services Prices Act B. E. 2542 in which the Central Committee on Goods and Services Prices, The Department of Internal Trade, Ministry of Commerce ( " the Committee " ) has issued the announcement to suggest that the selling prices of specific formulas of chemical fertilizer shall not exceed the suggested prices, except obtaining approval from the Committee. Therefore, the Company may be unable to adjust selling prices against an increase of raw material prices as governed by the price control policy above, resulting in selling price of fertilizers does not reflect actual cost. The Company's expected performance might not be achievable from this event.

#### **Risk Management**

The Company manages the risk by controlling inventories both of raw materials and finished products. From time to time, the Company monitors market conditions and flexibly revises production plan in accordance with market demands, then further adjusts the procurement plan of raw materials in order to keep inventories at the optimum level and mitigate effects of raw material price fluctuation.

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In addition, the Company uses best endeavor to adjust selling prices reflecting actual cost. Upon occurrence of any events causing production cost significantly risen up, the Company shall promptly request for the increase of fertilizer selling price to the Committee.

## **5. Fluctuation of the currency exchange rate**

As majority of raw materials are imported from international suppliers, the Company has to make a payment mainly by US Dollar. Therefore, there is a risk that the Company would be affected by the fluctuation of currency exchange rate. For instance, payments of raw materials would increase when Thai Baht against US Dollar depreciates on the payment date, or revenues converted from exported products would decrease when Thai Baht against US Dollar appreciates on the settlement date.

### **Risk management**

When the Company makes contracts based on a foreign currency, the Company will enter into a forward exchange contract with financial institutions. Under this practice, changes of currency exchange rate would have low impact to the Company as it has been fixed already, and the Company is also able to determine the cost and the selling price precisely based on the fixed exchange rate.

## **6. Dependence on limited number of suppliers**

Certain raw materials required for production can be produced and supplied by a limited number of suppliers. This dependence on limited suppliers might cause short supply than expectation, delay of delivery than production and selling plans, and unreasonable price increase. Therefore, dependence on a limited number of suppliers is one of risk factors that would affect the Company's performance.

### **Risk Management**

The Company uses best endeavors to explore potential suppliers of required raw materials, and allots procurement transactions into different suppliers to reduce the supplier dependent risk. Currently, the Company has several sources to import single fertilizers. Therefore, there is no raw material supplied by a single source to the Company at present. In addition, the Company sometimes makes purchasing contracts in a specific period enabling suppliers to estimate the Company's demand so that they can properly reserve and prioritize on the Company's order.

## **7. Plant Operation**

The Company's production capability is a critical factor of the business success. Therefore, any damage, loss, or interruption relating to production process, inventory, product distribution caused by uncontrollable factors, e.g., severe weather, natural disasters, fire, machinery breakdown, and lack of infrastructure are risk factors of the Company's performance.

### **Risk Management**

The Company operates the production by two plants, Phrapradaeng Plant at Samut Prakan Province, and Nakhon Luang Plant at Phra Nakhon Si Ayutthaya Province. Even in the case one plant cannot operate because of emergency matters, another plant can operate and total shutdown can be prevented. In addition, the plants implement a preventive and forecasting maintenance program to ensure production stability and reduce unexpected shutdowns. Notwithstanding the foregoing, the Company has the insurance covering property damages as well as business interruption in order to ensure that undesired events will be under acceptable level.

## **8. Foreign Investment**

The Company has a business strategy to expand fertilizer market into nearby countries, then the Company established TCCC Myanmar Limited, a subsidiary with the registered capital of 12.5 million US Dollar to operate a fertilizer packing plant at Thilawa Special Economic Zone in Myanmar and has started its commercial operation in early of 2018. This foreign project has inherent risk factors connected to the Company's performance. For example, market conditions, competitors, governmental laws and regulations, skills and knowledge of local labors, inflation, purchasing power of local farmers, etc.

