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SMART FARMING THE FUTURE OF AGRICULTURE IN THAILAND



THAILAND BOARD OF INVESTMENT

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BOI NET APPLICATION

January - March 2018





Unit: US\$ (US\$ = 31.82 THB as of 4 May 2018)

Note: Investment projects with foreign equity participation from more than one country are reported in the figures for both countries. Statistics on net applications are adjusted whenever applications are returned to applicants due to insufficient information. For more details, please see link http://www.boi.go.th/ newboi/index.php?page=Report_investment

SMART FARMING: THE FUTURE OF AGRICULTURE IN THAILAND

There is a saying in Thailand that agriculture is the backbone of the country. More specifically, the phrase refers to the farmers who work tirelessly to ensure that their fellow countrymen and, increasingly, citizens beyond their own national borders are well-fed.

An old sector upgraded with new technology

There is a saying in Thailand that agriculture is the backbone of the country. More specifically, the phrase refers to the farmers who work tirelessly to ensure that their fellow countrymen and, increasingly, citizens beyond their own national borders are well-fed. Through generations of such productivity combined with the fertile nature of Thailand's tropical climate, the country has established itself as one of the world's most renowned producers of agricultural products. Rice is, without doubt, the champion of that reputation with production recently soaring to a new high of over 11.48 million tonnage worth 5.1 billion USD in 2017. This figure represents a staggering 15.9 percent annual growth from 2016 and, from a global point of view, reinforces Thailand's position among the world's leading producers of this agricultural staple.

Looking ahead, there is no doubt that Thailand will continue to be a leading supplier of rice and other agricultural products to the world. However, as the global economy expands, so too does its population, and with it, the obvious demand for agricultural produce. According to the Food and Agriculture Organization (FAO) of the United Nations, the global demand for agricultural commodities is expected to grow at approximately 1.4 percent per year from now until 2030 and then at 0.8 percent annually onward to 2050. These annual figures compound into a staggering 40 percent increase for the 2018-2050 period. In such an environment, land scarcity will become one of the major challenges facing the world. While there are still untapped arable lands that can be put into proper use, the volume of new cultivatable land will simply not be sufficient to keep pace with demand. As a result, productivity and yield rate are the keys to ensuring future food security for the planet.

As is the case with other sectors, modern digital technology offers a solution. At every level of the agriculture industry supply chain, new technologies are transforming the sector. For upstream activities, the Internet of Things (IoT) and increasingly intelligent sensor systems are enabling farmers and growers to monitor their produce in real-time and adjust input accordingly. At the downstream end of the chain, the ongoing development of better machinery has made food processing more efficient and less costly. On the distribution front, e-Commerce has also recently opened up to agricultural products. These are just a few examples

of the innovations that are driving the agricultural industry into new territory. This article will be focusing on the digitalization of commodity production, an activity more popularly known as 'smart farming'.

Samples of local innovation in smart agriculture

Thai entrepreneurs are already setting their sights on how farming should be done in the future. Here are some examples of 100 percent locally-made innovations that will revolutionize the agriculture industry in Thailand.

Researchers at Mahidol University and Granmonte Farm, a renowned vineyard in Nakhon Ratchasima Province, have created the Micro-Climate Monitoring System. A dedicated network of sensors detect key data, including temperature, humidity, light intensity, wind speed, and air pressure, among others. These data are then analyzed by the intelligent system to increase the output yield and reduce the risk of failure. As one specific example, the irrigation system is automatically activated when the detected humidity is low. This feature, combined with the constantly-on internet connectivity, not only increases productivity but also gives growers the freedom to manage their farms remotely.

COVER STORY

A similar feature can also be found in the Smart Farming Kit, an IoT-based irrigation control system developed by the Faculty of Science and Technology at Thammasat University. Using this product, watering cycle timing can be preset in advance, while at other times, irrigation can also kick in automatically when soil level humidity falls below a pre-designated threshold.

