



120<sup>th</sup> Anniversary of Japan – Thailand Diplomatic Relations

# **JAYSES**

Japan-Asia Young Scientist and Engineer Study Visit JFY 2007

Final Report









December 2007

**Tokyo Institute of Technology** 

#### ACKNOWLEDGEMENT

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Special thanks to **Tokyo Tech Alumni Association** for supporting students' trip expense.

Also deepest appreciation to all the cooperating organization, companies and universities, namely (in order of visit) Japan Thailand Economic Cooperation Society, Research Center for Communication and Information Technology, King Mongkut's Institute of Technology Ladkrabang, Capital Rice Co., Ltd., TOYOTA Motors Asia Pacific Engineering & Manufacturing Co., Ltd., Siam DENSO Manufacturing Co., Ltd., Amata Corporation PCL, Office of the Board of Investment, PTT Public Co., Ltd., Mass Rapid Transit Authority of Thailand, Bangkok Metro Public Co., Ltd., JICA Project for AUN/SEED-Net, Chulalongkorn University, the Laem Phak Bia Environment Study, Research and Development Project under the Royal Initiatives, Thai Kuramaekai, Thailand Advanced Institute of Science and Technology, Thailand Science Park, National Science and Technology Development Agency, Embassy of Japan to Thailand, Chaipattana Foundation, Sirindhorn International Institute of Technology, Kasetsart University, Japan Bank for International Cooperation Representative Office in Bangkok, Channel 3, BEC-TERO Entertainment PCL.

Last but not least, JAYSES members would like to express sincere appreciation to the **Ministry of Foreign Affairs of Japan** for recognizing this program as an official event to celebrate the 120<sup>th</sup> anniversary of Japan-Thailand diplomatic relations.

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List of Abbreviations AUN/SEED-Net	ASEAN University Network/Southeast Eng	nineering		
	Education Development Network			
BMCL	Bangkok Metro Company Limited			
BOI	Board of Investment			
BTS	Bangkok (Mass) Transit System			
CU	Chulalongkorn University			
JAYSES	Japan – Asia Young Scientist and Engineer Study Visit			
JBIC	Japan Bank of International Cooperation			
JICA	Japan International Cooperation Agency			
JTECS	Japan – Thailand Economic Cooperation Society			
KMITL	King Mongkut's Institute of Technology Ladkrabang			
KU	Kasetsart University			
LERD	Laem Pak Bia Environmental Study, Research and			
	Development Project under the Royal Initia	tives		
MRT	Mass Rapid Transit			
MRTA	Mass Rapid Transit Authority of Thailand			
NSTDA	National Science and Technology Development Agency			
ODA	Official Development Assistance Petroleum Authority of Thailand			
PTT				
ReCCIT	Research Center for Communication and Information			
	Technology			
SDM	Siam DENSO Manufacturing Sirindhorn International Institute of Technology			
SIIT				
	(Thammasat University)			
TAIST	Thailand Advanced Institute of Science and Technology TOYOTA Motors Asia Pacific- Engineering and			
TMAP-EM				
	Manufacturing			
TNI	Tai-Nichi Institute of Technology			
TSP	Thailand Science Park			

## 1. Program Information

## a. Background

Thailand and Japan are in very important relation in political, economic and cultural aspects, and have long history of Official Development Assistance and industrial investment. In the year 2007, which is the 120th anniversary of Thailand—Japan diplomatic relations, there will be series of celebration events in both countries. And this program is one of the registered programs approved by the Ministry of Foreign Affairs of Japan.

As for Tokyo Tech (Tokyo Institute of Technology), Thailand is one of the most familiar and important country as the first branch office abroad (Tokyo Tech Office Thailand) was established here followed by the Philippines and China, and the first Joint Graduate Institute TAIST (Thailand Advanced Institute of Science and Technology) will be launched in June 2007 by the cooperation with NSTDA and Thai universities.

It is likely that the graduates from top ranking universities, such us Tokyo Tech, Chulalongkorn Univ., KMITL, SIIT etc, will take important roles of education, R&D or management in any field of academic, industrial, government or international organizations. That is why starting exchange and close relation in their youth would be benefit not only for themselves but also for the universities or even for the countries they belong, and would be effective investment which may make return in the future.

#### b. Theme

Understanding the effect to Thai industries and society by Japanese technology and method.

## c. Objectives

Under above-mentioned background, Tokyo Tech students will visit various institutions such as Japanese and Thai industries, government organizations, universities in Thailand and study the influence of Japan to Thai society and industries through industrial investment and Official Development Assistance (ODA). At the same time they will learn how the technology has been applied to the practical case in specific situation in another country through hearing from concerned people with those activities, discussion with students in Thailand and neighboring countries. The students can investigate Thai society with various points of view through different type of organization with their different missions. Furthermore, the students from Japan, Thailand and neighboring countries will use English as the common tool for collaboration in order to implement the activities under this program. It is expected that even English, as defacto standard language in business world, is a foreign language for those students, the clear vision to implement the program may give them the breakthrough for mastering English as practical tool.

#### d. Activities (to realize the objectives)

i. Visit Japanese industries in Thailand To study applied technology and localization.

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#### ii. Visit Thai universities

#### iii. Visit JICA Projects

To learn how the technology transfer has been done through bilateral and multilateral cooperation.

#### iv. Visit Thai local industries

To study comparatively with Japanese industries in Thailand.

#### v. Group discussion

To exchange opinion and share idea among students in different background in groups according to their interests. For example "Advantage and disadvantage of Japanese ODA", "What is the best appropriate technology for Thailand?" or "Effectiveness and challenge of multilateral cooperation"

#### vi. Presentation

Each group would make presentation to appeal their suggestion and recommendation to the guests from Thai universities, government or industries.

## vii. Reporting

After the visit to Thailand, they should make post-discussion proceedings.

## e. Expected impacts

- More Japanese students to study abroad
- More Thai students to study in Japan
- Establishment of intimate and international students' network among topranking universities in the region
- Benefit not only for the students but also for participating universities

## 2. Proceedings

Overall schedule (2007) is as follows;

May-Jun. Announcement in campus

Jun. Interview / screening of participants

Jul. Internal meeting

Mid Jul. Preliminary survey by Int'l Coordinator

Jul. - Aug. Preparatory studies
26 Aug.-3 Sep. Study Visit to Thailand
Oct Final presentation session
Dec. Final Report publication

#### a. Participation process

#### i. Announcement for Tokyo Tech students

The call for application started in May 2007 by website, poster, flier and mailing lists.

#### ii. Application

Applicants should have submitted their application with an essay titled ""My expectation for JAYSES program" within 250 words in English by 4<sup>th</sup> June 2007. Number of application was 28.

Statistic of application (by nationality and sex)

	Female	Male		Total
Japan	6		15	21
Indonesia	3			3
Korea	1		1	2
Iran	1			1
China			1	1
Total	11		17	28

Statistic of application (by grade, school and sex)

Year of study	Grade	Female	Male	Total
Undergraduate	В3		3	3
	B4	4	5	9
Subtotal for UG		4	8	12
Graduate	M1	4	3	7
	M2	2	6	8
	R	1		1
Subtotal for G		7	9	16
Total		11	17	28

#### iii. Interview

JAYSES Working Committee held interview with applicants in June. The applicants were divided into several groups of 3-6 persons and they were asked to have discussion in 30 minutes and to make presentation of the resolution. The given topic was "What will happen, what should we do, when the age without petroleum oil or natural gas comes?"

## iv. Screening result

All applications were screened by criteria of English ability, leadership, cooperative attitude, logic, calmness based on the submitted essay and marking by Tokyo Tech staff during discussion.

As a result, 12 applicants were selected as supported applicants. (with scholarship by Alumni Association)

There were some applicants who were willing to join the program even without scholarship. Therefore, working committee selected 3 more applicants as participants without scholarship by same criteria as supported participants. The list of Tokyo Tech participants is attached as annex a.

#### v. Participants from Thai universities

Participants from Thai universities were selected or nominated by each participating Thai university. As the study visit period was in middle of semester in Thailand, not all participants from Thai universities could fully join the whole activities. Therefore, working committee set the minimum requirement for those who can attend the student forum and one more technical visit to any of the organizations. The official participants were

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awarded the certificate signed by the Executive Vice President of Tokyo Tech.

The list of participants from Thai universities is attached as annex b.

## vi. Students forum registration

As there were a lot of demands from Thai students to join the student forum, JAYSES made the forum opened to any Thai student who registered through website or who are nominated by the staff of Thai universities. The number of pre-registration for the student forum at Chulalongkorn was 61.

b. Preparatory activities

b. Preparatory activities						
Schedule	Time	Theme	Lecturer/student in charge			
08 August 2007	9:00- 11:00	General Information about Thailand	Mr.Shimura			
(Wed)		Basic Thai language	Assoc.Prof. Thirapong			
09 August 2007	10:00- 11:00	Thailand-Japan economic cooperation				
(Thu)		Thai-Nichi Institute of Technology (TNI)	Mr.Hiroshi Wada, General Manager			
10 August 2007	9:30- 11:30	Toyota Motor Asia Pacific Engineering and Manufacturing Co., Ltd. (TMAP-EM)	Mabuchi			
(Fri)		Thai DENSO Group	Morishima			
16 August 2007	9:30- 12:00	Bangkok Metro Public Company Limited (BMCL)	Yamamura			
(Thu)		Mass Rapid Transit Authority of Thailand (MRTA)				
		Chulalongkorn University (CU)	Shono			
		Capital Rice Co., Ltd.	Sasamoto			
17 August 2007	9:00- 11:00	Royal Projects	Ashikawa			
(Fri)		Petroleum Authority of Thailand (PTT)	Wang			
	11:00- 12:00	Introduction of Thailand, Culture and History	delivered by Tourism Authority of Thailand			
23 August 2007 (Thu)	9:00- 12:00	King Mongkut's Institute of Technology Ladkrabang (KMITL)	Sato			
		Japan Bank for International Cooperation (JBIC)	Ishii			
		Thailand Board of Investment (BOI)	Tsunoi			
24 August 2007	9:00- 12:00	Amata Nakorn Industrial Estate	Minamino			
(Fri)		Ota Techno Park				
		Japan International Cooperation Agency (JICA)	Kammei			
		120th Anniversary of Japan-Thailand				
		Diplomatic Relations				
		JICA Projects (AUN/SEED-Net, ReCCIT)	Shitara/Akino			

## c. Schedule in Thailand

Date	Start	End	Event
26-Aug			Arrive in Bangkok
27-Aug	9:30	10:30	JICA Project ReCCIT
	10:30	12:00	Student Forum at KMITL
	14:30	16:30	Capital Rice
28-Aug	10:00	11:00	TOYOTA Motors Asia Pacific-Engineering & Manufacturing
	13:00	15:00	Siam DENSO Manufacturing
	16:00	18:00	Amata Industrial Estate/Ota Techno Park
29-Aug	9:00	10:30	Board of Investment
	10:30	11:00	Channel 3 interview
	13:00	15:00	PTT Research and Technology Center
30-Aug	9:00	11:30	Bangkok Metro Co. Ltd. / Mass Rapid Transportation Authority
30-Aug	9.00	11.50	of Thailand
	13:30	14:30	JICA Project for AUN/SEED-Net
	14:30	17:00	Student Forum at Chulalongkorn University
31-Aug	9:00	13:00	Damnungsaduak canal
	14:00   16:30		Laem Pak Bia Environmental Research and Development
			Royal Project
			stay at Hua Hin cottage
1-Sep	daytime		Preparation for presentation
	afternoon		go back to Bangkok
2-Sep	18:00	21:00	Kuramae Thailand (Tokyo Tech Alumni) General Assembly
3-Sep	10:00	12:00	TAIST Grand Opening Ceremony at NSTDA
	13:30   15:00		Presentation Forum at Thailand Science Park Convention
			Center (TSP-CC)
	15:00	16:00	(Observation of Thailand Science Park or city tour)
	Night		Leave Bangkok for Tokyo

## d. Follow-up activities

10 Oct. '07	Final Presentation Session/ Closing Ceremony
2 Nov. '07	Presentation at Thai-Japanese Students Academic
	Exchange Meeting 2007 at Osaka University
	(by Assoc. Prof. Thirapong and Mr.Shimura)
Dec. '07	Publication of the final report

#### 3. Outcome

## a. Technical visit reports

## i. Research Center for Communication and Information Technology (ReCCIT)

Reporter: Ms.Akino M. Tahir

**Date & time**: August 27, 2007, Time : 09:30-11:00,

**Program / Reporter's Comments:** 

We came to ReCCIT in the morning and welcomed by the coordinator. ReCCIT is a research institute under KMITL in the fields of communications and information technology. ReCCIT was initiated in 1997 as JICA project, which finished on September 2002. Previously, JICA supports for the project were in form of short-term expert visit, research grants and financial support from various sources. The explanation we received on our visit was about the project state now, after JICA finished its support. Like when under JICA project, the research institute is consisted of 4 main departments. Up to 30 doctoral degree students and some 120 master degree students have graduated after doing research in this research institute. We also had tour to several laboratories and met several researchers.

From the visit, I think ReCCIT has been able to be independent and able to manage the institution very well after support from JICA ended. It is very important to have such a research institute, because I think it contributes to the development of higher education in Thailand, which is needed to produce high quality graduates to work for the development of the country, especially in communication and information technology.

## ii. King Mongkut's Institute of Technology Ladkrabang (KMITL)

Reporter: Mr.Kodai Sato

**Date & time**: 09:30-12:30, 27th August 2007

Program:

Overview by Director of ReCCIT
Technical tour to ReCCIT laboratories
Student forum at KMITL
Discussion in four groups
Lunch with participants
Video about Tokyo Tech
Presentation by four groups

#### **Reporter's Comments:**

Tokyo Tech students had decided four discussion topics formerly in Japan. The first one was strength and potentials of Science and Technology development in Thailand. The second was contribution and influence of education, science and technology from Japan to Thailand. The third was roles of Japanese private sector investment and Government ODA to Thailand, and the fourth was culture of craftsmanship and career paths of blue-collars in Thailand and Japan. Participants were divided into four groups according to their interests. The fourth group started from confirming discussion topic and then exchanged ideas. After discussion each group presented what they talked to other groups. Group four focused on topics such as environment of factory workers and work ethics in Thailand.

Discussion in KMITL would be the basis for final forum following visit to various institutions and another student forum.

## iii. Capital Rice Co. Ltd.

Reporter: Mr. Shinji Sasamoto

**Date & time**: 14:30-16:30, 27 August 2007

Program:

Observation of the factory

The company staffs showed us in the factory. Rice polishing processes were almost automated. Some of the machines were made in Japan. Whereas packing and loading processes were run by labor. In packing process, I could see many workers who came from other countries such as Myanmar. Thai workers wear yellow shirts and foreign workers wear green shirts, so I could easily distinguish between them.

