



# ความรับผิดชอบต่อสังคม

## Corporate Social Responsibilities (CSR)

Corporate Social Responsibility : CSR is an important issue around the world that interested, particularly in the business sector who realizes that the business operation will impact on society and environment unavoidably. Therefore CSR will become significant issue for all parties which are not to build the good corporate image for business purposes or solve the problems in order to gain social recognition only. But at the present, CSR is going to be very important issue and become the “Framework and Business Operation Method” to develop the efficacy of business operation, reduce risk factors and enhance competitiveness, including develop value chain which leads to corporate sustainable development.

Thai Central Chemical Public Company Limited strives to “**The First Choice of Growers**”. We aim to be a top priority choice of agriculturalists by delivering excellent products and services that boost quality and productivity in farming, and emphasize to create values to stockholders by participating in activities in order to improve the quality of life, society and environment. The company has prepared the CSR report to publicize the CSR activities to public.

### 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

To accomplish the vision, the company has stipulated the mission as follows.

#### **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.

#### **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.

### Directions toward sustainability

“To create the quality of life for agriculturalists by delivering the values of sustainable agriculture” is the commitment of Thai Central Chemical Public Company Limited that we prioritizes and adheres to do business.

To create the quality of life to agriculturalists are required many factors. On behalf of chemical fertilizer producer who related with agriculture sector directly, the company has responsibility to produce the quality products and high standard of quality control, including research and develop products continuously. As well as the company provides the advice on product application in order to increase productivity and efficiency to agriculturalists, and deliver the valuable and safe agricultural products to our consumer. In addition, the company focuses on taking care of community and environment that may be effected from our operation by pollution reduction, energy saving and development of community, society and environment. These are interdependent between company and community which lead to sustainable development for the future.

### Framework of the report

This CSR report has been prepared in accordance with the Guideline for Sustainability Report, the Stock Exchange of Thailand by using the Integrated CSR Reporting Framework version 2, Thaipat Institute, as a framework. The material in the report covers only the activities of Thai Central Chemical Public Company Limited which excludes its subsidiaries.

### Nature of Business Operation

The company is a producer and distributor of high quality chemical fertilizer with production capacity of 1.2 million metric tons per year.

## Stakeholders

The stakeholder is the person concerned with the company activities in many aspects and may be affected by the operation of the company. Therefore, the company shall take responsibility to control any activities for generating benefit and minimize any effect as much as possible. The stakeholder, moreover, is the important part for strategic planning on sustainable growth. In particular, the company will assess the risk of such activity and monitor any effect happening to the stakeholder including survey needs of the stakeholders, and then the company will plan the strategy, policy or any guideline to address such effect.

The company categorizes the stakeholder of the company into groups as follows.

**1. Staff;** Staff performs activities of the company in accordance with the company's policy. Benefit or effect, which will happen, is salary, welfare, job promotion, seminar or training and workplace environment.

**2. Shareholder and investor;** Shareholder and Investor buy share(s) of the company; hence, they share interest with the company performance. Benefit or effect which may happen is consideration in many forms, such as, dividend, profit, loss from the company performance and information disclosed by the company.

**3. Farmer;** Farmer is a direct stakeholder by consuming the company's product. Benefit or effect which may happen is quality of the product and services, product information disclosure, non-disclosure of the customer information and after sale service.

**4. Dealer;** Dealer is one of the significant stakeholder in distribution of the good to the farmers. Benefit or effect, which will happen, is commission from sales of goods, preparation and transportation of the goods to the dealer, marketing promotion and support, warranty in case damage of goods.

**5. Business partner and Supplier;** They play an important role in supply chain i.e. supply raw material or provide services in any work or project. Benefit or effect which may happen is price of the supply, auction of any project, knowhow or technology transferred.

**6. Competitor;** Competitor is a stakeholder in business competition. Benefit or effect which may happen is fair and legally trade or transparent and ethical business operation.

**7. Creditor;** Creditor relates to the company as it has the right to claim against the company. Benefit or effect which may happen is timely payment including any agreed consideration.

**8. Community;** Community relates to the company as it may obtain benefit or effect from the company's production, such as, pollution, employment in the community, distribution of local goods or community development.