Formed in 2015, FarmD Asia is a smart farm service provider that aims to boost agricultural productivity through its flagship product, a pre-programmable pesticide-releasing aerial drone which can cover approximately six to eight acres of land in a single flight. In addition to reducing farmers' risk of exposure to chemicals, this technology also saves time and lowers cost. Another of FarmD Asia's products is a specialized environmentally-controlled mushroom cultivation chamber. The internetconnected chamber enables growers to adjust and optimize temperature and humidity remotely in order to maximize output.

Another agro-tech company, Thai Advanced Agri Tech, has enabled a reduction in planting spaces through its I-Stack planting kit, a stacked vertical hydroponic pot which can potentially save up to three times the space required for conventional planting. The pot is made of food-grade plastics that are highly durable and last for four to five years.

The companies and their innovative products mentioned here represent just few basic examples that attest to Thailand's current standing as an emerging player in the global smart agriculture industry and its related services. Foreign investors are therefore invited to invest in Thailand and use the country as a base from which to expand their operations into the region as well as a compatible setting in which to test new products or services.

Thailand's readiness and government support

In a country with such well-developed expertise in agriculture as Thailand, the possibilities afforded by the digitallyenabled farm and agriculture business have long excited all related stakeholders and interested parties, including farmers, policymakers, academics, and industry business operators, among others. Through this openness to change and progress, a wealth of knowledge and expertise in the future of farming has already driven agriculture in Thailand into an exciting new era years before the term 'smart farming' came into the spotlight, making Thailand's agricultural industry second to none when it comes to institutional support and industry readiness.



From the field of academia, the Agricultural System Integrator (ASI) launched by the National Science and Technology Development Agency (NSTDA) was a program designed primarily to equip modern farmers with the technologyagriculture-integration mindset they require to start and run a smart farm successfully. This short course provides its participants with business and networking skills, knowledge on smart agriculture technology, and a standard accreditation framework, as well as a field workshop, which provides participants with a true sense of how an agriculture business and farmers in the 21st century should operate.

In terms of government support, Thailand Board of Investment (BOI) stands ready to provide its full support to smart farming investment in Thailand. Under the current investment promotion scheme, smart farming and its related services (i.e., the manufacturing of modern agriculture products and services related to modern agriculture, e.g. detection or tracking systems, resource regulation systems, and smart greenhouse systems) are activities classified under the A3 category of the Activity-Based Incentives. As a result, smart farming investment will be granted 5 years of corporate income tax exemption with no maximum capped amount, along with an exemption on import duty for machinery and raw materials used for the production of exported goods, given that such investment includes the development of system and software for resources management that are integrated and capable of collecting, interpreting and analyzing data.

The readiness and support that Thailand provides underscore the country's determination to maintain its reputation as the world's foremost supplier of agricultural products and to continue supplying the world with the best quality agricultural products. To this end, Thailand has committed to further enhancing technological absorption and integration in the agriculture sector in order to ensure that all previously mentioned goals can be achieved.

SPECIAL TOPIC

TATAL TRACKING MANAGERINA TATA

MEASURES FOR IMPROVEMENT OF PRODUCTION EFFICIENCY

Efficiency and industry 4.0

In the era of Industry 4.0, the evolution of industry must conceptually encompass the enhancement of production methods and efficiency. As such, in addition to promoting the development of high-tech and advanced industries, human capital, and targeted areas, one of the current themes of the BOI's investment promotion policy is to support and encourage existing industries in Thailand to be active in updating their machinery and constantly devising new ways to reduce costs and generate higher outputs.

That being said, efficiency in a broader perspective is not defined solely in terms of output to cost ratio, nor is it necessarily achieved exclusively by the replacement of old machinery. Rather, taking steps to adjust the production process and utilize renewable or alternative energy can also play major roles in optimizing cost and output. Looking beyond financial matters, the cost to the environment is a major consideration in improving production efficiency, too. That is why the BOI supports companies that have committed to reducing their environmental footprint.

Attractive package for BOI promoted projects

Since 2014, the BOI has been supporting an increasingly diverse array of efficiency improvement initiatives through a variety of incentives launched under its Measures for Improvement of Production Efficiency. Carefully designed to encourage different types of efficiency improvement, the initiatives are categorized under four sub-measures, as follows: (1) energy conservation, alternative energy utilization or environmental impact reduction; (2) technology and manufacturing machinery upgrades; (3) advanced engineering designs and research and development in efficiency improvement; and (4) the upgrading of standards to international level. The last sub-measure applies specifically to the agriculture industry.