The labor efficiency was seemed to be low. Maybe the labor costs are so low that the company doesn't have to be nervous about it. Generally, it seemed that workers took it easy.

Quality check system was seemed to be strict.

#### Q&A

Q: Needless to say, CAPITAL RICE is one of the country-leading exporters. What kind of cooperation do you do with the Thai government?

A. We have the joint ownership of the production and sale strategies

Q. CAPITAL RICE is an affiliate of the STC group. As an affiliate, what kind of advantages do you have?

A: We can cooperate with other group companies in development of the new product.

Q: Recently, other countries such as Vietnam are increasing its exportation of rice. What kind of strategy do you intend to take in future, to win in the export market of rice?

A: Our strength lies in efficiency and promptness of services and effectiveness of transportation facilities whereby customers worldwide are assured of complete reliability. And, now rice demand in China is growing. So, we will maintain present strength.

Q: What kind of person does CAPITAL RICE want to employ?

A: We want a person who has fresh ideas.

## **Reporter's Comments:**

The company makes much of high quality and production efficiency. That is why Capital Rice is the biggest rice exporter in Thailand. The staffs were proud of that.

I didn't feel that the company is facing a hard competition, and doesn't have to worry about it as far as demand in China increases.

I really felt that Rice-exporting is one of the fields that Thailand can make use of its strength.

## iv. TOYOTA Motors Asia Pacific-Engineering & Manufacturing (TMAP-

<u>EM)</u>

Reporter: Ms. Yumi Mabuchi

**Date & time**: 10:00-11:30, 28 August 2007 (Tuesday)

Program:

Video about "Outline of TMAP-EM".

Presentation by Mr. Kazuya Fukuhara (Vice President)

#### Q & A

Q: What kinds of cars are needed in Thailand (in Asia)? Design and function...?

A: "Pick up truck" is the most popular type of TOYOTA car in Asia including Thailand. Because parking in Thailand is extremely crowded, people often move their car by pushing its bonnet; therefore TOYOTA designed their car's bonnet stronger in this country.

Q: Regarding Taxation (Is there any tax benefit from the government for local industry in Thailand?)

A: TOYOTA accepted special treatment from BOI.

Q: What is the detail of your employee's origin university?

A: TOYOTA's employee's origin universities by number of employee order, from the most populous one, are CU, KU, KM University of Technology Thonburi, KMITL, KMIT North Bangkok, Chiangmai U., Thammasat U., and SIIT.

Q: Can you tell me a little bit about your company's working culture and language used inside the company?

A: The company culture is Japanese. The common language in TMAP-EM is English.

Q: Within Thai people's community, how is TOYOTA's brand image?

A: With 40% market share in Thailand, means TOYOTA is very popular in Thailand. In the future, TOYOTA wants to reach young people market more and more.

Q: Why did TOYOTA choose this area for research center of Asia pacificwhy not more convenient place like industrial area?

A: Considering its easy accessibility, the technical center is placed between two industrial areas, Samutprakan and Chonburi, which has TOYOTA's affiliated companies.

#### **Reporter's Comments:**

Thailand's role is not merely production. Nowadays, Thailand also creates their original product for the world. TMAP-EM is one of the good examples of that. It creates original design which suits Asia pacific area. I found that TOYOTA –Thailand starts to play an active part as organization which can cover the whole line from design, production, until marketing of product.

#### v. Siam DENSO Manufacturing

Reporter: Mr. Daiki Morishima

**Date & time**: 13:00-15:00, 28th August 2007

Program:

Presentation about "DENSO in the world".

Presentation about "Siam DENSO Manufacturing"

Observation of facility

First, DENSO staff explained about DENSO group activity in the world and we confirmed that DENSO is one of the global companies. Then next staff explained about Thai DENSO activity and we understood their whole activity and works on Thailand. Finally they answered question which we had made before we came to Thailand.

After the meeting, we looked the inside of Siam DENSO factory. The inside has very large area. There were many lined machinery and Thai workers who were making products steadily. There was induction facility for new workers as well.

We found many notices which were made by Thai workers with power point and Thai workers talking harmoniously in a break.

#### 0&A:

Q: What role is DENSO in Thailand playing in the world?

A: Our role is to supply products to customers in Thailand and areas around Thailand.

Q: How much is the rate of employment passing of newcomer?

A: 30% from graduates of high school

#### **Reporter's Comments:**

Utilizing Thai low cost of workers, Siam DENSO employs more workers and keeps level of mechanization lower than DENSO in Japan. As a result, they obtain two advantages. One is improvement of detection accuracy of defective product by many Thai workers. The other is simple production line which can be altered easily because of low level of mechanization. Once all production lines are mechanized completely like production line in Japan, it is difficult to alter, In Thailand; they can alter the line quickly as soon as they find problems in the line.

Thai workers are as dexterous as Japanese and have quite excellent sense such as eyesight. They can judge subtle differences of product's shape without machine, so once they understand the culture of Japanese company's culture, they become quite excellent workers.

Only 4 years have passed since Siam DENSO was established, the factory is under the management of Japanese. DENSO aim to establish independent management by Thai workers in Thailand in order to keep on winning in global competition. I'm sure that Thai workers will manage the factory by their own power in the future.

## vi. Amata Corporation / Ota Techno Park

Reporter: Mr. Yuki Minamino

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Date & time: 16:00-17:00, 28 August 2007

Program:

Observation of Ota Techno Park

Presentation& Video by Dr.Chakkrit Pumpaisanchai about "What is Amata corporation?"

## Q & A

Q: Is there any Thai employee in OTP to make transfer the Japanese know-how to Thailand?

A: There are one or two Japanese. Others are Thai staff.

Transfer is active.

Q. How many years Amata corp. needs to get back their capital? A. 1989-1992

Q. Which type of industrial zone Amata is, GIZ (General Industrial Zone), EPZ (Export Processing Zone) or DFZ (Duty Free Zone) ?
A. GIZ (Domestic) and DFZ (export).

Q. How many SMEs from Ota-ku open their branches in OTP?

A. 4 to 5 in OTP. About 20 in Thailand.

#### **Reporter's Comments:**

Amata corp. wants to be not only normal manufacturing estate. They want to construct the city which has residence that pays attention to environmental problem.

So that, companies that want to contract with Amata estates have to take strict screening process.

They have already got in the investment of the first step. But it is important to circulate money in this kind of project, so that capital will be invested for expansion of the area.

## vii. Board of Investment (BOI)

Reporter: Mr. Hiroya Tsunoi

**Date & time**: 9:00-10:45, 29 August 2007 (Wednesday)

Program:

Presentation by Ms. Chitra Kulvanich, Senior Investment Promotion Officer "What kind of role is the BOI in Thailand?"

Presentation by Ms. Chitra Kulvanich, Senior Investment Promotion Officer Video about "A summary of BOI".

#### Q&A

Q: Even if Japanese individuals launch some businesses in Thailand, can they receive preferential treatment of tax? (ex: The rubdown)

A: There are some types of industries given priority; however, they can basically get it.

Following these:

- Agriculture and agricultural products
- Mining, ceramics and basic metals

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- Light industry
- Metal products, machinery and transport equipment
- Electronics and electrical appliances
- Chemicals, paper and plastics
- Services and public utilities

Therefore, in the rubdown, you cannot receive preferential treatment of tax.

Q: Industrial promotion policy in NIEs (Newly Industrial Economies) is domestic promotion rather than overseas promotion because a real income of country is not low wages labor but revenues from their owned companies. For example in Taiwan, the targeted promotion is not an impressive number like BOI of having annually 1,000 invested projects but just a small number, like biotechnology industry promotion of Taiwan is aimed to build 1-2 public companies listed in stock-market in 3-5 years not in one year like BOI. Therefore, BOI as being affiliated to Ministry of Industry recently, I believe that BOI may have alternated its industrial incentives more towards domestic entrepreneurship/companies. If so, could you please tell us more about domestic-oriented industrial policy?

A: In Ministry of Industry, there is a department of industrial promotion and Ministry of Commerce to tackle this issue.

Q: I think that BOI's privileges given to overseas investors are "tax exemption" and "deregulation" but by the effect of WTO (World Trade Organization) / GATT (General Agreement on Tariffs and Trade) and bilateral trade agreement tied under FTA (Free Trade Agreement), Thailand has to reduce tariff on import of raw materials, equipment and itemized commodities as well as deregulating non-tariff barriers. Under this new situation of international liberalization, I think that BOI have already realized that "tax exemption" and "deregulation" are not the BOI's sword or authority anymore in the future, so do BOI revise the policy on attracting foreign investors?

A: We are paying effort to marketing because every country in ASEAN having organization alike the BOI to attract FDI (Foreign Direct Investment).

Q: We think that there are many Japanese companies in Thailand. What kind of Japanese corporations are there in Thailand?

A: which business specifically can not be asserted; however we think that there are many companies about the automobile manufacturer. In any case, there are a lot of companies in Thailand.

Q: Thailand industries are increasingly going to grow more and more. Therefore, what kind of business do you need to improve your industry or skills?

A: The automobile industry is important an industry for the growth of Thailand. On the other hand, we should be independent for our economics by ourselves in the future. Specifically, we think that we should put an effort into the field of the agriculture and bio.

Q: A lot of companies are a center the city such as Bangkok. Most companies

do not advance to the countryside. How do you have a solution to develop a countryside economy?

A: As for now, we do not specially have a plan to develop the country side. However, we think that if the development of the urban area moves ahead sufficiently, the district also develops.

Q: The economy in Thai has grown until the present. Which company affected your economy most until now?

A: We do not have information about it; however, we think that the automobile industry has a considerable influence on Thai.

#### Reporter's Comments

BOI is declaring following incentive condition of investment.

- It improves the technical power of the industry in Thailand.
- It contributes to the economic development in the district except the metropolitan area.
- The basic foot of mountain industry.
- It acquires foreign currency.
- It contributes to the development of the infrastructure and saves natural resources.
- It contributes to decrease an environmental problem.

And thus BOI is giving a privilege and protection of financial and non-financial with wide area against the investment project which agrees with the development of the national economy. In addition, BOI will step up some businesses which are the agriculture and the agricultural products processing industry, the technical development and in the development in the manpower and the environmental protection and the measure. As for the business of these, BOI are going to give an exceptional privilege and protection.

## viii. PTT Research and Technology Institute

Reporter: Mr. Xu Wang

**Date & time:** 14:30-16:30, 29 August 2007 (Wed)

Program:

Presentation by vice president of PTT about "History, nowadays, future view of the company".

I can truly felt PTT's flavor of super big company after preparatory studies, especially after listened the presentation of PTT from the wisdom vice president I was deeply astonished by PTT's remarkable achievements throughout the years. I even dreamed to be a member of it.

To be the pre eminent Thai energy corporation, operating a fully integrated oil and gas business, which encompasses gas-based petrochemicals and total energy services, confident of being a regional leader and a high performance organization with accountability, integrity, and optimum stakeholder returns, within a value-driven corporate culture.

#### Q & A

Q: Facing the risk of resources-decreasing, what is the long term strategy of PTT?

A: As the national leading gas/oil supplier, PTT's roles are not only secure petroleum resource by exploration & concession of gas/oil but also diversify energy consumption by introduction of new/alternative energy like bio-diesel and gasohol or even introduction of using NGV in vehicles. Here I wanted to refer that Bio-diesel can be produced from 100% crude palm oil or purified from used cooking vegetable oil.

Q: Can you show us some concrete case about PTT settling now. A: By the authority of PTT, alcohol successfully replaced octane by 3% at the first stage, now 10% mixing rate, 20% in the next year and SSV (any rate) is sold in Thailand. (No 97% diesel + 3% octane sold in Thailand anymore)

Q: How PTT shall take responsibility in environment and social development?

A: PTT pays responsibility in environment by initiating CDM (Clean Development Mechanism) which Ministry of Energy has declared to reduce 7% CO<sub>2</sub> to gain carbon credit under Kyoto Protocol.

Q: As you had studied in Japan for several times, can you comparing the difference between Thailand and Japan from the aspect of energy consuming?

A: The rate of gasoline and diesel engine for vehicles are quite different. Compared with Japan, there are much more diesel engines for vehicles in Thailand. Gasohol is simple mixture of alcohol with gasoline. They proved by experiments that 10 % gasohol doesn't give any damage to normal gasoline engines.

## **Reporter's Comments:**

PTT is a super big company with high vision and bright future.

PTT completely establishes a full cycle of petro-industry from resource exploration, distributed pipeline & logistics, refinery, storage, distribution network, marketing and R&D. However, R&D fund (16 million US/year) for PTT is still low in compare with income of PTT which is now enjoying a growth of energy sector shared by 5% of GDP.

It shall take responsibility and be a part of community in environment and social development.

# ix. Mass Rapid Transit Authority of Thailand (MRTA)/ Bangkok Metro Company Limited (BMCL)

Reporter: Mr. Masahiro Yamamura

**Date & time**: 9:00-11:30, August 2007 (Thursday)

Program:

Presentation by Mr.Prapat Chongsanguan, Governor of MRTA, about "Mass Transit systems in service".

Service area of Bangkok metro is expanding now. In the near future, people can go to the airport by train. Excluding mechanical, electrical and train system, 96% of civil and construction cost is allocated by JBIC's loan. MRTA put a high value on service than making a profit. If you think only

making a profit, undertaking this project (=Creating Metro service) must be impossible.

Observation of Operation Control Centre (at BMCL)

More than 99% of trains are on time and not delayed for more than 5 minutes.

#### 0 & A

Q: Will Sky train and MRT be integrated in the future?

A: There is a master plan for that, but I do not know much about that because it will be the event in several decades later.

Q: I found there is a great deal of deficit in MRTA. What do you think about it?

A: We have a deficit in short term, ant try to compensate it in the long term. Thai Government helps MRTA financially. Metro is the profit in the country, not in the company, so I think the deficit is not a problem.

Q: What are the roles of JICA, JBIC and Japanese companies?

A: The role of JICA is technical support, and we expect JBIC to help us in financial aspect. As for Japanese companies, Kajima is mainly responsible for construction, and Mitsui Bussan is managing whole process.

Q: Why did MRTA adopt elevated system in outskirt of Bangkok?

A: Because it was cost effective. Also, there is a lot of flood in Thailand, so this system can be a good measure for easing the damage caused by flood.

Q: Do you want to make original Thai Metro system?

A: Yes. Currently, MRTA purchases trains from Siemens, but MRTA needs technological transfer in system side and try to create its own system.

Q: Are BMCL taking any measures for safety?

A: Train users, people in charge of operating control centre and guard man are responsible for that.