## Significant and focus issue for CSR

From analysis of the stakeholders considering the issue which is important to the stakeholders and the issue which is important to the company, the company has specified the significant issues, after that the company has processed CSR activity focusing on the below issues.

- Quality control of the products
- Development of Environmental friendly production process
- Labor practice and human resource development
- Providing correct information of product application to agriculturalists

## CSR in Process

### Responsibility to Customer, Society and Environment

The company has compiled our CSR activities to customer, society and environment related on operation as below.

#### 1. Quality Control of the Products

The company focuses on the quality and standard of production process to make customer's satisfaction and confidence in company products as "Pui Tem Suit". The company believes that the good fertilizer will enhance quantity yield, increase the income and improve the quality of life for agriculturalists.

- In production line, both plant sites have been certified ISO 9001 : 2015 Quality Management System for Manufacture of Fertilizer, Manufacture of Plastic Bag and Co-Generation of Electricity Steam and Hot Water from Gas Engine. The company strictly examines the quality of raw material and finishing goods by randomly examined for 3 stages. Firstly, the raw material will be randomly examined for quantity of nutrient before going through production line. Secondly, the fertilizer will be examined nutrient content after it has been produced and transported to the warehouse. Thirdly, before the fertilizer is packed, it will be examined the nutrient content again. In each stage of examination, the company's staff will randomly collect the sample every 15 minutes from the belt conveyor and once the staff gets 8 samples or every 2 hours, such samples will be sent to the company's laboratory for nutrient content analysis. If any sample does not meet the standard of quality, the fertilizer produced in such period will be separated and will be sent to reproduction process. This quality control procedure is one of the highest standards of quality control systems in the fertilizer industry.



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- The company set up the laboratory for analysis of fertilizer quality at Prapadaeng plant site and Nakhon Luang plant site which are the most advance and highly efficient in nutrient content analysis. Both of the company's laboratory have been certified ISO/IEC 17025: 2017 Laboratory for fertilizer analysis from Department of Science Service, Ministry of Science and Technology. Hence, it can be assured that fertilizer examined by the laboratory will meet standard of industrial quality. Furthermore, the company laboratory is now certified as the certified laboratory for fertilizer analysis from Department of Agriculture, Ministry of Agriculture and Cooperatives. Any fertilizer traders can use the result of fertilizer analysis by the company's laboratory to register with Department of Agricultural for trading.

### 2. Development of Production Process

The company conducted the Internal Logistic Improvement at Nakhonluang plant site and Prapadaeng plant site, namely, transporting the products to the warehouse and transporting the products to customers or dealers.

- For Nakhon Luang plant site, the company has improved the logistic system to facilitate for customer as "One Stop Service" with Palletizer system and P-Sling which was controlled by the computer system. The improvement resulted decrease the customers' pick-up time in the warehouse by about 50%.

- For Prapadaeng plant site, the company has improved process of transporting the products to the warehouse and transporting the products to the customers or dealers by installing P-Sling system, which is packing sack equipment for moving the products 2 metric ton per time. In addition, the company has improved internal logistic system by management the parking point for loading process of goods, which increase internal transportation efficiently. Both improvements resulted decrease the customers' pick-up time in the warehouse by about 50%.

### 3. Environmental Preservation

- The company has built the Co-Generation Power Plant which generates electricity and heat at the same time at Prapadaeng plant site. The electricity generated by the power plant will be consumed in the plant site internally and if there is excess of electricity, it will be sold to Metropolitan Electricity Authority ("MEA"). Heat, produced by the exhaust gas of the power plant in addition to electricity, can be used in fertilizer production process. Former days, heat was produced by separate gas firing boiler but the Co-Generation Power Plant can use such natural gas to produce both electricity and heat. This project, therefore, promotes the company decrease of energy consumption, production cost saving and income generating from sale of electricity to MEA. The operation of the power plant has begun since the end of 2013.