### **Risk management**

The Company has paid attention to such investment by closely monitoring the economic, social, and market situation in Myanmar. In order to have effective operation, the Company has strength of strong brand recognition, product quality, competitive cost advantage, as well as a variety of products that can support a variety of farmers' demand.

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## **9. Controlling persons**

Sojitz Corporation (“Sojitz”) and ISTS (Thailand) Co., Ltd. (“ISTS”), the related person of Sojitz pursuant to Section 258 of the SEC Act, collectively own approximately 83.46 percent of the Company’s share capital. Therefore, they can control voting in the shareholder meeting on significant agenda, e.g., dividend, capital increase, related party transaction, acquisition or liquidation of asset, etc. as their votes are more than 75 percent of the total votes. In this matter, rights to vote are solely rights of each shareholder. Therefore, the Company is unable to control voting of such shareholders to be in accordance with the Company’s direction or not conflict with interests of minority shareholders.

### **Risk Management**

The Company has strictly complied with related rules, regulations and laws upon proceeding of voting in the shareholder meeting. Moreover, the Company has prepared information of such matter delivered to all shareholders together with the notice prior to the meeting date. The notice states details of such matter, history, reason, necessity and the Board’s opinion for consideration by shareholders before attending the meeting. In addition, shareholders will be able to ask questions in the meeting and the Company has a person in charge of such matter to provide clarification to shareholders so that they can make an appropriate decision in each agenda.

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#### 4. Assets for Use in Business Operation

(1) The company's main assets for use in business operation are as following.

1.1 Land with building thereon which is the location of the Phrapradaeng Plant Site at 284, Kilometer No. 17.5, Suksawat Rd., Pakklong Bang Plakod Sub-District, Phra Samut Jedee District, Samut Prakan Province approximately 98 rai of area, including machines in the fertilizer production process. The Company has ownership over such assets. There is no burden attached to such assets.

1.2 Land with building thereon which is the location of the Nakhon Luang Plant Site at 50 Moo 5, Nakhon Laung-Pachee Rd., Khlong Sa-Kae Sub-District, Nakhon Luang District, Phra Nakhon Si Ayutthaya Province approximately 106 rai, including machines in the fertilizer production process. The Company has ownership over such assets. However, land and building thereon is under mortgage with Bangkok Bank PCL for various kinds of debt at the amount of THB 637.7 million. The machines are also under mortgage with Bangkok Bank PCL for various kinds of debt at the amount of THB 580.9 million.

(2) The company has other asset for business operation as follows:

##### 2.1 Trademark

The Trademark License Agreement between the Company and Metro Co., Ltd. ("Metro") has been made on February 2, 2004 with conditions briefly concluded as follows:

|                     |   |   |
|---------------------|---|---|
| Trademark Owner     | : | Metro   |
| License Period      | : | Indefinite Period   |
| Licensed Trademarks | : | Altogether 19 trademarks including OX Trademark   |
| Condition           | : | Irrevocable and exclusive rights to use the trademarks domestically and internationally with agro-chemical and fertilizer products. |
| Royalty Fee         | : | One time payment at the total of THB 960 Million paid in cash and in kind.  |



## 5. Legal Dispute

At present, the Company has no significant legal dispute.



## 6. General and Other Information

### 1. Information of the Company

Name: Thai Central Chemical Public Company Limited (TCCC)  
Head Office: 21/35-46 Thai Wah Tower 1, 14-16<sup>th</sup> Floor., South Sathorn Road, Thungmahamek, Sathorn, Bangkok 10120  
Business: Manufacturing and Distributing of chemical fertilizer  
Registration No.: 0107536000277 (previously, Bor Mor Jor. 101)  
Telephone: (662) 639-8888  
Fax: (662) 639-8999  
E-mail: mailbox@thaicentral.co.th  
Home Page: <http://www.tcccthai.com>  
Registered Capital: THB 1,754,148,354  
Number of Share: 584,716,118 ordinary shares  
Par Value: THB 3.00  
Amount and type of shares sold: 584,714,068 ordinary shares