## **Reporter's Comments:**

To make Metro construction successful, one has to put up with short term deficit. JBIC is greatly contributing to the construction and extension of Metro service financially. Without that, it would be impossible to create such a huge system. Next step should be to make Thai original system, and JICA can and must help this step.

## x. Chulalongkorn University

Reporter: Ms. Yoko Shono

**Date & time**: 13:30-17:00, 30 August 2007

Program:

Showing the DVD of HRH Princess Sirindhorn's visit to Tokyo Tech

Introduction of Tokyo Tech Orientation of JAYSES Group Discussion by topics After having lunch at the cafeteria, students got together in the convention room. Dr. Thirapong made some comparisons with Tokyo Tech and Chulalongkorn University as an introduction of both universities.. To have a discussion, students from Thailand and Japan divided into 4-5 groups based on each topic. About 30 minutes was given to prepare for the presentation.

#### Q & A

Q: What do you like most about this university?

A. This university has the highest quality in education and research. ( By Chin )

Q. How much is the tuition fee?

A: The course of science and medical course; 2,600 baht per semester The arts course: 1,900 baht per semester

Q: Are you awarded by any scholarships?

A: Only selected excellent students are eligible to apply scholarships like 10 out of each grade. There are 3 types of scholarships, the first one covers tuition fees and living expense, 48,000 baht per year. The second one covers tuition, the third one covers partial living expense. Financial aid like government loan is also available.

Q: What do you want to do after you graduate from university? A: Going to the US to get MBA, then I want to run my own company. (By Ohm)

Q: How often do you use English on campus?

A: Some classes are taught in English. But it does not mean all students are fluent in English. (By Doam)

#### **Reporter's Comments:**

To enter this leading university in Thailand, many high school students go to private tutoring school as it happens in Japan. As a consequence, the students are very proud of being a part of this university.

Except the students whose parents live far from Bangkok, most students go to university from parents' house for 4 years.

There are scholars who completed their PhDs in Japanese universities including Dr. Thirapong from Chulalongkorn University.

## xi. JICA Project for AUN/SEED-Net

Reporter: Ms. Mayuko Shitara

Date: August 30, 2007, Time: 13:30-14:30,

## **Program / Reporter's Comments:**

We visited Chulalongkorn university and Mr. Sakae Yamada, Program Coordinator and Prof.Dr.Kazuo Tsutsumi, Chief Advisor kindly gave a presentation about AUN/SEED-Net. This program was initiated in 2001 by Japan and officially started in 2003. Just now, it involves 19 institutes from

ASEAN countries and 11 supporting universities from Japanese side. Since the beginning, 444 students have graduated from this program. And for the students, the scholarship is given by Japanese Government, Ministry of Education, Culture, Sports, Science, and Technology. In this program, Japanese professors are dispatched to the other member's university for the collaborative researches.

We could find out that this program has been contributing a lot to develop the human resources in ASEAN countries. Even though it is still not so common to go to graduated course in ASEAN regions, for the human resource development, higher education is required. Actually this program has made a big progress on that issue.

I strongly felt the importance of this program. Just now, USA and Europe attract many young students to study there but I hope the students' exchange between Asian countries happen more often.

# xii. <u>Laem Phak Bia Environmental Research and Development Project under the Royal Initiatives (LERD)</u>

Reporter: Mr. Kota Ashikawa

**Date & time:** August 31, 2007 (13:30~15:00)

Program

Presentation About "How to purify wastewater by natural method "by Professor Dr. Kasem Chunkao.

Video about "Laem Phak Bia – A model of Natural Waste Water Treatment".

#### Q & A

Q: Why is to carry out activities without political involvement one of the Chaipattana foundation's objectives?

A: A freedom to do anything without asking through the politician is important. The foundation can be free from the political. Moreover, the foundation can contact directly to the citizen too.

Q: What are the roles of His Majesty the King Bhumibol Adulyadej and Her Royal Highness Princess Sirindhorn in the Chaipattana Foundation?

A: His Majesty the king is doing like a consultant of the foundation and also follows all of the result of the research and experiment. Moreover, His Majesty the King thinks about the new things so as to develop Thai people lifestyle, especially the people who live in the rural area. As for her highness princess Sirindhorn, she always follow the research and sometimes goes to the field by herself to look what the progress is and also visit the official and the citizen around the places which she went too.

Q: Where does the Chaipattana foundation get funding from?

A: The foundation's funding relies solely on donation from pe

A: The foundation's funding relies solely on donation from people of Thailand – both as an individual and company. Since the foundation is much like a representative of the King. Therefore it cannot do the fund-raising. Thai people love the King and know in our heart that all His Majesty's

projects are to aimed to bring well-being to Thais. Therefore those money comes naturally without advertising or pledge.

Q: Where does the RDP get the funding aside from Chaipattana foundation? A: It's also like the Chaipattana foundation, which is getting from the people who gave the funding. Some projects may have products for sell as side products. Sometimes after doing research, there is a product that sellable. In case of Laem Pak Bia, There are fish and grass which the project can sell it and gain some money. However, they aren't allowed to fund raise.

Q: What kind of approach does the RDP use in designing projects? Is it top down (from the RDP to community), or bottom up (community proposal to RDP)?

A: Both top down and bottom up will be used as the approach in designing project. As for top down, its objectives are to give some advice and some information to the community and to develop that area. As for the bottom up approach, the objectives are to give the information about the problem of the community and what the people from that one need to the RDP.

Q: Has this treatment system been applied already to other areas of Thailand?

A: This treatment is not yet applied to the other areas of Thailand. But in the near future, it will be introduced as research and experiment to the other areas of Thailand. And for the others, it should have some research about that area before this treatment can be applied.

#### **Reporter's Comment**

The Royal Development Project plays a crucial role in supporting the people in the development programs, mainly in agriculture and environments. The Chaipattana Foundation is one of the organizations that support The Royal Development Project. The Chaipattana Foundation is a royal-initiated charity body that supports countrywide development projects not initiated by Government of Thailand. The Chaipattana Foundation coordinated with both the government sector and civil society in Thailand without any political involvement to promote the development of social and economic well-being activities which are beneficial to the Kingdom. The LERD is one of the activities of the Chaipattana Foundation. The LERD project is located at Petchaburi province. One of the biggest problems in Thailand is that they still lack of soil and water treatment facilities. Therefore Science and knowledge to solve the wastewater and solid waste problem were researched and technologies were built. There are four main technologies concerning wastewater treatment: 1) Lagoon treatment system, 2) Grass filtration system, 3) Constructed wetland system, and 4) Mangrove forest. As for soil treatment, there is one solid waste disposal technology, which is application of concrete box to soil treatment. These researches will be applied to other areas of Thailand.

#### b. Outcome of discussion at Student Seminars

Date & Venue: 27 August 2007 at KMITL and 30 August 2007 at Chulalongkorn

## University

## i. Group 1

Topic title: Strengths and potentials of Japan and Thailand

**Members:** Ms. Mayuko Shitara, Ms. Akino M Tahir, Mr. Wang Xu, Mr. Yuki Minamino, Mr. Powit Rungsangthiwakorn

#### Discussion:

**Back ground of this topic:** Japan and Thailand has been having good relationship for long time. Not only diplomatic relationship, but Japan pays attention to Thai land as the base of R&D and invest a lot into Thai industry. So why to Thailand? Why not other ASEAN countries? There must be some strengths and potentials in Thailand.

**Characteristics of Thailand and Japan:** First of all, we discussed characteristics of Thailand and Japan. Japan and Thailand have several different characteristics.

Thailand has a long history of being a kingdom. Our visit to The Laem Pak Bia Environmental Study, Research and Development Project under The Royal Initiatives has shown us that Thai people are living in a peaceful life under their King, H.M. the King Bhumibol Adulyadej, who has been contributed in many social and economic development projects.

On the other side, in our visit to Petroleum Authority of Thailand (PTT) Research and Technology Center, we were informed about the richness of Thai in terms of natural resources. At the same time, now they are trying to secure the energy source for several years later thinking of decrease of nonrenewable energy resources. And Regarding human resource, we learned from our visit to TMAP-EM (TOYOTA) and Siam DENSO Manufacturing, that Thai people is very good human resources for those two companies. Another positive characteristic is that Thai is an open society and have open culture towards outsiders. People are very nice and friendly, as well as open and helpful to us. These characteristics are several of advantages that Thai have that can be useful for moving towards a developed country.

As for Japan, we discussed that Japan is already a developed country. Some characteristics of Japan that we assumed had been advantages for Japan in its developing process are that Japanese are good at improving the imported technology and products. Thus, they can adjust new technologies to local needs, and create their own version of technologies that work for Japanese society. Japanese is also a hard worker society, people work very hard and as a result, the country became one of the wealthiest countries in just a short period.

**Economics and politics of Thailand:** Generally speaking, economics and politics background are two big factors to the investors. Comparing with the

other ASEAN countries, Thailand has been doing a really good job in both of them. One of the most surprising things that I felt in Bangkok is everyone loves their King so much, meanwhile His Majesty the King treat his nations so well which make the whole society seems politically stable. On the other hand facing the risk of resources-decreasing, Thai Government has truly felt that they have to enhance their own industry and the know-how to get reduce of the risk. Besides Thailand's geographical location advantage, well-education background, developed infrastructure condition etc. are all attractive points to foreign investors to start their investment to Thailand.

**Conclusion:** From all things mentioned before, we found out that Thailand has a big potential to be a developed country. Those potentials are reflected in the aspects of the real industries. To know each other's strengths and potentials, we can collaborate more and more from now.

## ii. Group 2

# **Topic title:** Contribution of Science and Technology from Japan to **Thailand**

**Members:** Ms. Yoko Shono, Ms. Yuki Sunami, Mr. Hiroya Tsunoi, Mr. Yosuke Kanmei, and Mr. Satoshi Ishii

#### Discussion and conclusion:

On this report, we would like to summarize our outcome of the group discussion with the topic: Contribution of Science and Technology from Japan to Thailand. The contents of our report is as follows: 1) Why Japan is famous for science and technology in Thailand, 2) Japanese contribution in Education, 3) Influence of manufacturing system, 4) ODA projects in Thailand, and 5) What they can do for the future

## 1) Why Japan is famous for science and technology in Thailand

At first student forum, we asked Thai students for a thing that comes to mind immediately hearing Japan. Japanese companies' products that are automobiles, foods, restaurants, TV programs, cartoons, comics and music came up first. Now there are many Japanese companies and products in various fields in Thailand. These companies easily can start a business in Thailand under the strong supports of BOI. For example, BOI supplies "tax reduction". Thanks to this policy, Japanese companies moved factories to Thailand. Siam DENSO and TMAP/EM which are Japanese large enterprises we visited contribute to make Thai society more convenient and comfortable in field of auto industry. People in Thailand can enjoy watching Japanese TV program easily by satellite television and CATV at their own home. Besides, Japanese high technologies such as Shinkansen and HONDA ASIMO are introduced through Thai news program and newspapers. Thai people know about Japan very well and feel an affinity with Japan with growing in such living environments. Some student participated JAYSES program and each student forum said that such Japanese companies and technologies give a big

dream in their future. It seems to be the first motivation to learn high technology at Japanese universities.

Another thing that makes Thai people to have good image to Japan is the diplomatic relationship between Thailand and Japan It have lasted for 120 years. The imperial house in Japan keeps a good relationship with the Thai Royal. It greatly affects when we form a mutual trust relationship each other.

Moreover, Thai students said that they hope to make their original companies in Thailand such as PTT and Capital Rice we visited to study high technology. Therefore, they consider that to enter and get an education in Japanese companies is quite advantageous for them especially in field of science and technology. Therefore, many Thai students want to have a higher education in Japan. As a fact, there are a large number of Thai faculty members who graduated from Japanese universities in every field of industries. For instance, some engineer working in PTT graduated from Japanese universities. There are more than 200 alumni from Tokyo Tech in Thailand in total. They make a remarkable contribution in each industry and affect younger students to have a dream of science and technology.

#### 2) Japanese contribution in Education

Many Thai students think of studying at Japanese universities. Japan is quite famous country in advanced education for them. Certainly, American and European countries equally affect to Thai people and society as well as Japan, but Japan is thought as the country where they can go to study abroad easily due to being a member of same Asia and sufficient scholarships by some organization. In fact, MEXT scholarship, Ministry of Education in Japan is ranked 2nd as the most famous and popular scholarship following King's scholarship -Anandha Mahidol-. As a project of JICA, ReCCIT was constituted in KMITL campus in order to develop the field of telecommunication engineering. What is more, the collaboration projects with company such as NICL and JAXA are carried out at ReCCIT. Also AUN/SEED-Net is the scholarship for the students who study science and technology, guided by the Hashimoto-Obuchi cabinet in Japan. There are a lot of students studying high technology with these scholarship systems in Japanese graduate schools.

## 3) Influence of manufacturing system

The next topic is how Japan influenced manufacturing systems in Thailand so far. About this topic, we found the points below through visiting DENSO, TOYOTA R&D and talking to Thai students during this technical visit.

First, we could find the strong influence from Japan in manufacturing business in Thailand. For example, "5S", "Just in time", "TQC" and "Kaizen". Those terminologies and methods have been brought firstly in Thailand and spread to the society of manufacturing business since Japanese companies moved factories here. As a result, they succeeded at

manufacturing high quality of products effectively.

The second point is integration of local value in Japanese companies in Thailand. Toyota, Honda, Isuzu and Denso put the R&D basis in Thailand in order to satisfy the local needs. It becomes easier for Japanese firms to integrate local value and make more local oriented products.

In addition, Japanese companies put many efforts on raising the future leaders from Thai people so that they can run the companies by themselves eventually. Also, in order to improve product qualities and productivity, Japanese companies try to educate and share the opinion with the Thai employees. We believe this helps to elevate worker's satisfaction as well.

## 4) ODA projects in Thailand

On this section, we would like to mention about ODA projects from Japan to Thailand. Although ODA projects themselves are not direct contribution of science and technology from Japan to Thailand, we believe that results and outcome of these projects have affected science and technology in Thailand.

Under the assist of ODA loans, a large amount of Japanese funds have been financed to Thailand. By using these funds, it has made possible for Thailand to conduct big projects. For instance, bridges over Chao Phraya River, Suvarnabhumi airport, highways and MRT whose head office we visited in JAYSES program. Concerning MRT, about 96 % of the construction cost was from ODA loans. In addition, a lot of Japanese companies like Kazima, Tokyu and Mitsubishi had took part in constructing tunnels and other facilities for MRT. Moreover, controlling systems are also introduced from Japanese companies.

Thanks to MRT, lives in Bangkok have become more convenient. If we use MRT, we do never stick into traffic congestions and save transportation time, thus promoting economic activities. Since MRT is on time for 99%, we are sure of moving to one place to another on schedule every time.