- The company has conducted Air Quality Control Project at Phrapradaeng plant site and Nakhon Luang plant site. Normally, in transportation process of raw material or finishing good into the plant site, micro dust can be released and it may affect the nearby community and environment, also it is loss of the company. In this project, the company has installed the dust protection equipment using Cyclone System to produce air circulation and makes dust sink to the bottom. After installation of the equipment, the quality of air complies with the standard of industry. The company has also installed additional dust protection equipment using Scrubber Tank System which can be able to trap dust with smaller size (smaller than 20 Micron) by using water. Moreover, the company has installed the information board showing air quality at the jetty of Nakhon Luang plant site for acknowledgement of nearby community in accordance with environmental governance principle. The air quality will be monitored every day and the result will appear on the information board accordingly.

- The company has initiative Garbage Separation Project. The objective aims to motivate our employees to separate the garbage before dump. The company will buy garbage which can recycle at the agreed price. After that, the recycling garbage will be sold to the purchaser of recycling garbage. This will align with the campaign "Turn garbage into money" initiated by the company. The revenue from the purchase of garbage will be circulated in the Project that is to buy garbage from staff again. In addition, the company has changed garbage containers to be appropriate and enough for the quantity of garbage in the plant site. At Prapadaeng plant site, the result shows that there is 177 tons of recycling garbage sold to the purchaser. At Nakhon Luang plant site the result shows that the general garbage by 80.10 tons or 28.61% of the normal quantity which decrease form the last year. And the recycling garbage sold to the purchaser by 80.82 tons or decrease by 7.54% of the normal quantity when compared in year 2018, although the recycling garbage reduction that will occur from waste separation and waste reduction by 7R method, the company aim to encourage staff to realize environmental issue.

- The company raised awareness of energy conservation and resource usage to staff in organization, held Save Energy Day 2019 at Phrapradaeng Plant Site and opened the opportunity for every staff in each Division to arrange exhibition and show the result of energy reduction and conservation which occurred from working process, including opened the opportunity for students in community to visit the exhibition. This activity is the part of organization culture to build the environmental culture for staff.

- Furthermore, the company emphasizes production process which considering sustainable business development to reduce the environmental and social impacts and both of plant sites have been certified 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 Ministry of Industry and the company is studying of upgrading to level 5 in the near future. The green industry project has been set up by the Ministry of Industry that regulated 5 levels of "Green Industry" to evaluate the environmentally-friendly factories.

#### 4. Ethical Labor Practices

The company acknowledges safety of the company's employee as priority; therefore, having announced Work Instruction to be a guideline for working by having the safety standard not lower than the standard set by Department of Industrial Work. The company holds seminar on safety issue periodically and invites an outside speaker to give a lecture. In addition, the company has collected the statistic of accident which occurred in the plants including any injuries caused by work as the following details.

In 2019, there were 15 times of accidents occurred in the plant site. 10 employees and constructors were injured and took leave for 69 days. Such incidents were calculated as Injury Frequency Rate (IFR) of 4.33 per one million hours, and Injury Severity Rate (ISR) of 29.90 per one million hours.

- At Prapadaeng plant site, 7 employees and constructors were injured and took leave for 69 days. Such incidents were calculated as Injury Frequency Rate (IFR) of 8.69 per one million hours, and Injury Severity Rate (ISR) of 59.9 per one million hours.

- At Nakhon Luang plant site, 3 employees and constructors were injured and took leave for 0 days. Such incidents were calculated as Injury Frequency Rate (IFR) of 2.59 per one million hours, and Injury Severity Rate (ISR) of 0 per one million hours.

In this matter, every morning before start working, a short period of 10 minutes will be reserved for a supervisor to perform Safety Talk with their subordinates. The safety rules and other interesting matter will be briefed in this period. In working process, if there is any accident, investigation will be preceded and it will be reported to the Safety Health and Environment Committee for improvement of safety measure (if any). Statistic of injury caused by work will be also collected for improvement of safety standard of employee.

- The company initiated "White Factory Project" at Prapadaeng plant site and Nakhon Luang plant site which aims for a clean workplace from narcotic. With cooperation from the police and the Department of Administration officer, the company randomly tested employee's urine without prior notice. If the result shows that any employee has narcotic in his/her body, the company will not immediately punish him/her. Such employee will be sent to the hospital for rehabilitation program. There will be several session of discussion with a therapist, medicine treatment and regular urine test until completion of the program. After that, such employee will be randomly tested in accordance with the project schedule. If the result still be the same, the company will terminate employment of such employee. Nevertheless, from statistic showed all employees who completed rehabilitation program passed the random urine test in every case. At present, no employee found narcotic in the urine test anymore.