In a bid to reward efforts to improve production efficiency, if a proposal to import new machinery is approved by the BOI, such machinery may be imported with duty exempted. In addition, half of any new investment value, research and development cost or any cost that is incurred for the specific purpose of enhancing the efficiency of the company's operations and standards (excluding the cost of land and working capital) may be deducted from corporate income tax for a period of 3 years, starting after the certificate of incentive has been issued.

Projects eligible for incentives under the Measures for Improvement of Production Efficiency must have already commenced business operations. Although it is not necessary for a project to have been granted any prior incentives in order to qualify, if the project has already been granted corporate income tax exemption, the exemption period must have already ended prior to applying for any incentives under the Measure for Improvement of Production Efficiency. With specific regard to investment, the value of any efficiency-related investment must be no less than one million baht, although the lower bar of 500,000 baht applies in the case of corporations registered as SMEs, provided they meet the qualifications of owning no more than 200 million baht in assets and having at least 51 percent domestic ownership. In all cases, cost calculations exclude the cost of land and working capital.

SPECIAL TOPIC





How companies can receive support

In order for a proposal to be considered for incentives under these measures, a proposal must be submitted, along with the relevant investment plans or R&D proposal, according to the nature of each individual efficiency improvement effort. To be more specific, the first sub-measure (energy conservation, alternative energy utilization or environmental impact mitigation) requires that the project's machinery be upgraded to achieve either a saving in the level of energy consumption through the utilization of modern technology or alternative energy, or a reduction in waste, water waste or exhaust air. In the case of an energy conservation upgrade, the amount of saving derived from the improved economy must be no less than the amount of exempted corporate income tax. For the use of alternative energy and environmental impact mitigation, the consideration will be made on a case-by-case basis.

Regarding the second sub-measure, the upgrading of machinery and technology will be granted with corporate income tax exemption equal to the full investment value – in lieu of the 50 percent maximum capped exemption rate that applies in other sub-measures – on the conditions that such investment is made for an automation system, either partially or fully integrated into the production process, and that at least 30 percent of its value adds to the automation industry in Thailand. In other cases, the basic incentives package applies.

The third sub-measure encourages R&D and the creation of advanced engineering designs that will be utilized for efficiency improvement. The amount of total sales generated by the company determines the value of the expenditure



that must be invested in either of the two mentioned areas in order for an activity to be eligible for incentives under this sub-measure. The minimum level of the activity's expense must be no less than 1 percent of total sales over the first three years, beginning from the date of the investment promotion application. In the case of SMEs, a lower limit of 0.5 percent of total sales applies.

As for the fourth sub-measure, it is specifically designed to encourage agricultural businesses to seek and obtain international accreditation, such as the Good Agriculture Practices (GAP), the Forest Stewardship Council (FSC), the Program for the Endorsement of Forest Certification Scheme (PEFCS), the Food Safety Management System (ISO 22000), the Sustainable Forest Management System (SFM, ISO 14061), or other certification of similar or equivalent standing. As with the other sub-measures, the process of obtaining accreditation must incur a cost and be completed within three years after the date of application.

As of March 2018, 311 projects with a combined worth of 358 million USD have been approved for incentives under the Measure to Promote the Improvement of Production Efficiency. We encourage investors to apply as soon as possible to take full advantage of these incentives. Applications will be accepted until 30 December 2020.

SMARTASEAN, SMARTFHAILAN SMARTCITY

In the final week of April, Singapore hosted the 32nd ASEAN Summit, the latest in an ongoing series of twiceyearly gatherings attended by leaders from all ten ASEAN Member States. Since the inception of the ASEAN Charter and the Blueprint for the ASEAN Economic Community, cooperation between ASEAN nations has become more focused on fostering mutual socioeconomic prosperity. To this end, the member states have jointly agreed upon a series of milestone in various areas of development, including cross intra-regional trading, transportation infrastructure, and information and communication technology, among other key areas.