## 5) What they can do for the future

Finally, we would like to raise an issue from our visit. That is what Thai society can do for their future to promote sustainable growth. In order to achieve sustainable development, it is expected that Thai society can utilize applicable technologies and new innovations.

From this point of view, we would like to suggest two issues to promote their economy. First, in order to achieve sustainable development, it is expected that Thai society should utilize applicable technologies and new innovations. We think that Thai has a potential to make them because they have already have some excellent companies and could establish them by themselves. For instance, Capital Rice Co. is leading company in Thailand. They can produce a large amount of rice by themselves and export them to the world.

Second, in order to strengthen its potentials in agro-industry and bio-diversity, Thailand should focus on development of their technology. For example, PTT (Petroleum Authority of Thailand) is also reading company in Thai. They are going to deal with a bio-fuel because of growing demand not only in Thailand but also in all over the world. They already have a research lab about it. From these reasons, when we compare with other countries, Thai have a possibility to play an important role in this field.

#### **Acknowledgements from Group 2:**

We would like to thank all Thai students who attended student forums taken place at King Mongkut's Institute of Technology Ladkrabang and Chulalongkorn University. Their comments and exchanging idea with them helped us to summarize our topic. We greatly appreciate people who did presentation and showed their facilities for us at the place where we visited: ReCCIT, Capital Rice Co. Ltd., Petroleum Authority of Thailand, TOYOTA Motors Asia Pacific-Engineering & Manufacturing, Siam DENSO Manufacturing Co., Ltd., AMATA Industrial Estate, Ota Techno Park, Board of Investment, the organization: Mass Rapid Transit Authority, Bangkok Metro Public Co. Limited, AUN/SEED-Net at Chulalongkorn University, Laem Pak Bia Environmental Research and Development Royal Project, NSTDA. Lastly, we are grateful to all JAYSES committee and members, especially Dr. Thirapong and Mr. Shimura for warm support and help

## iii. Group 3

**Topic title:** Roles of Japanese private sector investment & Government ODA to Thailand

Members: Mr. Morishima, Ms. Mabuchi, Mr. Yamamura

#### Discussion and conclusion:

Recently, many overseas companies, including Japanese famous companies like TOYOTA and DENSO, have the factories in Thailand. These companies can produce high quality products with low cost and are expanding employment, which accelerating Thai economy. Also, there are so many well-educated engineering students in Thailand. With these strengths, Thailand is considerable for many foreign companies now.

However, there are some problems for Thai industry to be solved. First, there is less opportunity for engineering students to utilize their ability, because there are not so many R&D facilities of overseas companies in Thailand. As a result, Thai people do not have sufficient know-how in Science & Technology. Second point is about management. More management skill is required for Thai people who are working in overseas companies in Thailand. In DENSO, Japanese manager told us that he wants Thai people to manage its employees, but there are few Thai workers who can do that.

Through the discussion with Thai students, we found two things seemed to be very important for Thailand to solve these problems. One is developing their own technology, and the other is assisting SMEs (small and medium enterprises) in Thailand and making them competitive in global world. In order to realize these two things, ODA (official development assistance) will be quite important. ODA is financial or technical support offered by government to contribute to the economic and social development, and the improvement of welfare in developing countries. This ODA should be used for educational purpose such as strengthening human resource, facility, scholarships for university students. Also, it should be used for financial and technical supports for SMEs, for example, technical training for management.

As for Japanese companies, one of their roles is to nourish excellent Thai employees with skill of management. Widening channel with Thai SMEs is also crucial.

If both ODA and Japanese companies are plying these roles, it will be able to help Thailand to create self-sustained industry and own-developed technology, which making Thai more developed country in the future.

## iv. Group 4

Topic title: Japanese enterprise in Thailand

Members: Mr. Ashikawa, Mr. Sasamoto and Mr. Sato

## Discussion and conclusion:

## 1. Background

Discussion topic for the group 4 is "Japanese enterprise in Thailand". And we especially focused on "localization".

What's localization? Why is it important?

Till now, Japanese factories have been built in Thailand in order to supply cheaper productions or parts to Japan. But now, markets in neighbor countries such as Malaysia and Indonesia have been becoming bigger. So, not only manufacturing but market research and production development are needed to the factories in Thailand. In the other words, the factories have to supply productions that meet the demands of markets in these countries (local markets). >> Localization

#### 2. Discussion Structure

Our definition of the term "localization" is to pursue better system to meet demand of local market. Several key aspects of localization might exist, and one of the most important factors is <u>human resources</u>. Local worker's way of thinking and their environment varies from place to place, therefore analyzing local situation carefully and applying appropriate human resource system is important for better cooperation. According to discussion with Thai

students and visit to Japanese enterprise in Thailand such as Siam DENSO manufacturing Co., Ltd., it came out that there are mainly two important factors to be examined and solved for localization of Japanese enterprise in Thailand. The first one is to prevent from job hopping and the second one is education.

#### 3 Human Resources

#### 3-1 Job-Hopping

Job-hopping is a phenomenon that workers change job frequently. Although it is natural to step forward to different place according to changing situation, in Thailand job-hopping happens so often that it might be an obstacle for company's long-term planning.

To prevent job-hopping, it is important to keep workers' motivation high. Of course, Salary is essential element, but Rewards and Communication are more important for sustainable development. We heard form Thai students that now the lack of communication between the boss and workers exist in many Thai enterprises and that makes workers' motivation low.

Here is a structure flow.

- 1. Communication between workers and their boss is needed.>>Bottom-UP
- 2. Workers Opinions are accepted to the company and something improve.
- 3. The company give some Rewards to workers
- 4. Thus it is possible to keep their motivation high!

#### 3-2 Education

Next important thing is Education, especially for middle level staff. Nowadays, Japanese enterprises in Thailand, almost all of top level management and planning staff are Japanese. On the other hand, non-supervisory employees such as middle and bottom level staff are mostly Thai people. To implement the localization that we are suggesting, the increase in the number of Thai staff in top level position is necessary. As a result, education for middle level staff is important. Top level staff needs management know-how to find a problem and develop an optimal strategy. However, at present Thai workers lack of know-how like this. Therefore, Thai workers should be given more opportunity to develop management know-how as part of education system such as On the Job Training (OJT). The experience is the most important ingredient to acquire that.

#### 4. Conclusion

To localize Japanese a company in Thai, there are 2 important factors.

a. To solve the problem of job hopping,

>>better reward and communication between manager and workers are

important.

b. Increasing the number of local manager is important.
>> Ability of management know-how to find a problem and developing an optimal strategy is needed to local managers

## c. Q & A / Comments at the Final Reporting Session

Date & Venue: 10 October 2007 at Ookayama Campus Tokyo Tech

**Q:** (to Group 4) What do you mean by "reward"? **A:** Not only salary but prize, award, etc...

**Q:** (to Group 1) Comparing Thailand with other South East Asian countries, they started to develop at around the same time, back in the beginning of 90s, but Thailand now seems to be more developed than other countries (excluding Singapore of course), so what do you think of the reason, why does it happen, or what kind of factor contributes to that?

**A:** The most visible factor is because Thailand is politically stable, and it's very important for the investors if they want to invest their money, in a politically stable country.

**Q**: My comment is that once some production system has been established, it attracts many manufacturing company. Especially in the case of automobile integration effect was quite significant in Thailand. Difference might be just by chance, but Thailand caught the best timing for the triggering development.

**Q**: (to Group 4) You suggested more Thai employee should be in higher position in the Japanese company in Thailand. What should be the good proportion of Thai worker in Japanese companies? And how should the promotion of education for Thai workers.

**A:** As Thai market is different from Japanese one, Thai worker should participate to planning the strategy. However, we heard from the Japanese staff that the management skill of Thai workers is not sufficient yet, because of lack of opportunity and education. So they need to give more opportunity and education such as "on the job training".

**Q:** Why did JAYSES chose Thailand for the target? Why not countries in much more developing process such as Vietnam or the Philippines?

**A:** Actually we visited the Philippines as the series of this kind of program, and the practical reason to chose Thailand was because Tokyo Tech has a lot of strong and good relation with various organizations in Thailand and also Tokyo Tech alumni in Thailand is very active, which could help us to coordinate visiting program to Japanese industries in Thailand. Another reason is that we would like to design this program to be the beginners' course for development studies, we thought that they could learn a lot of best practices and case studies from Thailand.

**Q**: (to Group 3) In the "Result of Discussion" of Group 3, you concluded that it is important for Thailand to establish self-sustained industry. Is that Japanese students'

opinion, or the resolution of the discussion with Thai students?

**A**: The result of discussion with Thai students.

**Q**: I think it is difficult for developing countries to keep "self –sustained industries", because many foreign companies in Thailand suffer from NIH ("not invented here") syndrome. In case of Japan, they imported technology from outside and improved it themselves, but Thai case might not be like that. What do you think is the way to establish self-sustained industry?

**A**: One way is technical cooperation such as JICA is doing. I expect more on the aspects of technical transfer not on the financial support to help Thai industries to establish self-sustained industry.

**Q**: In case of Japan, we developed by ourselves. What is the difference of Japan in those days with Thailand at the present situation?

**A:** (from another audience) America contributed to Japanese industries after the War to catch up other developed countries, to shift military-based industry to rather peaceful one. Japan had some infrastructural base, but in case of Thailand, they are starting from less than Japan had.

#### 4. Evaluation

## a. By the participants

#### i. Means to know JAYSES

Tokyo Tech students knew the program from mailing list, website, poster or through staff/friends. Most of Thai participants heard about the program from staff of universities.

## ii. Motivation to participate

The answers vary in individuals. Most of them made multiple answers such as "making good friends", "to broaden my viewpoint" and "upgrade English ability".

#### iii. Satisfaction

More than 80 % of the answers are "Satisfied very much". The reasons to chose "satisfied somehow" are limitation of visiting time or lack of fieldwork planned by students.

## iv. Evaluation on each part of the program

#### 1. Preparatory studies

Most of the Tokyo Tech students satisfied very much with preparatory activities. "Visiting JTECS" and "Presentation and Q& A among members" get the highest marks. (10 out of 14 answers are satisfied very much)

#### 2. Study visit in Thailand

Most of Tokyo Tech students rated 'satisfied very much' for Siam DENSO (All14 students), MRTA(12/14) and PTT Research and Technology Institute (11/14).

Thai students rated highest for Capital Rice, Laem Pak Bia Royal Project (7/7), Working stay at Hua Hin (7/7) and PTT Research and Technology Institute (5/5).

Siam DENSO is ranked number one for overall rating. (19 out of 20 students rated highest)

#### v. Suggestion

## 1. Management

Most of the Tokyo Tech participants are satisfied with the management performance of JAYSES. However, several students point out the overload to the staff and they suggest that more students should participate management to support university staff.

Participants from Thai universities are satisfied with the management. A student point out the lack of coordinator in Thai side.

## 2. Financial support

Most of Tokyo Tech students are satisfied with support for students' trip expenses by alumni association. However, some students point out that the budget for program was not sufficient as staff should save budget by choosing cheaper material for souvenirs to give to the visiting organizations.

Compared with participants from Japan, Thai students didn't have to spend much money to join the program. However, some students suggest some support for local transportation or meal.

## 3. Preparation

Some Tokyo Tech students suggest that the program should provide more information and instruction to those who are not used to travel abroad. One student suggests that Thai students studying at Tokyo Tech could have some roles in the preparatory activities to upgrade the program.

#### 4. Where to visit next time

Several Tokyo Tech students suggest that JAYSES should continue to visit Thailand to make the human network closer and stronger. Others suggest Vietnam, Indonesia, Malaysia, China, India, Singapore and other Asian countries.

Several Thai participants suggest that JAYSES should expand and arrange Thai students to visit Japan to conduct study visit utilizing the established network. Others suggest also to Thailand, Vietnam, Singapore, Malaysia and China.

#### 5. Quantity of activities

Several Tokyo Tech students point out that schedule in Thailand was tight. Some students suggest the program to have more free time or cultural visit. Others suggest the program can be extended to 2-3 weeks.

Some Thai students suggest that JAYSES should have more time for students to exchange idea and discuss. Others suggest more time for refreshing.

## vi. Impact on idea, vision or future plan?

Several Tokyo Tech students are impressed with the higher technical level of infrastructure and human resources in Thailand than they expected before their visit. Many of them comment about generosity, hospitality and friendliness of Thai people. A few students decide to apply for the student exchange program with scholarship to study abroad in near future. Most of them would like to visit Thailand again. One student decides to study Thai language.

Several Thai students made up their minds to study in Japan after joining the program. A few students are more interested in Tokyo Tech than before. A few students decide to study Japanese. Some students are impressed with high quality of Japanese technology.

#### vii. Other comments

Many of Tokyo Tech students think this program is successful one. A few students point out that the benefit is not only for the participants but also for Tokyo Tech, CU, KU, KMITL and SIIT. Most of them appreciate the effort taken by the staff of Tokyo Tech. Some students say they will keep in touch with Thai participants after the program.

Many of Thai participants think the program as successful one and appreciate for the opportunity. Some students comment that they will keep in touch with Tokyo Tech participants.

## b. By the audience of Final Reporting Session

#### i. Comments

- Well prepared final reporting session. Need more time for discussion. (academic staff, Tokyo Tech)
- Fruitful outcome during limited program period. I hope they will have further discussion with Thai students from the resolution of the delegation this time. (academic staff, Tokyo Tech)
- Good program. It should be expanded through other countries in Asia. (international student, Tokyo Tech)
- Very interesting. I can imagine that Tokyo Tech students' experience of discussion with Thai students will give much impact to their life in the future. I wanted to join! (student, Tokyo Tech)
- It's a good program. The participated students can learn many things and gain experience during the program. Moreover, the program might improve if it has the visitors from the target country. In this way, we can have two-ways communication and information. (international student, Tokyo Tech)
- It seems really interesting. I wish I could have joined!
- Participants learned many things from the program. I hope this kind of program will continue to encourage more students to be interested in

international activities. (student, Tokyo Tech)

- As I joined a class in Thailand this year, I am quite impressed with this program. (student, Tokyo Tech)
- The final session gave me an idea that this program was very effective. I envy the participants for having such wonderful experience. (student, Tokyo Tech)

## c. By concerned staff in Thai universities

#### i. Overall evaluation

Most of the answers from academic staff of Thai universities evaluate JAYSES as very successful program.

## ii. Benefit to Thai students

Academic staff of Thai universities pointed out the Thai students' benefit to join JAYSES as the opportunity to interact with international students in different background and culture.

#### iii. Comments

A professor suggested that JAYSES should let more students to attend. Another professor proposed a student exchange program for Thai students to visit Tokyo Tech.