- The company attended "Happy PVD Company" Project with objective of financial stability to retried employees by encouraging our employee to save money in company's provident fund and motivating them save fully rate of benefit. The company always educates all employees through many channels and activities in order to motivate employee's awareness of saving for retirement goals and choose appropriate investment program.

- The company gives priority to human resource development. The company believes that the company could sustainably grow; the employee shall be the quality and professional persons. In this regard, the company rendered the policy to develop the employees' skills in related areas through the training both in fundamental skills and specific profession skills such as management, accounting and finance, information technology, creating motivation for increase efficiency of work, professional presentation skills, problem solving and analysis techniques, including safety at workplace, in total of more than 140 courses. The training course was designated to suit the necessity for developing the man powers' skills and the company's strategies. Furthermore, the company opened for the employees to provide opinions toward such trainings in order to design the most suitable course to meet requirement and desire of the employees and the company. Training statistic could be summarized as follows. The number of employees, who attended the training, was 86.37% of all employees. The total hours of trainings were 10,612.45 hours, or 20.18 hours per person per year in average. The training expense per person per year amounted to THB 7,232.26.

- In 2019, the company initiated the "Brand Ambassador Project batch #1" by the Brand Ambassador group to participate various activities such as training about products and services, visiting dealers, sub dealers and farmers. The objectives are to drive employees and build leaning process, make understanding about chemical fertilizer business and realize Thai Farmer needs, in order to apply information to develop the quality products and services which are able to meet the customer needs and company vision "The First Choice of Grower" in the future.

#### 5. Providing Information to Farmers

- The company arranges the farmer meeting average every month through the year to provide the farmer knowledge relating agriculture in various topics. The meeting will be co-arranged by the dealer, university, private sector and government agencies which will be responsible for finding the venue of the meeting and inviting the participants from 50-500 persons per session. The meeting will be arranged in different areas covering all parts of Thailand. The topic in the meeting will cover agricultural knowledge, such as, how to grow plants, soil fertility, treatment for plant decease, chemical fertilizer usage and etc.

- The company conducts the Demonstrating Plot Project which gives chance to the agriculturist to actually try plantation of rice, maize, fruit, para rubber, cassava and vegetables. The Demonstrating Plot is able to present the products to framers by correct method for using the suitable fertilizer formula, show the comparison of old way of plantation which has been conducted previously. The company will select the leading agriculturist who is interested in the project and he/she shall allocate some area to be the demonstrating plot. Then he/she shall use the company' fertilizer with the demonstrating plot following advice of the company in 4 matters which are right formula, right time, right ration and right method. From the result, 100% of the participants agree that production yield of the demonstrating plot which follows instruction of the company and use the company's fertilizer has been increasing quantity and quality of productivity.



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- The company quarterly publishes “Puen Tae Kasetkorn Thai” (True Friend of Thai Agriculturist) Magazine distributed to agriculturist, governmental unit, dealer and any person who is interested in for free of charge and it also can be downloaded from the company website. The content in the magazine will relate to agriculture in various aspects, such as, the King’s advice on agriculture, plantation of various plants, protection of plant decease, soil improvement etc. written by academic, agricultural expertise or the company staff. It also publishes details of much research in relation to appropriate fertilizer formula for each plants conducted by the company. In addition, there is a column of agricultural question answering which give chance to the agriculturist to ask the question and the company will have the expertise answer it accordingly.

- The company enhances children of the farmers to learn about knowledge by various projects, such as, Edible Garden Project having the objective to educate the children on preliminary agriculture knowledge regarding vegetable growing and how to use fertilizer correctly starting from seed selection, application of fertilizer and harvesting. The company hopes that the young generation shall be able to apply knowledge from this project to their plantation at home. This project also enhances the children to have discipline, cooperation, and most importantly, they shall have fresh and safe vegetable grown for eating. In this year, the company built the demonstration plot “The Edible Vegetable Garden” for Wat Samruan School and Watlay School (Thawepanya) at Nakhon Luang District in Ayutthaya Province, For the results of this project, the students are able to understand the cultivation and usage of chemical fertilizer correctly, including apply the knowledge which company educated to their demonstration plot and achievement. Moreover, they can also generate an income from surplus products which each schools use as a fund to continue the project, as well as reduce cost of raw materials for luncheon in the school. In the future, the company will expand this project to many schools in the region.