However, the digital economy and industry 4.0 are two key areas which have undoubtedly garnered an increasing degree of attention from the ASEAN community in recent times. In earlier days, the first ASEAN ICT Masterplan served as the original playbook by which ASEAN nations cooperated in various related fields, such as internet infrastructure, digital security, and digital skills development. More recently, the exponential growth in the capabilities of life-enabling or personalization-oriented technology, especially sensors and big data analytics - collectively termed the Internet of Things (IoT) - has created the potential to enhance the quality of life of the general populace. The smart city is one of the most exciting concepts to have materialized from this particular area of technological development. It is also one of the main topics of discussion at the latest ASEAN Summit.

In one of the sessions, Singapore put forward the proposal of creating the ASEAN Smart City Network (ASCN). This would essentially establish the framework on how regional cooperation on smart city development in ASEAN should move forward. The proposal primarily revolves around the sharing of best practices and the twinning or partnering of cities in the ASEAN countries.

Most importantly, three cities from each member state have been chosen as the pilot cities for the ASCN project, with the exception of Singapore and Brunei Darussalam which will each have only one pilot city. For Thailand, Bangkok, Chonburi and Phuket are the three selected cities.

While Thailand is looking forward to connecting with its ASEAN neighbors, it already has a head start in this respect as it has been developing several smart cities on its own for some time now. Recently, Thailand's Committee on Smart City Development designated Bangkok, Chiang Mai, Phuket, Khon Kaen, Chonburi, Rayong, and Chachoengsao as the country's future smart cities.

There is currently no globally accepted consensus on what defines a

smart city as it generally encompasses many aspects of citizen livelihood, such as public transportation, education, e-government services, and data analytics for city services, among others. Nonetheless, Thailand Board of Investment (BOI) has been supporting the country's smart city initiatives and encourages participation from the private sector. Smart city area developers may be granted eight years of corporate income tax exemption on condition that they invest in city communication infrastructure and open data platforms or provide urban services in six key 'Smart' criteria of smart city development, namely Smart Mobility, People, Living, Economy, Governance, and Energy & Environment. Companies developing individual services under these 'Smart' criteria may also be granted a similar level of incentives as well.

As a rising number of major cities across every continent become increasingly urbanized, greater population density will place further constraints on city resources. In such an environment, it is inevitable that innovation in key areas will become an imperative factor in determining the quality of life for the urban citizens of the future. Thailand is committed to being a key player in developing the technology and driving the growth of tomorrow's smart cities in Thailand, across ASEAN and throughout the world.

CARGILL : A COMPANY THAT HELPS PEOPLE THRIVE

"Cargill is working to nourish the world in a safe, responsible and sustainable manner. We have been in business for more than 153 years and have a history of working with partners to navigate our complex food system from field to table. We specialize in moving food from where there is a surplus to where there is a deficit. That means we are investing all along the food supply chain, all over the world."

> Mr. Peter Van Deursen, Chief Executive Officer, Cargill Asia Pacific



Cargill's international presence

With bases of operation in 70 countries and over 155,000 employees, Cargill provides food, agricultural, financial and industrial products and services around the world. Deeply principled in working together with farmers, customers, governments and local communities, Cargill is dedicated to helping people thrive by sharing the insights it has gained in more than 153 years of operations.

Through its philosophy of "Helping the World Thrive", Cargill is fully committed to being a good global citizen, ensuring food security around the world, reducing environmental impacts and improving the livelihood of the communities in which the company operates. In order to achieve those goals, Cargill invests continuously in new products and more efficient means of conducting its business. The following are just a few examples of the steps taken to achieve these objectives:

- Investment in animal and aquatic feeds that can produce more protein in a cost-effective manner while lowering the environmental footprint
- Investments in new and healthier food ingredients, which include zero or lowcalorie sweeteners, healthier vegetable oils and plant-based meat alternatives
- Investment in logistical operations, such as fuel-efficient boats, cold-storage supply chains, food storage facilities and ports, so that the company's food and agricultural products can be moved with increased efficiency and safety
- Expansion of the company's capabilities to utilize agricultural products for industrial applications
- Development of new innovations and apps to work with farmer to help them be more efficient, reduce costs and increase food safety

While the company's presence is genuinely global, its key focus, however, is to supply nutritious, safe and sustainable food to the Asian market. Recognizing that the Asian continent is home to over half of the world's population but only around a quarter of the world's arable land, Cargill has established a key corporate strategy of developing supply chains to provide sufficient food and nutrition to meet the demands of the Asian market.