#### d. Cost effectiveness estimation

- i. Budget total 1,648,000 JPY (450,000 THB)
  - 1. Program expense 928,000 JPY
    - a. Travel expense for staff 3 times = 578,000JPY
    - b. Chartered Bus and car rental 200,000JPY
    - c. Stationary, souvenir, 50,000 JPY
    - d. Report printing 100,000 JPY
  - 2. Scholarship (travel expense support) 720,000 JPY 60,000 JPY x 12 persons (3 students self-supported)

#### ii. Time

1.	Program design	4 months since Sep. '06
2.	Approval	4 months
3.	Announcement-selection	1 months
4.	Discussion with Thai org.	5 months
5.	Preparatory studies	2 months
6.	Study visit	10 days
7.	Preparation for reporting	1 month
8.	Publishing final report	2 months

## iii. Workload

1. Tokyo Tech: 2 staff

- a. Assoc. Prof. Dr. Thirapong Pipatpongsa, Global Scientific Information and Computing Center
- b. Mr. Tsugihiro Shimura, International Office
- 2. Working committee: 2 students
  - a. Mr. Yuki Minamino, B4, Dept of Electrical and Electronic Engineering
  - b. Mr. Daiki Morishima, B3, Dept. of Inorganic Materials

#### 5. Impacts

## a. Broadcasting program on TV

<u>Channel 3</u>, one of the key TV stations in Thailand, interviewed several JAYSES participants and broadcasted 8 minutes program as a part of "<u>Good morning world</u>" on 2<sup>nd</sup> September 2007.

http://www.ttot.ipo.titech.ac.jp/JAYSES2007/album.html

#### b. Journal

## i. Chulalongkorn University

The news about Student Forum of JAYSES was published on page 3, <u>"Eng. talk." (ช่างพูด)</u> September 2007, the monthly magazine by <u>Faculty of Engineering</u>, Chulalongkorn University.

#### ii. MTEC

Introduction of JAYSES was published on page 17-21 MTEC (National Metal and Material Technology Center, NSTDA) Newsletter Vol.37 (July 2007)

## iii. Kasetsart University

Preliminary visit by Mr. Tsugihiro Shimura, International Cooperation Coordinator of Tokyo Tech, was published on newsletter of <u>Kasetsart</u> University.

http://www.ku.ac.th/english2003/news/july50.html (English) http://www.intaff.ku.ac.th/Admin/WNews/view\_news.php?No=125 (Thai)

## c. Presentation at Academic Exchange Meeting

Assoc. Prof. Dr. Thirapong Pipatpongsa and Mr.Shimura, academic and administrative staff in charge of JAYSES, attended the "2<sup>nd</sup> Thai-Japanese Students Academic Exchange Meeting" held at Osaka University on 2nd November 2007 to give an oral presentation about JAYSES activities.

## d. Search engine results

The official website of JAYSES has been ranked in <u>top 10 on Google</u> search engine by keyword of "120th anniversary of Japan Thailand Diplomatic Relations" since September 2007.

http://www.ttot.ipo.titech.ac.jp/JAYSES2007/indexe.html

## e. Joining Tokyo Tech Alumni Association in Thailand

Tokyo Tech students were invited by the Tokyo Tech Alumni Association in Thailand, to the annual meeting on 2<sup>nd</sup> September 2007 at Ambassador Hotel. Dr. Aizawa, the President of Tokyo Tech also joined the meeting and complimented JAYSES members for the successful activities, especially for the interview on

Channel 3 TV program.

## f. Joining TAIST Tokyo Tech Grand Opening Ceremony

Tokyo Tech students attended the Grand Opening Ceremony of TAIST Tokyo Tech held on 3<sup>rd</sup> September 2007 at Thailand Science Park.

## 6. General Conclusion by Tokyo Tech staff

## a. Key success factors

- i. Overall and synthetic program design
  - The program focused on the industries in Thailand, but didn't limit to any specific field of science or technology. The sites to be visited were chosen from various fields and characters. It enables the **openness** of the program and also strengthened the **interdisciplinary** aspect of the studies.
- ii. Encouragement of students' ownership and activeness
  Students' had to deal with various tasks during the program. Every student had his/her own topic-in-charge, which motivated each one highly.
- iii. <u>Intensive discussion among multinational group of students</u>
  The students from Japan, Thailand and other Asian countries should discuss on a topic based on different idea, personality, culture, academic background, which can lead to the **diversity training**.

#### b. Extension

Most of the concerned persons suggest JAYSES to be continued. Although it proved to be a **cost-effective** event for Tokyo Tech (no more than 15,000 USD for 15 students' 10-day dispatch), we need to **secure the budget** for next year's implementation or explore **external fund** to support this program.

#### c. Expansion

There are some new ideas from participating students that JAYSES should visit not only Thailand but other neighboring countries namely Vietnam, Singapore, Indonesia, etc. It will enrich the program by realizing **comparative studies among countries**. The condition for this constructive idea is the **financial support the students from Thailand** or other countries. If the trip would be among ASEAN region, the cost for Thai students would be much lower than that of Japanese students, which Thai universities or any donors can afford.

## d. Expectation

The authors hope that this program will continue for many years to establish a **high** leveled human network of promising students which would contribute for the solidarity of Asian countries in the future.

#### Annex a

# List of participants from Tokyo Tech

# Tokyo Tech Students

Name	Nationality	Sex	Grade	School/ Faculty	Department
Kota Ashikawa	Japan	M	U4	Engineering	Civil and Environmental Engineering
Satoshi Ishii	Japan	M	M2	Interdisciplinary Grad. Sch. Of Science and Engineering	Innovative and Engineered Materials
Yosuke Kammei	Japan	M	U4	Engineering	Computer Science
Shinji Sasamoto	Japan	M	U4	Engineering	International Development Engineering
Kodai Sato	Japan	M	M2	Decision Science and Technology	Human System Science
Mayuko Shitara	Japan	F	U4	Bio Science and Biotechnology	Biotechnology
Yoko Shono	Japan	F	M1	Innovation Management	Management of Technology
Yuki Sunami	Japan	F	M2	Science and Engineering	Civil Engineering (exchange students studying at Kasetsart University)
Akino Tahir	Indonesia	F	M1	Interdisciplinary Grad. Sch. Of Science and Engineering	Environmental Science and Technology
Hiroya Tsunoi	Japan	М	M1	Decision Science and Technology	Human System Science
Yumi Mabuchi	Japan	F	M2	Interdisciplinary Grad. Sch. Of Science and Engineering	Built Environment
Yuki Minamino	Japan	M	U4	Engineering	Electrical and Electronic Engineering
Daiki Morishima	Japan	M	U3	Engineering	Inorganic Materials
Masahiro Yamamura	Japan	M	M2	Decision Science and Technology	Value and Decision Science
Xu Wang	China	М	U3	Engineering	Civil and Environmental Engineering

## Tokyo Tech staff

Name	Nationality	Sex	Department	Position
Thirapong Pipatpongsa	Thailand	M	Global Scientific Information and Computing Center	Assoc. Professor
Tsugihiro Shimura	Japan	М	International Office	International Cooperation Coordinator

# Annex b List of Participants from Thai universities

University	Name	Nickname	Nationality	Sex	Field
CU	Agus Bejo		Indonesia	M	Electrical Engineering
CU	Atikrit Chanjavanakul	Doam	Thailand	M	Nano Eng.
CU	Jirada Vitayaphibul	Bow	Thailand	F	Nano Eng.
CU	Miss Paninee Chetprayoon	Peng	Thailand	F	Nano Eng.
CU	Miss Theeranuj Patharakorn		Thailand	F	Electrical Eng.
CU	Mr. Ekkarin Wongsiri		Thailand	M	Electrical Eng.
CU	Mr. Lertluck Leela-amornsin		Thailand	M	Electrical Eng.
CU	Mr. Nattapat Kunawattanakorn		Thailand	M	Electrical Eng.
CU	Mr. Sophon Poowapattaraporn		Thailand	M	Electrical Eng.
CU	Mr. Surasak Chantasirichot	Ton	Thailand	M	Nano Eng.
CU	Mr. Thananan Singsiri		Thailand	M	Electrical Eng.
KMITL	Monton Udompitaksook	Ball	Thailand	M	
KMITL	Pornpan Puihuaton	Mai	Thailand	F	
KMITL	Ptcharin Daungkaew	Yimp	Thailand	F	
KMITL	Puthita Amonsettrachai	Eve	Thailand	F	
KU	Leela RUCKTHONG	Mamaew	Thailand	F	Dept. Chemistry
KU	Nattapol Choycherdsuk	Bia	Thailand	M	Engineering
KU	Sayamol Asapa	Saya	Thailand	F	Engineering
KU	Siraprapa SANPA-ARSA	Tak	Thailand	F	Dept. Physics
SIIT	Chanon Kupoomchaiskul	Yoon	Thailand	M	Computer Science
SIIT	Natthapong Sasasmit	Job	Thailand	M	Computer Science
SIIT	Powit Rungsangthiwakorn	Chin	Thailand	M	Computer Science
SIIT	Swit Phuvipadawat	Tei	Thailand	M	Information Technology
SIIT	Watcharathat Srithanesiganon	Ja	Thailand	M	Information Technology

#### Annex c

## **List of Cooperating organization and persons**

## Thai University

Institution	Section / position		Name	
		Danastmant of	Assoc. Prof. Dr. Ekachai Leelarasmee	
Chulalongkorn		Department of Electrical and	Assist. Prof. Dr. Tuptim Angkaew	
	Faculty of	Electronic	Dr. Supavadee Aramvith	
University	Engineering	Engineering	Dr. Manop Wongaisuwan	
	Engineering	Engineering	Dr. Suree Pumrin	
		Department of Civil Engineering	Assoc. Prof. Dr. Veerasak Likhitruangsilp	
King Mangkut's Instituto		Dean	Assoc. Prof. Dr. Kobchai Dejhan	
King Mongkut's Institute of Technology	Faculty of Engineering	Department of Information	Dr. Sathaporn Promwong	
Ladkrabang		Engineering	Assoc. Prof. Dr. Kanok Janchitrapongvej	
	Faculty of Science	Dean	Dr. Surapol Phatharakorn	
		Assoc. Dean	Dr. Thanya Kiatiwat	
Kasetsart University	Faculty of Engineering	Department of Electrical Engineering	Dr. Dusit Thanapatay	
	International Affairs	Director	Ms. Phacharavadee Paerattakul	
	Division		Mr. Somsakdi Tabtimthong	
	Division		Ms. Suthinee Sutthisri	
Sirindhorn International		n and Computer	Dr. Thanaruk Theeramunkong	
Institute of Technology	Technology		Dr. Cholwich Nattee	

# Thai Governmental Department/ Public Company

Office of the Board of	Senior Investment Pr	omotion Officer	Ms. Chitra Kulvanich	
Investment	Senior Investment Pr	omotion Officer	Ms. Ratanawimon Naree Sukreekhet	
mvestment	Investment Promotio	n Officer	Ms. Suthasinee Nyamnat	
	Research and	Vice President	Ms. Usanee Chatranon	
	Technology Institute	Senior Researcher	Dr. Vijit Sriyunyongwat	
PTT Public Co., Ltd.	Administration and Foreign Affairs,	Administrative Officer	Ms.Anakamanee Soontaranond	
	Research Promotion Department		Ms. Tippawan Chutiteparak	
	Governor		Mr. Prapat Chongsaguan	
Mass Rapid Transit	Asst.Governor		Mr. Boonyok Tamtai	
Authority of Thailand	Director, Technical &	t Planning Dept.	Mr. Chaisit Gururatana	
	Engineer		Ms. Anchalee Jenpanitsub	
Bangkok Metro Public	Public Relations Chie	ef	Ms. Duangkamol Hamsongkarm	
Company Limited			Ms. Petchawan Maneepark	

# **Thai Private Company / Foundation**

The Office of the Chaipattana Foundation	Ms. Suleeporn Boonbongkarn
	Ms. Siriphat Phaisuwat

# JAYSES: Japan-Asia Young Scientist and Engineer Study Visit 2007 Final Report

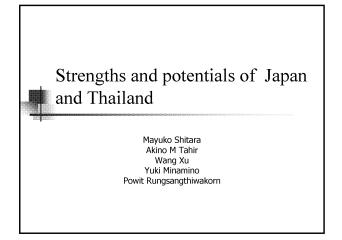
Laem Phak Bia Environmental Study, Research and Development Project under the Royal Initiatives		Director	Prof. Dr. Kasem Chunkao.	
			Ms. Noppawan	
Lanital Rice Co. Lid	Plant Manager		Mr. Sumeth Pichetpongsa	
	Assistant Plant Manager		Mr. Varittipon "Jojo" Pichipongsa	
Amote Corneration PCI	Business Development Manager		Dr. Chakkrit Pumpaisanchai	
Amata Corporation PCL	Business Development Manager Customer Service Supervisor		Ms. Angkana Chiewkanrob	

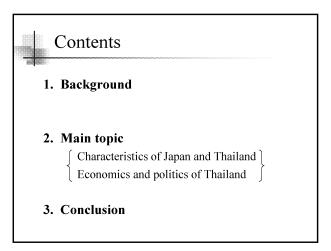
# **Japanese Governmental Department / Project**

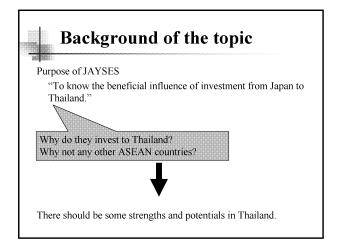
Embassy of Japan in	Japan Information	Counselor	Ms.Kayoko Fukushima	
Thailand	Service	Third Secretary	Mr. Takashi Kohama	
Japan Bank for	Representative	Chief	Mr. Yuhei Ohmi	
International	Office in Bangkok	Representative	wr. Yunei Onmi	
Cooperation	Office iii Daligkok	Project Officer	Ms. Katharine Maneethapodi	
	Chief Advisor		Prof. Dr. Kazuo Tsutsumi	
JICA Project for AUN/SEED-Net	Program Coordinate	or	Mr. Naoki Umemiya	
	Program Coordinate	or	Mr. Sakae Yamada	
	Program Officer		Ms. Rungchalai Punninda	