### 6. Innovation and distribution of innovation obtaining from CSR compliance

For the best interest of the agriculturist in usage of chemical fertilizer, the company cooperates with various leading educational institutes to conduct research in order to search for the appropriate fertilizer formulas with different economic crops. The agriculturist is also encouraged to use the outcome of research for their plantation. The examples of research are as follows.

Research Project	Cooperating with
1. Comparison of Off-season Longan Growth and Productivity with various fertilizer formulas on 3 <sup>rd</sup> year	Maejo University in Chiang Mai Province
2. Comparison of Maize Growth and Productivity with different fertilizer rates on 3 <sup>rd</sup> year	Chiang Mai University in Chiang Mai Province
3. Growth of Celery and Chinese Cabbage with various fertilizer formulas	Kasetsart University, Kamphaeng Saen Campus in Nakhon Pathom Province
4. Efficacy Test of fertilizer paper bag for slow release in oil palm, para rubber and fruit tree	Cooperating with farmer plot in Phitsanulok, Chumphon and Surat Thani Province

Anyhow, the company is sponsor for all expenditures in conducting the research. The outcome of research has been publicized for the agriculturist, fertilizer traders and any persons who are interested in by publishing in Puen Tae Kasetkorn Thai Magazine and in the seminar or meeting with the farmer.

## CSR after Process

Furthermore, the company held the projects and activities for social and environment benefits as follows.

### 1. The Projects for Social Benefits

#### - Scholarships for farmers’ children

The company initiated policy to support and encourage farmers’ children who have an excellent academic record but financial limitation. Then, in the future, they become a decent and qualified person to the society. In addition, this activity will create positive perception and impression of the trademark “OX-Brand” to the farmers including good image of the company. In this matter, the company has arranged scholarships for farmers’ children who are studying in the primary school and the secondary school and have an excellent academic result but financial limitation. The scholarship will be granted via schools in the northern part and northeast part of Thailand. For last year, the company had funded scholarship for THB 800,000.

**- A-Math Genius Project**

In addition, the company also held A-Math Genius Project which educated mathematic to children to enjoy practice and logical thinking by our employees who attended the training course as trainer for primary students. In this year, the company held this activity in community nearby Nakhon Luang plant site.

**- The Project of Rice Camp by Thai Rice Foundation under the Royal Patronage**

The company supported “Youth Farmers: The Future of Thai Rice” Rice Camp project in the Central region held by Thai Rice Foundation under the Royal Patronage. The objectives of the project are to educate and support the new generation farmers who have high potential to do sustainable agriculture, aim to build learning process in agricultural and technology for increasing product quality corresponds to market demand, which TCCC continues to support this project every year.

**- The Project to support NPK compound fertilizer for community services.**

The company supported NPK compound fertilizer to many organizations to increase productivity for society, community and public benefits, such as the rural school and Thai Red Cross (Ratchagarun Center) which used for tree planting activity on Mother’s Day every year.

**- The Project to support the public activities with community**

To make the company operation be successful, the company need the co-operation and support from nearby community. In this year, the company supported and joined the recreation activities with community such as Kathin Ceremony and Phapa Ceremony (offering of robes and other needs to monks), the annual Children’s Day and the big cleaning day nearby plant site area.

**- The Voluntary Project to develop local community**

In addition, the company focuses on community development nearby plant site. In this year the company held The Development Voluntary Project at Wat Koo Sang Child Development Center, 43 Moo 9 Pak Khlong Bang Pla Kot, Phra Samut Chedi in Samut Prakan Province. The objectives are to improve the quality of life in safety, occupational health and environment, prevent risks of all kinds. The employees and technicians conducted this activity such as installation of water filter, installation of rain gutters, installation of sun-proof and water-proof awnings, electrical repairs and light, landscape improvement, painted building and campaign to raise awareness of waste separation.