Cargill's presence in Thailand

Cargill's story in Thailand began in 1968 with the opening of a trading office in Bangkok. Since then, the company has expanded continuously into new areas of business, accumulating a total investment of 1 billion USD. Currently, the company operates at 14 locations in Thailand. Employing over 17,000 people, Cargill's Thai operations comprise the origination, sourcing, processing, handling, distribution and marketing of a wide range of products, including agricultural commodities, animal feed, cooked poultry, food, as well as food and beverage ingredients. In particular, Cargill is extremely proud of its cooked poultry business in Thailand, which is now operating from a state-of-the-art processing plants in Nakhon Ratchasima and Saraburi Province.

Food market in South-East Asia

Cargill identifies demographics and economic potential as the basic indicators for market growth. Southeast Asia offers considerable promise in both of these areas. Markets such as Vietnam and the Philippines, for example, have populations in the region of 100 million. Across the region, large groups of consumers offer

COMPANY INTERVIEW

huge demand for a variety of products offered by Cargill, both directly and indirectly. These large markets, Thailand included, offer Cargill some of our best strategic opportunities in the world.

Why Thailand?

As ASEAN's second-largest economy, the importance of the food and agriculture sector in Thailand cannot be overstated. Among Thailand's key strengths are the abundant natural resources from which 80 percent of all ingredients used in its thriving food industry are sourced locally.

Cargill values Thailand's welcoming investment policies which enable both domestic and foreign investors to act on their strategies. The Thai government provides a healthy environment that allows businesses to grow and thrive. On top of this, incentives granted by the Thailand Board of Investment are generous and helpful for our business expansion. The country's geographical location is also of strategic importance with its close proximity to major consumer markets such as Japan. The combination of these market and institutional factors has enabled Thailand to become the only net exporter of food in Asia, and allows for production at a highly competitive price in a global perspective. One of the country's most prominent success stories in this respect is poultry, with Thailand's cost level among the lowest in the world, enabling its poultry products to be shipped all over the world.

With half a century's experience of doing business in Thailand, Cargill knows exactly what Thailand has to offer companies looking to invest in or enter the Thai market. In addition to the factors already mentioned, Thailand remains an attractive market for Cargill due to the friendliness of the locals towards foreigners, Thailand's increasingly skilled and dependable workforce and the generous investment incentives on offer.

Cargill's growth strategy in Thailand

Cargill believes that, as the worldwide demand for more, better, healthier and sustainable food increases, Thailand will continue to play a key role in the global food supply chain. Given its natural resources, people, physical location and logistical capability, Thailand provides excellent opportunities for both a source and a production center for food and agricultural products. By utilizing its expertise in food and agriculture, Cargill's strategy is to re-invest in Thailand and expand its current portfolio. This includes investment in new facilities, technology and equipment upgrades and talent development, as well as a focus on improving food safety and quality standards across the entire value chain. The company is committed to providing food security to the world, while minimizing environmental impact by protecting natural resources and nourishing local communities.

Facebook pledges to increase investment in Thailand

Mr. John Wagner, Managing Director of Facebook Thailand, recently announced that it is the company's mission to support Thailand's digital transformation process by helping Thailand's businesses and its people to realize their full digital potential. In identifying the underlying drivers of digital transformation in Thailand, Facebook has identified SMEs, large corporations, and local communities as the three key groups. Given that local SMEs account for a large portion of Thailand's GDP, Facebook is particularly interested in helping this particular group of enterprises narrow the digital gap. In order to achieve its stated goals, Facebook will launch support programs, workshops, live and online training, and chat support for SMEs. Mr. Wagner also referred to the similar trend that currently prevails for larger corporations, many have yet to act on this realization or to formulate their digital strategy. On an individual level, statistics show that over 34 million Thais access Facebook every day, and over one million Facebook groups have been created in Thailand, including those endeavoring to create a positive social impact.