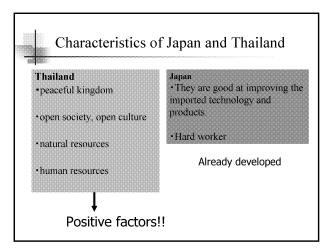
# **Japanese Private Company**

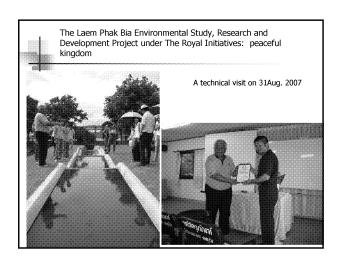
TOYOTA Motors Asia Pacific Engineering & Manufacturing Co., Ltd.	Vice President	Mr. Kazuya Fukuhara	
		Mr. Teruki Miyai	
	President	Mr. Motomi Kato	
a; PENICO	Vice President	Mr. Katsunori Suzuki	
Siam DENSO Manufacturing Co., Ltd.	Managing Director	Mr. Yasushi Matsuda	
	Managing Coordinator	Mr. Tokuyuki Soeda	
	Assistant General Manager	Mr. Trayoutha Tanpat-a-nan	

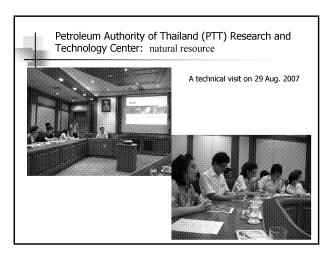


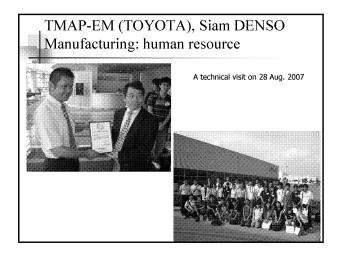


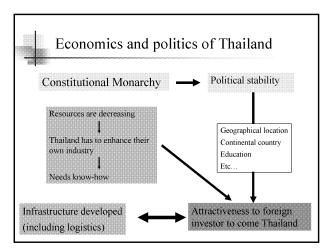


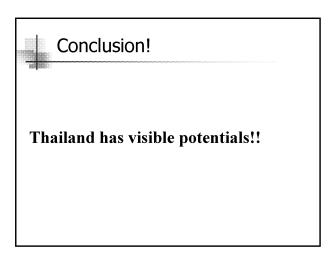














TOKYO TECH

# Contribution of Science and Technology from Japan to Thailand

Hiroya Tsunoi Satoshi Ishii Yoko Shono Yosuke Kammei Yuki Sunami

# Japanese Contribution in Education

- · MEXT scholarship
  - Sufficient scholarship
  - Ranked in the 2nd (the king scholarship is the  $\mathbf{1}^{\mathrm{st}}$ )
  - famous scholarship in Thailand
- · JICA's educational projects
  - ReCCIT
  - AUN/SEED-Net



## Influence of Manufacturing System

- · Japanese style in manufacturing
  - 5S, Kaizen, Just-in-time, TQC
- Integration of local value in Japanese companies in Thailand
  - R&D bases (TOYOTA, HONDA, ISUZU, DENSO)
  - Promoting the local managers
  - Sharing the opinion to improve production-line
  - The attitude to listen to each idea carefully

## What Thai society can do for the future?

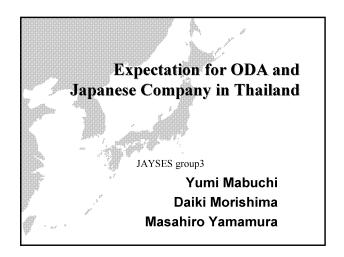
In order to achieve sustainable development, it is expected that Thai society can utilize applicable technologies and new innovations.

Leading Companies in Thailand

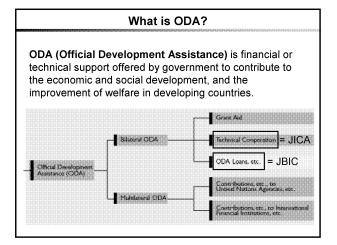
- PTT
- · Capital Rice
- AMATA

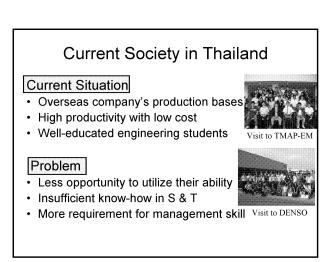
Thank you for your kind attention!

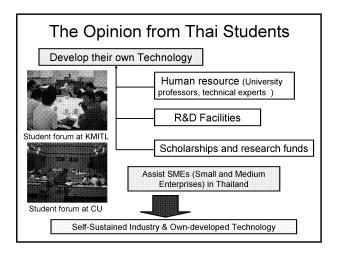


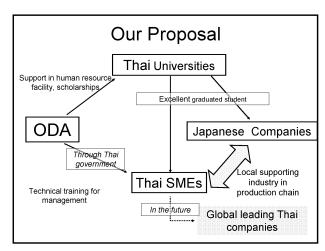


# What is ODA ? Current Situation in Thailand The opinion from Thai students Our proposal for future of Thailand Conclusion









## Conclusion

The way to create self-sustained industry & own-developed technology

#### ODA

- Strengthening human resource, facility, scholarships through ODA
- Financial and technical supports for SMEs

#### **Japanese Companies**

- Nourishing excellent Thai employees with skill of management level
- · Widening channel with Thai SME



Self-sustained industry in Thailand

## Thank you for your attention!



http://blog.terakoyahonpo.com/images/dona1.jpg

## Japanese Companies in Thailand

#### Example of famous companies in Thailand

• TOYOTA, DENSO, SONY...

#### Roles of these companies

- · Expanding employment
- Producing high quality products with low cost
- →Accelerating Thai economy



/isit to TMAP-EM



Visit to DENSO

## JICA's activities in Thailand

- ASEAN University Network/Southeast Asia Engineering Education Development Network (AUN/SEED-Net) Project
- Asia-Pacific Development Center on Disability (APCD) Project
- HIV/AIDS Regional Coordination Center Project
- · Disaster prevention ability improvement
- etc.

# JBIC's projects in Thailand

- Suvanabhumi airport (super-structure)
- Mass Rapid Transit Authority of Thailand (construction cost for red-line)

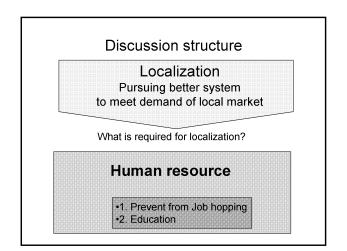


Governor of MRTA

- · Bridges crossing Chaophraya River
- etc.

# Japanese enterprise in Thailand

JAYSES discussion group 4 Kodai Sato Kota Ashikawa Shinji Sasamoto &Thai students who joined our discussion



#### Human resource

# 1. Prevent from Job hopping

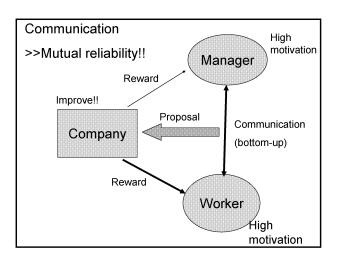
Key point: Motivation

-It is important to keep workers' motivation high

Of course Salary is essential...

↓ but!

Reward and communication!



# 2. Education How to increase the number of Thai workers in Top position? →Education of workers in middle position. About what? Ability to find problems and solve them. now In the future Top Japanese Thai Middle Thai



Annex e

## Summary of evaluation by the participants

1. How did vou know JAYSES?

da you know office.			
	Tokyo		
Answers	Tech	Thai univ.	Total
Mailing list, mail news	5	0	5
from friend/professor/stuff	4	7	11
Website	3	2	5
Poster	2	0	2
Total answers	14	9	23

2. What was your first motivation to participate this program?

was your most watten to participate this prog	1422.		
	Tokyo		
Answers (multiple)	Tech	Thai univ.	Total
To make good friends	6	6	12
Observation of various organizations	6	5	11
To broaden horizon	4	3	7
Unique experience more than sightseeing	3	2	5
To upgrade English ability	4	0	4
To learn different culture, society	3	1	4
Cost effectiveness	3	0	3
Wanted to go Thailand	3	0	3
To study about ODA	1	0	1

3. Are you satisfied with JAYSES program?

on building with officer progre	ш.			
		Tokyo		
Answers	score	Tech	Thai univ.	Total
Satisfied very much	2	11	9	20
Satisfied somehow	1	3	0	3
Not satisfied	0	0	0	0
Total answers		14	9	23

SD=0.337 AVG=1.87

#### 4. Please explain the reason for your choice on question 3.

Tokyo Tech students
The program broke my stereotyped idea about Thailand, which is quite developed in various field of technology.

It broadened my outlook on the world.

I could meet many nice people. Through discussing with Thai students, I was motivated to study English much more.

Well-prepared observation visit to Japanese companies in Thailand, which gave me useful and important information about business.

Increase my knowledge on international relations and further my discovery of Japanese investments in Thailand.

Share opinions and ideas in English with people from many different cultures and backgrounds.

Challenge my ability in leadership during the group discussions.

#### JAYSES: Japan-Asia Young Scientist and Engineer Study Visit 2007 Final Report

I could brush up my English conversation skill by fully utilizing my poor vocabulary to communicate with students in different background.

.....

I learned a lot how Japan and Thailand are different.

I was stimulated by meeting with high-motivated and active students from Tokvo Tech and Thai universities.

I could lean many things from comparison study of Thailand and Japan.

I learned that not only manufacturing industries but also R & D is important to develop a country.

I could make good communication and exchange with Thai students.

I could study some basic conversation of Thai.

Thai food is so tasty! (lol)

Because the main purpose of the program was accomplished and participants seems to be satisfied with the program. Not only that, JAYSES contributed for Tokyo-tech.

I could deepen my knowledge about Thai culture and society through communication with Thai students.

I could hear the direct comment from the people working in Thailand. The program helped me to make a clear vision on my international career path in the future.

It was very good social studies to contact and discuss with people in industries. Not enough time for visiting

Wanted to have fieldworks designed by ourselves

I was quite disappointed when we had to skipped Ayudhya visit.

Because the program met my expectation, and I even got the chance to know things I did not think I would get from the program, for example, visiting Thai industries or Japanese industries in Thai, and having a chance to take a look inside their factories as well.

Students of Thai universities I never have experiences like this before so I think it's great. I wish I can joint this activity again some day later.

I have gained a lot of good experience and memory. Participants both from Japan and Thailand made the program worthwhile and full of fun.

I already got the many good things from this program especially the very good relationship from the Tokyo Institute Technology, other Thai University and also both of kindness Coordinators. Moreover, I also got the new experience and knowledge about the association and the company which contact directly to the Japan.

I met good people, learn more things about businesses in Thailand and have a great time in this program.

I gain a lot of knowledge and get many new ideas about my life from talking with Japanese students. Also the program is very well planed.

I have made progress in opening an attitude about engineering; I have improved my English skill when I talked to Japanese students. I am very impressed by their relationship.

I had a great time.

The program is well planned and I get to know more about my country both from sight seeing and thoughts sharing among JAYSES members.

I've got very great friends, and they are really friendly - wish that we still keep in touch, and in the future, we may have chance to exchange the ideas in anything.

#### 5. Please evaluate each part of the program and make comment if any.

[Preparatory studies]

#### General Information about Thailand

cheral information about rhanana				
	Tokyo			
	Tech	Thai unv.	Total	
Satisfied very much	9			9
Satisfied somehow	4			$\overline{4}$
Not satisfied	0			0
Total answers	13	0	1	3

Thai language tips

and language tips			
	Tokyo		
	Tech	Thai unv.	Total
Satisfied very much	4		
Satisfied somehow	9		•
Not satisfied	0		(
Total answers	13	0	13

Visiting JTECS

Sitting 011200			
	Tokyo		
	Tech	Thai unv.	Total
Satisfied very much	10		10
Satisfied somehow	4		4
Not satisfied	0		0
Total answers	14	0	14

## Comments

I could learn a lot more than I expected. Especially about the information of the demands for automobile in Thailand.

Mr. Wada's lecture was very informative to understand the present situation of industries in Thailand and the relation with Japanese companies.

 ${\bf Q}$  & A session with Mr. Wada was much more than I expected that we could study how is the advantage Thailand in terms of "geopolitics" and the recent situation of higher education.

Introduction by Tourism Authority of Thailand

	Tokyo Tech	Thai unv.	Total
Satisfied very much	6		6
Satisfied somehow	6		6
Not satisfied	1		1
Total answers	13	0	13

Comments

The materials provided by Mr. Fujimura were very useful during my stay in Thailand.

Presentation and Q & A among members

	Tokyo Tech	Thai unv.	Total
Satisfied very much	10		10
Satisfied somehow	2		2
Not satisfied	1		1
Total answers	13	0	13

Comments
Good opportunity to know members each other. I could practice English presentation, which help me not to be nervous when I visited Thailand and make presentation. Informative session to have the basic idea about the visiting organization, of course.

#### [Study visit in Thailand]

#### ReCCIT

	Tokyo Tech	Thai unv.	Total
	recii	That unv.	Total
Satisfied very much	4	2	6
Satisfied somehow	9	3	12
Not satisfied		1	1
Total answers	13	6	19

Comments

Good opportunity to observe research facility in Thailand.

#### Student Forum at KMITL

	Tokyo Tech	Thai unv.	Total	
Satisfied very much	6	4		10
Satisfied somehow	6	3		9
Not satisfied	2	0		2
Total answers	14	7		21

Comments

The first time we could communicate with Thai students.

Thai students were so friendly that we made good friends.

Although it was the first meeting for us, without any gap between our communication.

A meaningful session simply because it was the first opportunity to exchange idea with Thai students.

Because it was just the day after arrival in Thailand, we couldn't make discussion deep enough. Anyway, it was fun to communicate with them.

It was regretful that we couldn't make enough preparation for discussion.

Capital Rice Company Limited

	Tokyo		
	Tech	Thai unv.	Total
Satisfied very much	8	7	15
Satisfied somehow	6	0	6
Not satisfied	0	0	0
Total answers	14	7	21

Comments

Too hot to wear white coat. We could hear nothing under the sound of machines.

# JAYSES: Japan-Asia Young Scientist and Engineer Study Visit 2007 Final Report

Too hot...

Too hard to walk around with white coat in such hot weather.

Very good observation because we could follow the production line in order of process.

TOYOTA Motors Asia Pacific - Engineering and Manufacturing

	Tokyo		
	Tech	Thai unv.	Total
Satisfied very much	6	1	7
Satisfied somehow	7	5	12
Not satisfied	1	0	1
Total answers	14	6	20

\_\_\_\_\_\_

#### Comments

It was just presentation and no observation tour.

Because I'm interested in TOYOTA personally, it was very good opportunity for me to visit TMAP. I wanted to have more chance to talk with people working in industries. As TOYOTA is famous and we couldn't make any observation tour, not much something new to me. However, Q & A session was quite interesting.

I wanted to take a look at the facility.