**2. The Project for Environmental Benefits**

**- The Weir Project**

The company focuses on the natural water resources for agriculturists which held the Weir Project for environmental restoration and water resource conservation to the ecology, save the water resources for Thai Farmer, prevent flood in rainy season and save water in dry season. In this year, the company held “2<sup>nd</sup> Year TCCC Weir Project” at Samlan Waterfall National Park in Saraburi Province. On this activity, the experts and officers of Samlan Waterfall National Park provided the knowledge and guidelines to construct the weirs correctly.

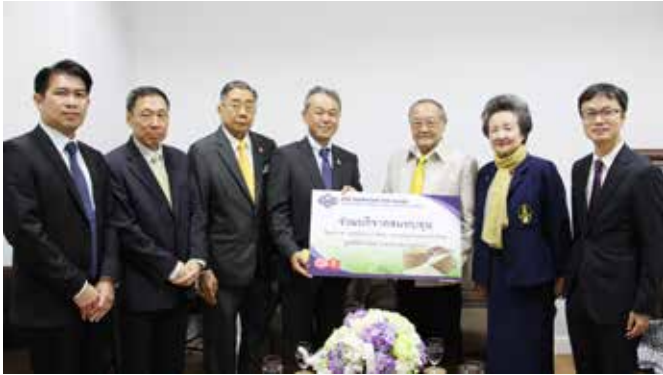
**- The Project of Mangrove Reforestation**

The project of mangrove reforestation is the prioritized activity of the company. In this year, the company held “2<sup>nd</sup> Year LuiLane Sangruk Pakkra Project, planted 1,500 mangrove trees at Ban Laem Sing (Chulachomklao Fort), Samut Prakan Province. The objectives are environmental restoration and conservation to save the habitation of plants species, aquatic animal and terrestrial animal. In addition, mangrove forest will protect tidal waves, coastal soil erosion and prevent wind speed or storm which make severe damage for resident and village nearby mangrove forest.





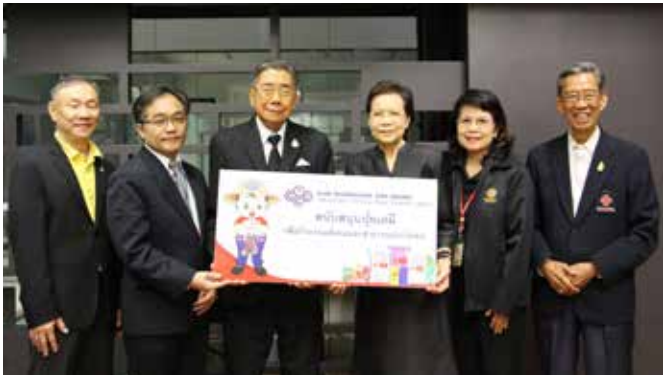
# ความรับผิดชอบต่อสังคม Corporate Social Responsibilities (CSR)



➤ สนับสนุนโครงการ “อนุชนชาวนาไทย : ความอยู่รอดของข้าวไทย”  
Supported the project “Youth Farmer : the Future of Thai Rice”



➤ สมทบทุนการศึกษา มูลนิธิวิสิษฐกรรม กระทรวงพาณิชย์  
Granted scholarship to Vissukham, Ministry of Commerce



➤ มอบปุ๋ยเคมีแก่ศูนย์ราชการศูนย์สภากาชาดไทย  
Gave chemical fertilizer to Ratchagarun Center under the Thai Red Cross Society



➤ ต้อนรับเกษตรกรเยี่ยมชม กระบวนการผลิตปุ๋ยเคมี พร้อมสัมมนา  
“ปุ๋ยเคมี และธาตุอาหารข้าว”  
Welcomed farmers to visit fertilizer production process and seminar “Chemical Fertilizer and Nutrients of Rice”



➤ สานต่อโครงการสวนสวยกินได้ปีที่ 3  
Continued “The Edible Vegetable Garden Project Season 3”



➤ เปิดโรงงานนครหลวง จัดงานวันเด็กประจำปี  
Opened Nakhon Luang Plant Site held National Children's Day