### 2. Information of juristic persons of which the Company has shareholding more than 10%

#### 1) MC Agro-Chemicals Co., Ltd.

Head Office: 581 Moo 4, Bangpoo Industrial Estate, Soi 12B, Sukhumvit Road, Praksa Sub-district, Muang District, Samutprakarn 10280  
Business: Import and distribute both technical pesticide and finished product which used in Agriculture, Public Health and Livestock. The business sector includes the marketing of formulated, finished products, repacking service and quality control checks by modern laboratory.  
Shareholding: 99.99%  
Telephone: (662) 709-4517  
Fax: (662) 709-4780  
Registered Capital: THB 50,000,000  
Number of Share: 500,000 ordinary shares  
Par Value: THB 100  
Amount and type of shares sold: 500,000 ordinary shares



**2) N.I.M. Co., Ltd.**

Head Office: 205 United Flour Mill Building, 8<sup>th</sup> Floor, Ratchawong Road, Chakrawad, Samphanthawong, Bangkok 10100

Business: The Company is engaged in liquid chemical storage tank rental and terminal operation for the storage of liquid chemicals mostly the raw materials for use in various industries.

Shareholding: 51%

Telephone: (662) 222-7352

Fax: (662) 224-5616

Registered Capital: THB 125,000,000

Number of Share: 12,500,000 ordinary shares

Par Value: THB 10

Amount and type of shares sold: 12,500,000 ordinary shares

**3) Central Pacific (Thailand) Corp., Ltd.**

Head Office: 180-184 Metro Building, 5<sup>th</sup> Floor, Ratchawong Road, Chakrawad, Samphanthawong, Bangkok 10100.

Business: Importer and distributor of fertilizers, agro-chemicals, minerals and etc.

Shareholding: 49%

Telephone: (662) 225-0200

Fax: (662) 622-7978

Registered Capital: THB 200,000,000

Number of Share: 2,000,000 ordinary shares

Par Value: THB 100

Amount and type of shares sold: 2,000,000 ordinary shares

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#### 4) TCCC Myanmar Limited

Head Office: Lot No. C-15 & C-18, Thilawa Special Economic  
Zone A, Yangon Region Myanmar  
Business: importer and distributor of chemical fertilizer in Myanmar.  
Shareholding: 99.99%  
Telephone: (+95) 1 230 9175  
Registered Capital: USD 12,500,000  
Number of Share: 125,000 ordinary shares  
Par Value: USD 100  
Amount and type of shares sold: 125,000 ordinary shares

### 3. Information of other referees

#### 1) The registrar of ordinary shares

Thailand Securities Depository Co., Ltd.  
93 Ratchadaphisek Road, Dindaeng,  
Bangkok 10140  
Telephone : (662) 009-9000 Fax: (662) 009-9991

#### 2) Auditor for the financial year 2019

##### **Deloitte Touche Tohmatsu Jaiyos Audit Co., Ltd**

AIA Sathorn Tower, 23<sup>rd</sup>-27<sup>th</sup> Floor, 11/1 South Sathorn Road, Yannawa,  
Sathorn, Bangkok 10120 Thailand  
Tel : (662) 034 0000 Fax : (662) 034 0100

##### **Company's Auditor**

- |                               |                                      |
|-------------------------------|--------------------------------------|
| 1. Mr. Manoon Manusook        | Certified Public Accountant No. 4292 |
| 2. Mr. Mongkol Somphol        | Certified Public Accountant No. 8444 |
| 3. Mr. Choopong Surachutikarn | Certified Public Accountant No. 4325 |

Investors can also find more information of the company issuing securities from the company's Annual Registration Statement (Form 56-1) which is show on website [www.sec.or.th](http://www.sec.or.th) or company's website [www.tcccthai.com](http://www.tcccthai.com)