Siam DENSO Manufacturing

	Tokyo			
	Tech	Thai unv.	Total	
Satisfied very much	14	5	1	19
Satisfied somehow	0	1		1
Not satisfied	0	0		0
Total answers	14	6	2	20

## Comments

Good opportunity of on-the-spot observation.

Excellent arrangement for facility tour. All 4 groups referred to what we learned at SDM, diligence of Thai workers and merits/demerits of automation and manual process. It's simply because program at DENSO was great.

Very interesting facility tour with explanation.

Nice tour with informative explanation.

It was great experience to know the real industrial process closely.

#### Amata Industrial Estate / Ota Techno Park

	Tokyo			
	Tech	Thai unv.	Total	
Satisfied very much	7	4		11
Satisfied somehow	6	2		8
Not satisfied	1			1
Total answers	14	6		20

#### Comments

It was just a presentation and there was limited time to see.

Precious opportunity to talk directly with executive of Thai company.

Innovative and progressive business model! It should be introduced much more widely.

#### **Board of Investment**

	Tokyo		
	Tech	Thai unv.	Total
Satisfied very much	4	4	8
Satisfied somehow	10	1	11
Not satisfied	0	0	0
Total answers	14	5	19

PTT Research and Technology Institute

	Tokyo		
	Tech	Thai unv.	Total
Satisfied very much	11	5	16
Satisfied somehow	3	0	3
Not satisfied	0	0	0
Total answers	14	5	19

Comments

-----Energetic presentation by Vice President!

It was pity that we had to skip Ayudhya visit because of longer stay here than scheduled. However, the presentation was so interesting that it compensated my satisfaction. The lady Vice President is so super!

Mass Rapid Transit Authority of Thailand

	Tokyo Tech	(T)  :	/D-4-1	
	Tecn	Thai unv.	Total	
Satisfied very much	12	4		16
Satisfied somehow	2	2		4
Not satisfied	0	0		0
Total answers	14	6		20

Comments

As I was in charge of MRTA during preparatory studies, very interesting visit. Very kind of Mr. Governor to take enough time for Q & A for us.

The Governor is so handsome and cool. It was good to know that some consultant collaborate with such organization.

We could know how the big project plan from MRTA.

Bangkok Metro Company Limited

	Tokyo		
	Tech	Thai unv.	Total
Satisfied very much	10	3	13
Satisfied somehow	4	2	6
Not satisfied	0	0	0
Total answers	14	5	19

Comments

As a student of civil engineering, I'm very interested in this visit the most. I was surprised to know that all the trains are controlled in second-wise precision. Also surprised that there aren't any time table for trains even under such well-controlled system.

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AUN/SEED-Net Project

	Tokyo Tech	Thai unv.	Total
Satisfied very much	5	2	7
Satisfied somehow	6	4	10
Not satisfied	3	0	3
Total answers	14	6	20

\_\_\_\_\_\_

Comments

I am one of SEED-Net student, so I proudly to be a member.

One of the speaker's English was a bit difficult to understand.

Student Forum at Chulalongkorn Univ.

	Tokyo		
	Tech	Thai unv.	Total
Satisfied very much	8	5	13
Satisfied somehow	6	1	7
Not satisfied	0	1	1
Total answers	14	7	21

## Comments

It should be more active discussion forum.

The discussion time was very fruitful. However, the venue was too large to follow the oral presentation by each group, which was dull.

It was very good time to collaborate with Thai students to make active discussion and presentation. I would like to thank the staff of Chulalongkorn University for providing us such opportunity.

We could accumulate the know-how for active and efficient discussion to make the final outcome on presentation.

The discussion was very smooth because we took enough time to prepare for it. Pity that some students didn't pay attention when other group made oral presentation.

Laem Phak Bia Royal Project

	Tokyo			
	Tech	Thai unv.	Total	
Satisfied very much	9	7		16
Satisfied somehow	5	0		5
Not satisfied	0	0		0
Total answers	14	7		21

Working stay at Huahin

	Tokyo Tech	Thai unv.	Total
Satisfied very much	6	7	13
Satisfied somehow	6	0	6
Not satisfied	2	0	2
Total answers	14	7	21

Comments

The hotel was in wonderful environment to prepare the final presentation. The beach was also fantastic.

Wanted to have more time for the beach. Anyway, it was fun.

The schedule was so tight that I finished preparation just before checking out time.

# JAYSES: Japan-Asia Young Scientist and Engineer Study Visit 2007 Final Report

Anyway, I could recover from the fatigue in Bangkok. I wanted to have more time there.

Joining annual meeting of Tokyo Tech Alumni Association in Thailand

	Tokyo		
	Tech	Thai unv.	Total
Satisfied very much	9		9
Satisfied somehow	3		3
Not satisfied	1		1
Total answers	13	0	13

# Comments

To take the opportunity to meet with OB, JAYSES member should not sit in one group but scatter to other tables. It was difficult for junior persons like us to cut into other table in such situation.

Because there were many VIPs including the President of Tokyo Tech, I became very nervous and got goose pimples.

Good chance to meet with senpai (OB).

I had very good opportunity to talk with OB from the department that I belong to, who is working in Thailand. Good occasion for JAYSES to advertise good impression to the Presidents and Alumni Association, especially by the on-the-air DVD of Channel 3.

Joining TAIST Grand Opening Ceremony

	Tokyo Tech	Thai unv.	Total
Satisfied very much	2		2
Satisfied somehow	7		7
Not satisfied	5		5
Total answers	14	0	14

# Comments

It was the final day and our fatigue was on its peak. It was difficult for us to keep concentration on panel discussion.

#### Presentation Forum at TSP

	Tokyo Tech	Thai unv.	Total
Satisfied very much	7	3	10
Satisfied somehow	6	1	7
Not satisfied	1	0	1
Total answers	14	4	18

# Comments

As the last event of study visit, good opportunity to sum up and review what we did in Thailand.

Every one tried his/her best. The first and last time for us to show our effort in Thailand.

All the group made very good presentation in limited time. If there were more guest, it should have been more effective and fruitful.

I understand that the time was limited, but it should have had a bit of time for Q & A to get feed back. There was no introduction of distinguished guests.

I was very nervous to make presentation in English. But this experience motivated me to study English much harder.

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#### **NSTDA**

E I DII			
	Tokyo		
	Tech	Thai unv.	Total
Satisfied very much	1	2	3
Satisfied somehow	8	1	9
Not satisfied	5	1	6
Total answers	14	4	18

Comments

Not enough time. No explanation

We should have visited before the final presentation.

#### 5. Please give us advice for the future program.

#### Management

# Tokyo Tech students

There have been so much tasks for both P' Shimu (Mr.Shimura) and Aj.Teramoto (Prof. Thirapong) through the program including preparation.

Students could have helped the task of Tokyo Tech staff.

If we could have involved Thai students studying at Tokyo Tech, it would have been much more effective.

Thanks to Prof. Thirapong, Mr. Shimura, Mr. Minamino and Mr. Morishima for taking part in working committee. Especially without strong leadership of Mr. Shimura and Mr. Minamino, JAYSES could not have made such successful outcome. I think more students could have joined the management to share the workload.

We should have let more 2nd and 3rd year students to join. But the participation from graduate school helped a lot to the program, we should not reduce the number of graduate students. Instead, total quota for participants should be more as well as the number of Tokyo Tech staff to accompany. If I have a chance to join next time, I would like to help Mr. Shimura and Prof. Thirapong to share the tasks.

The number of participation was just fine. (10 plus) If I could acquire credit, it would be better. Combination of Mr. Shimura and Aj. Thirapong is the best! Aj. Thirapong can speak Japanese and Thai, which eased our anxiety very much.

Students communication should have started before we visited Thailand. Most of the Thai students have their MSN account and sign on messenger very frequently, which might reduce the burden of preparation by Mr. Shimura and Aj Thirapong.

Recruitment for Thai students should have done much earlier.

I think it was good management. Everything is so well prepared by the university staff and we almost did not do anything else. I'm not sure if it's a good advice, but maybe it's also good to consider giving more role or responsibility for the students, for some kind of learning opportunity in managing activities like this, and also for the sense of belonging to the program.

It was good because 2 staff were assigned to this program. Role of student leader like Mr. Morishima or Mr. Minamino is also indispensable.

Students could have joined the process of project designing and management. It was too much for 2 staff of university.

I wanted to visit laboratory related to my specialty. Such experience may encourage students to study abroad.

This is the second time for me to participate this kind of program. As Dr Thirapong is a locality this year, we got truly so much convenience from even the moment we arrived at the airport to our dinner dishes. (So if next program is for Beijing Olympics, I would like to take a role as Dr Thirapong or Mr. Minamino. I would feel so honored to bring the others convenience, especially in my hometown.)

# Students of Thai universities

Good management, very well-prepared

I think your management in JAYSES was really good.

There was no coordinator at my department, so the arrangement was so difficult at first

Keep up with this level.

#### **Financial Support**

# Tokyo Tech students

It will be a good idea to cover the trip expenses, because it seems that it is the most expensive part of the program.

The more, the better. But 60,000 yen was sufficient enough.

As I was supported by alumni association in the past, I couldn't have the financial support this time. I understand that it's difficult but if there is any possibility of relaxing this rule, it will be better.

Not enough budget for program by Tokyo Tech. Appreciation plate was not gorgeous enough for gift. Some local expenses which were difficult to get receipts couldn't be reimbursed. I think there are some rooms for upgrading this kind of regulation, if university understands the real situation of developing country.

Full scholarship is welcomed.

To collect good participants, more financial support can be incentive.

## Students of Thai universities

More financial support for Thai students, especially for their meal.

Thai students may have problem with transportation.

Only if JAYSES could ask Thai university for more support...

It's now in the proper way.

I didn't spend my money to join the program except for my personal consumption such as lunch. It's enough for me.

#### Process of preparation

# Tokyo Tech students

If a mile stone schedule for preparatory activities until final reporting session in Japan, that would help participants to plan summer vacation.

If a sample of report could be shown, it would make the study visit much more effective one.

Not enough information for those who made trip abroad for the first time. Actually I like the way management have been done this time but beginners might have needed more care.

Preparatory studies should have started much earlier.

More instruction should be provided for those who are not familiar with trip abroad.

I think we should have included practice for effective discussion in the preparatory studies.

#### JAYSES: Japan-Asia Young Scientist and Engineer Study Visit 2007 Final Report

Preparation was so good, also the preparatory study gave us a rough idea on the company we would visit. Is it possible to have a one day or two days preparatory study instead of one month? It's quite difficult to attend all the session if the session is broken like this year's

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Good management to adjust schedule for all the members.

Wanted to study Thai language more. That would make Thai people happier.

More native student is desirable so as to make us more raw information about Thailand.

#### Where to visit next time?

#### Tokyo Tech students

To maintain good network, it's better to continue this program to visit Thailand

Visiting both Thailand and the Philippines (including English studies). It may be easy to conduct in these countries because there are branch offices of Tokyo Tech.

Visit around several Asian countries in one trip(Thailand, Singapore, Vietnam, Malaysia)

India

Vietnam

China

Considering that success of this program owes much to personal network of Mr. Shimura and Prof. Thirapong with various organization in Thailand, next program should continue to Thailand. If we could visit Singapore or Vietnam after Thailand for comparison studies, it is great.

Korea

As we already have fieldwork program to the Philippines by International Development Engineering Department and the short study visit program to China by Prof. Hashizume, JAYSES should continue to send students to Thailand. Better not expand to other countries but should concentrate on Thailand to make better program and foster sustainable human network.

Indonesia, to see huge gas/oil plants

Singapore, expecting high leveled discussion in English

I think Malaysia or Vietnam will be a good destination. I'm not sure about Laos though. Does it have to be in South East Asia? If not, India will be a great learning opportunities for program like this.

The best choice is Beijing, Olympic is a special season. Also it is a special chance for everyone to touch with new Beijing and new China even new Olympic spirit! Rather than get information about a rising China from mass media, be there and feel everything by our heart is obviously better.

Developing countries which are difficult for us to plan individual trip.

# Students of Thai universities

Since I am Indonesian so I promote JAYSES to visit to Indonesia. I think there also have many Japanese industries. Many Indonesian students also graduation from Japanese University so it will feel more comfortable.

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Vietnam

Malaysia or maybe Singapore

I really want to visit Japan. ^\_^

Would you please visit my university next time? Kasetsart University!

China

#### Quantity of activities

# Tokyo Tech students

Less activities, more balanced sectors (not only companies and research institutes)

I think this year the schedule is a bit tight. Beside that play drama by ourselves in Manila last year is good way for communication at the same time.

Amount of activity was good. But it was too concentrated in short duration.

Too few days to visit so many organizations.

It was OK for me but for those who are not strong enough might be too tight schedule.

Chartered bus (double-decker) was very useful for us to take rest during transportation.

Activates and length of stay were matched but better to spare one day in the middle (not in the last like this time).

10 days are too short for me. 2 to 3 weeks are needed not only to visit organizations but also to make close exchange and discussion with Thai students.

2 organizations a day maximum. 3 spots are too much. It should have been difficult for Thai students to gather early in the morning every day.

Less number of visiting site and more time to each place would help us to study deeper. Not enough computers considering 4 groups to make presentation.

Can be more days like 2 weeks. More physical program would be nice. (especially after lunch)

Need more free time for social, cultural visit.

# Students of Thai universities

I think this activity must have balancing between studying and refreshing so it must be scheduled as well to make participant enjoying the activity.

I think that schedule is OK.

There should be more activities for students to get to know others.

Your activities were enough for eight-day program, but I think you should expand more free days in order that your Japanese students could have time for traveling Bangkok and relaxing with Thai students.

More time would be nice. The schedule was so tight and strict

Should be more forums and group discussion. But should increase the time for rest/fun such as go out together or go to shopping together.

#### 6. Did JAYSES give you impact on you idea, vision, future plan, etc...?

# Tokyo Tech students

Yes, I never thought that Thailand has been really developed for the last several years. It is very interesting to know more about Thailand. I also never thought that their King has a really strong influence in people, especially young generation. I see it as one of the strongest points Thailand has compared to other ASEAN countries.

JAYSES offered me a good chance to share opinions and ideas with people from many different cultures and backgrounds. I can't say how I have changed in such a short time. However I am sure of great returns in the near future.

For the future plan, I want to be international player who can move all around the world.

Yes. I understood the importance of relationship between Thai and Japan. I hope to contribute to both Thailand's and Japan's development.

#### JAYSES: Japan-Asia Young Scientist and Engineer Study Visit 2007 Final Report

I was impressed with the generosity of Thai people during my stay. They took care of us, explaining cultural issue, sharing snacks etc. My career plan is to work in the English speaking area, and the experience of JAYSES made me more confident on my plan.