AirAsia will invest 150 million USD in the EEC

On 17 May 2018, AirAsia Group confirmed that it will invest in a maintenance, repair, and overhaul (MRO) facility at U-Tapao Airport, an aerodrome situated at the heart of the Eastern Economic Corridor (EEC). This decision came after Mr. Tony Fernandes, AirAsia Group's Chief Executive Officer, met with Thailand's Deputy Prime Minister, Somkid Jatusripitak, the previous day. This upcoming facility, which is valued at around 150 million USD, will become a maintenance center for AirAsia Group's entire aircraft fleet. AirAsia currently operates approximately 200 aircraft, although given the group's outstanding orders, this figure is set to grow to between 300 and 350 aircraft in the next five years. More importantly, the establishment of this facility will encourage further investment in other related businesses, such as aircraft parts and components, as well as additional supporting services.

BOI'S MISSIONS AND EVENTS



During the morning session of the "Korea-Thailand 60th Anniversary of Diplomatic Relations: Maekyung Thailand Forum", which was held on 17 May 2018 at the Siam Kempinski Hotel in Bangkok, Dr. Somkid Jatusripitak, Deputy Prime Minister, together with Dr. Kobsak Pootrakool, Minister Attached to the Prime Minister's Office, Dr. Pichet Durongkaveroj, Minister of Digital Economy and Society, and Dr. Uttama Savanayana, Minister of Industry, delivered keynote speeches in celebration of the 60th anniversary of diplomatic relations between Thailand and the Republic of Korea, the efforts taken by Thailand to facilitate business processes in the country, Thailand's national digitalization strategy, and industrial development strategy for Thailand 4.0, respectively. Later that day, Ms. Duangjai Asawachintachit, the Secretary General of the Thailand Board of Investment, also joined a panel discussion on the topic of "ASEAN connectivity & Thailand 4.0", during which Ms. Duangiai highlighted the opportunity of using Thailand as a base from which to expand into other ASEAN markets and beyond.



During 1 - 4 May 2018, Dr. Kobsak Pootrakool, Minister Attached to the Prime Minister's Office, and Ms. Duangjai

Asawachintachit, the Secretary General of the Thailand Board of Investment, led an outward investment promotion mission to the People's Republic of Bangladesh. In addition to foreign affairs, international trade, and investment-related Thai government agencies, the delegation also comprised representatives of Thai businesses from various industries. including energy, real estate, agricultural machinery, and auto parts. In serving the mission's purpose, the delegation met with investment promotion agencies in Bangladesh, including the Bangladesh Economic Zones Authority (BEZA) and Bangladesh Investment Development Authority (BIDA). The trip also included a visit to the Special Economic Zone area and meetings with members of the Bangladeshi business community.



On 16 May 2018 at the Sukosol Bangkok Hotel, Dr. Kobsak Pootrakool, Minister Attached to the Prime Minister's Office, hosted a welcome reception for His Excellency Mr. Paik Un-gyu, Minister of Trade, Industry and Energy of the Republic of Korea. Joined by more than 180 Korean investors, the two ministers presided over the signing of a memorandum of understanding between the Thailand Board of Investment, the Ministry of Industry, and the Korea Biotechnology Industry Organization (KoreaBio) on cooperation in the biotechnology sector. The proposed collaboration is slated to include investment promotion activities, conferences, and business networking sessions.



On 16 May 2018 at the Bangkok International Trade & Exhibition Centre (BITEC), Mr. Chokedee Kaewsang, Deputy Secretary General of the Thailand Board of Investment, presided over the opening of SUBCON THAILAND 2018. Dubbed as ASEAN's largest industrial subcontracting and business matching event, this year's SUBCON THAILAND ran from 16 to 18 May and marked the twelfth consecutive year that the annual event has taken place. Jointly organized by the Thailand Board of Investment's Industrial Linkage Development Division (BUILD) and UBM Asia (Thailand) Co., Ltd., SUBCON THAILAND 2018 was attended by 408 exhibitors and 23,922 visitors, generating 6,419 business matches with a combined value of transactions totalling over 302 million USD.



On 7 May 2018, Dr. Bonggot Anuroj, Deputy Secretary General of the Thailand Board of Investment, delivered a keynote address titled "Measures to Promote the Improvement of Production Efficiency" at the Thai-German Technology Conference on Energy Efficiency in Industry at the Crowne Plaza Bangkok Lumpini Park in Bangkok. During her speech, Dr. Bonggot highlighted the measures implemented by the BOI to improve production efficiency. The measures have been designed to encourage technology upgrades, energy conservation, the development of alternative energy sources, and the reduction of environmental impacts.

	Key Economic	c Figures	ì							
	GDP (2017) \$455.4 Bil			Unemployment Inve 2017						
	GDP per 0 \$6,729	Capita (2017))	1.2%			2.8%			
	GDP Growth			Headline Inflation Exr			port Value Growth			
	2016 3.3%	2017 3.9%		2017 0.7%			2017			
	Market Profile			International Competitiveness						
	Population II	Minimum Wage THB 308 - 330 \$ Approximate \$9.7 - 10.4		WEF Global Competitiveness IndexWorld Bank Ease of Doing Busin2016 : 34th 2017 : 32nd2017 : 46th 2018 : 26th				<u>g Business</u>	<u>)</u>	
	Source: United Nations and Mini	istry of Labor	Time to	Time to set up business : 5 days Source: WEF and World I					< •	
	Export Figures Top 10 Export Markets									
	(January - April 2018)			Rank	Value (USD Millio	on) Yo	Y Growth	Share		
				China	9,734		5.0%	11.9%		
	Export value (USD million)			US	8,690		9.3%	10.6%		
	Export value (USD million) January – April 2017 : 73,320.7			Japan	8,201		21.5%	10.0%		
	January – April 2017 : 73,320.7 January – April 2018 : 81,775.1			Hong Kong			3.7%	4.9%		
	Year-on-year Growth : 11.50%			Vietnam	3,833		16.9%	4.7%		
				Malaysia	3,656		14.1% 4.5%			
				Australia	3,576		14.7%	4.4%		
				Indonesia	3,253		16.2%	4.0%		
				Singapore	2,798		-0.3%	3.4%		
	Top 10 Exports			India	: 2,581	•	30.4%	3.2%	1	
	Goods / Products	Value (USD million)	YoY Growth	Share	Goods / Pro	ducts	Value (USD million)	YoY Growth	Share	
1: N	Notor cars and parts	9,208	13.5%	11.3%	占 6: Chemical produ	ucts	2,891	23.7%	3.5%	
🖵 2: C	Computers and parts	6,453	19.9%	7.9%	7: Electronic integrated circuits		2,683	6.6%	3.3%	
	Precious stones and jewellery	4,183	-6.2%	5.1%	8: Refined fuels		2,651	39.2%	3.2%	
℃ 4: R	Rubber products	3,474	8.4%	4.3%	♣ 9: Machinery and		2,552	12.2%	3.1%	
0 5: P	Plastic beads	3,308	22.5%	4.0%	* 10: Air conditioners	s and parts	2,097	10.6%	2.6%	
	Source: Ministry of Commerce									
	Exchange Rates						Tax Rate			
	(Data as of 4 May 2018)						Corporate Income Tax: 0 - 20%			
	S THB 31.82 S THB 43.45 E THB 38.29 THB 29.40 THB 5.05					Personal Income Tax: 5 – 35% VAT: 7% Witholding Tax: 1 – 10%				
	Source: Bank of Thailand Note: JPY currency is for 100 Ye	en					-	venue Departme	nt	

Thailand Investment Review 🚹



ABOUT BOI

The Office of the Board of Investment (BOI) is the principle government agency that operates under the Prime Minister's Office for the purpose of encouraging investment in Thailand. We at the BOI serve as the professional contact points for investors, providing them with useful investment information and services. We offer business support and investment incentive to foreign investors in Thailand, including tax and non-tax incentives. A few non-tax incentives include granting land ownership to foreigners and facilitating visas and work permits. Besides serving the needs of overseas investors, we also offer consultation services to Thai investors who are interested in investment opportunities abroad.

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