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I heard from the staff of Tourism Authority of Thailand that Thailand has many millions of repeating visitors. Now I understand the reason very clearly. Now that I can ride on MRT by myself, I would like to visit Thailand again.

It was my second time to visit Thailand but it changed my idea about Thailand that it's not a developing country any more. I made good friends with Thai students, and their diligence motivated me to brush up myself. I've already decided my job, but in the long run, this program will give impact on my life.

Before joining JAYSES, I hesitated to apply for exchange study abroad program, but now I decided to apply and study abroad.

In daily life, we tend to focus on western country. It was good opportunity for us to think about Asia.

Thailand is much more comfortable country to stay than I imagined. And much more developed than I thought. I was impressed when I find His Majesty's picture anywhere in town. I decided to study Thai language.

anywhere in town. I decided to study Thai language. I am interested in JICA and JBIC before joining JAYSES. After I learned the contribution of ODA to Thai industries, education, infrastructure and many other fields as my personal experience, I made up my mind more strongly to work in this

I thought Thai people are always relaxing but I was surprised to know that younger generation make effort to study hard. I think neighboring countries will follow Thailand in same way. I am very interested in Thailand situation from now on.

One of the strongest impressions was the activeness of Thai executive in local Convincing speech, skillful intelligence to lead discussion and international sense of balance were admirable. I hope I can work with such kind of people as a partner or even colleague in the future. JAYSES helped me to make such clear vision on my career plan.

Thai people are very friendly. My idea about Thailand was changed 180 degree! I thought Thailand was developing country but it is not. Infrastructures such as port, airport or highway are developed and it has geopolitically advantageous location in the region. There are many human resources in research institute so I could learn why big companies like TOYOTA are trying to establish base of R&D here. I visited Thailand as a student but I would like to visit again as a consultant to contribute to the economy in the Asian region. I also found that there are many similarities between Japan and Thailand, so it's very friendly country for us. I will visit Thailand not only for business but also for my personal trip. 

#### Students of Thai universities

Japan is one of the most powerful countries in Asia so Japan should be active to lead some development country to enhance our regional prosperous.

Yes, very much. Not only about Japan but I particularly interested in TiTech as a next step to further education. During the trip I gained much useful information.

# JAYSES: Japan-Asia Young Scientist and Engineer Study Visit 2007 Final Report

Yes, I have ever thought about the plan to study in the Master degree in Japan (About the Nanotechnology). When I participate this program, I have more strong vision to study in Japan than before and I will tried to study more and more to make my dream come true. During the study in the undergraduate program in my university, if I have a chance to go Japan like a exchange student or go training in the summer vacation or whatever I also would like to go to Japan too (if I have a chance).

I know more about Japanese life style, how Japanese thinking and a lot of production process from this program. And I think I can apply it with my life after this program to improve my own life or even my own country to be better.

Yes, I found out that Japanese people can be serious with work and they can have a lot of fun too.

Absolutely yes!

Yes, I would like to go study in Japan in the future

We see that Japan is a highly developed country with modern technologies especially in the private sectors. In my opinion, Thailand needs the support on gaining such "know-how" more than to be given with the final products like machine, material supports.

I decide to go to study in Japan for my graduate/master degree. And I think Japanese friends are really friendly and enjoy! Also, I surprise (but its good) that Japanese can use English really efficiently!!

#### 7. Others

# Tokyo Tech students

The JAYSES experience was really nice. I hope to join other similar program like this one.

Not only would this experience be beneficial for me but also beneficial for other Tokyo Tech students that I would come into contact with after the project. This investment of time and money would have great returns for the future of all participants, universities and countries. I would feel honored to participate in this program.

Thanks a lot for the great support from Kuramae OB meeting.

I could not have vested so various kinds of organizations without JAYSES arrangement. I would like to utilize this precious experience for my activity. And joint study trip with Thai student was wonderful. No matter difference of nationality or culture, we are same young students with same mentality. The time spent with Thai friends is my wonderful memory of this program.

Except for small points to be upgrade, JAYSES was very successful program with well-prepared and overall management. Comparing other similar program, one of the key factors for success of JAYSES was limitation of participating universities only to Tokyo Tech and a few Thai top ranking universities. If JAYSES expands the participation widely, it might be better but also difficulty to control and manage the program. For example, on first day, Thai students tend to make groups by universities. I can't say good or bad to this issue but would like to hear Thai students' opinion. Anyway, I am very happy to participate this program.

I was surprised to see how high the participants' (Japanese, Thai and others) motivation and ability of English are. I was encouraged to make more effort to keep my studying life in Thailand meaningful.

Big thanks to Mr. Shimura, Prof. Thirapong, Mr. Minamino. Tokyo Tech members are all excellent, which encouraged me a lot. I would like to keep in touch with Thai students.

It was a bit hard schedule during staying in Thailand, but it gave me fulfillment. As for my English ability, there were some cases that I couldn't follow what they were saying. I must study English much more! One thing made me happy is some Thai students decided to take Japanese class in next semester because they are impressed to see how Tokyo Tech members improved on Thai conversation. Of course English is the first language for international communication, I think the effort to learn partners' mother tongue is the basic attitude for cross cultural communication. While my stay in Thailand, I tried not to show up myself "Japanese-like" by wearing same T-shirt as Thai students, on the other hand, I kept in mind that I should behave myself as a model of Japanese. Flexibility of adjusting life and stability of identity are the key for good communication with foreigners, I think.

I would like to thank Mr. Shimura, Aj. Thirapong and other staff for establishing such wonderful program. I can imagine how hard you try to prepare a program like this. I will graduate from Tokyo Tech next year and become a member of society. I'm sure I will utilize what I learned through JAYSES. I hope we will have reunion sometimes in the future.

I could learn many things about Thai industries and society through systematic program starting from preparatory studies. JAYSES helped me to make friends not only in my department but those who are in other fields. Sometimes I felt tired of hard schedule, but considering the difficulty to make such well-prepared program with full of contents, I would like to appreciate Mr. Shimura, Prof. Thirapong and other staff.

No matter their nationality, JAYSES members are all highly motivated students and I enjoyed very much being in the group. I experienced pleasure and difficulty of English communication. Not many Tokyo Tech students take the chance to apply for the exchange program to study abroad with many kind of support offered from university. I think that the program like JAYSES can trigger and accelerate those students to be motivated to study abroad. I strongly hope that this kind of program should continue every year.

# Students of Thai universities

In JAYSES activities, TIT can promote or inform about their university in further toward another countries student.

Is it possible for the foreigners to have the activities in Japan? (Like the program that was hold in Thailand but held in Japan instead)

Thank you Shimura san and Thirapong san and other JAYSES members that give such a good time.

Thank you for JAYSES camp that gives me an opportunity to join in. I liked it very much because it extremely impacted my vision about Thailand-Japan technology and economy. Attending JAYSES camp, it made me improve my English skill especially speaking. I loved talking to Japanese friends. They were really friendly. We changed Thai-Japanese cultures each other. That was very fun. You know that Japanese friends are my inspiration to take Japanese language course next term!

JAYSES is a great program. I really enjoy it and looking forward to participating in future JAYSES events if possible. Keep up the good work.

Wish to see you all again. Wish that for the future, there will be the program again and Thai people and Japanese can be more understand and keep in touch.

Annex f

## Script of Channel 3 news program (2 Sep. '07)

#### **English:**

- Parts of technologies used in Thai industries have an origin from Japan. As being the leading country in developing technologies, university in Japan provides students the opportunity to learn how Japanese technologies have been applied in foreign country as the extracurricular activities.
- Japan-Asia Young Scientist and Engineer Study Visit or JAYSES brought a group of students from Faculty of Science and Engineering from Japan to Thailand in order to visit and observe Thai industries using Japanese technologies.
- Students from Tokyo Institute of Technology gave the opinion that Thai education system has an entrance examination so that he believes only capable students can enter universities. On the other hand, Japan focuses on quality of research which is the strength point of Japan.
- Mr. Yuki MINAMINO (B4) Dept. Electrical and Electronic Engineering, Tokyo Tech "I will talk about two points.

First one is from educational point of view. The most different point is I think that in Thailand it is both difficult to enter and graduate from university. But in Japan, it is very easy to graduate from university. But the high quality of the graduate school is Japan's strength I think.

And the second one is from engineering point of view. Thai strength is their characteristic I think. For example, some engineers from Japan told us that Thai people have very good eyesight. He meant they don't need microscope to find defective products even if skilled Japanese engineers need it. Not only that, Thai people have some kind of craftsmanship to make products like cars or some electronic devices. 10 or 20 years ago, it was common in Japan as well. But nowadays, that kind of craftsmanship has gradually lost in young generation in Japan. It is very important point to make industry to have craftsmanship mind. On the other hand, Japan has different strength. I think it is a partnership with Thailand. I mean this year is 120th anniversary of Japan-Thailand diplomatic relationship. That long relationship between our countries makes it possible to make good relationship not only diplomatic field but also industry or other kind of business field."

- The lower cost of Thai labors is the main factor attracting investment from Japan. In return, Thailand enjoys the benefit from technology transfer for developing the industries.
- Ms. Yuki SUNAMI (M2) Dept. Civil Engineering, Tokyo Tech "Once Thailand was a base of manufacturing and assembly for Japanese commercial companies due to their low personnel cost. It contributed toward expansion of employment of Thailand, and they make Thailand society more convenient and comfortable. At present, they hope for not only production base but also research and development base. In that background, each company put a lot of attention to employee's training of human resources and expect them will be a leader and will lead their companies. Therefore induction and management system are innovated from Japan."
- Investment from Japan is approximately 8,600 million Baht. Mayuko Shitara from Tokyo Tech said, during her study visit she found that Japanese private sectors have greatly invested to

Thailand and could expect an increasing trend in the future. Still Japanese government supports Thailand in terms of financial funds rather than technology assistances.

- Ms. Mayuko SHITARA (B4) Dept. Biotechnology, Tokyo Tech

"First, about the Japanese private sector, the impression by visiting Japanese companies here, I think they contribute Thai industry a lot. Not to mention employing a lot of Thai people, Thai employees but also they are trying to bring up the Thai managers. And they do that in Thai way not Japanese way. And also Japanese companies start to pay attention to Thailand not only as a labor intensive but also as a base of R&D and also high technology. So I think Thai industry can expect more contribution from Japanese companies.

But on the other hand, Japanese government ODA's reputation is not as much as I expected. Actually they are collaborating and assisting a big financial support to Thailand. But Japanese should know that Thai expect high-technological support to promote human resource development, I think."

- However, attitudes about career paths and culture of craftsmanship between Thai and Japanese are still different especially in R&D and industrial automation.
- Ms. Siraprapa SANPA-ARSA (B4) Dept. Physics, Kasetsart Univ.
   "In Thailand, salary and social status of engineers and scientist is significantly inferior to management levels who are their boss ..."
- Mr. Shinji SASAMOTO (B4) Dept. International Development Eng., Tokyo Tech "In Japan, It's very common for workers to work at the same companies for a long time. And the companies have a lot of skilled workers. This is one of the advantages of Japanese companies. However nowadays many Japanese companies have been reducing regular workers to cut the personnel costs. As a result, they are facing the problem of lack of experts.

Another way to cut the personnel costs is automating their processes. But it makes them more difficult to improve them quickly because of complicating system."

- JAYSES provides the study visit program to Tokyo Tech students with Thai students from Chulalongkorn University (CU), Kasetsart University (KU), King Mongkut's Institute of Technology Ladkrabang (KMITL) and Sirindhorn International Institute of Technology (SIIT) to learn how Japanese technologies are being applied and affect to Thai industries for 7 days and to strengthen the relation among next generation of people who will play a leading roles for developing technologies of both countries.
- Clare Patchimanon, Morning World, reports

#### 日本語:

- タイの産業界に普及している技術の一部は日本から伝わってきた。世界の技術をリードする日本の理工系大学では、大学主催のプログラムとして、海外で日本の技術がどのように応用・活用されているのかを実例として学ぶ機会を学生に与えている。
- Japan-Asia Young Scientist and Engineer Study Visit: JAYSES プログラムでは、日本から 理工系の大学生をタイに派遣し、日本の技術を運用・応用するタイの産業界等を訪問 し情報収集する活動を行った。

# JAYSES: Japan-Asia Young Scientist and Engineer Study Visit 2007 Final Report

- ・ 東京工業大学から参加した学生の所感では、タイの教育制度の特徴として大学の入 試・卒業の難易度の高さがあげられ、その一方で日本では大学院の教育・研究体制が 充実しているため技術者育成に貢献している点を述べていた。
- 南野友輝 東工大電気電子工学科 B4

「2つの視点から述べたいと思います。

1つ目は、教育的な視点からです。最も大きな違いは、タイでは大学における入学・卒業の両方が難しいということです。日本では卒業は非常に簡単です。しかしながら、大学院のレベルが高水準であることが日本の強みであると私は考えています。

2つ目は、技術的な視点からです。タイの強みは彼らの性質にあると思います。 日本から来た技術者に聞いた話ですが、タイ人は非常に優れた目を持っているそうです。つまり、彼らは不良品や製品の不具合を見つけるのに、顕微鏡を必要としないというのです。日本の熟練技術者でも必要なのにも関わらず、です。それだけでなく、タイの人々は車や電子製品を作るのに、ある種の職人気質を持っていると思います。10年から20年程前までは日本でも当たり前のものでしたが、今日ではそのような職人気質は若い世代から失われつつあります。職人気質は、産業を発展させる上でとても重要なものなのです。

一方で、日本は異なる強みを持っています。それは、タイとの関係です。今年は日タイ修好120周年にあたります。両国によるこの長い関係は、外交だけでなく産業やその他のビジネスにおいても良い関係を持つことを可能にするでしょう。」

- 日本より安いタイの人件費が日系企業から投資を誘致する要因である一方、タイ従業員は日本の技術移転を受けるという恩恵にあずかることができる。
- · 角南由紀 東工大土木工学科 M2

「かつて日本企業は、人件費の安さ(低さ)から生産・製造の場としてタイをみていた。それら(日本企業の進出)は、大量生産に必要な人員を確保することで、雇用拡大という面で寄与した(貢献した)。またそれら大企業の進出は、タイの方々の生活をより便利に快適にした。ところで現在は、そういった生産・製造の分野だけでなく、研究開発の面においてもタイに進出し現地に根付くことが内外から求められている。そのような状況の中、タイに進出している各々の企業では、タイ現地採用者の人材育成に力を入れており、ゆくゆくは彼らが現場リーダーとなり会社をけん引していくことを期待している。そのための研修プログラムや管理体制などが日本から導入されている。」

- 日本からタイ工業部門への最新投資額は約86億バーツ(311億円)である。参加学生の一人設楽まゆ子は、今回の企業訪問・生産現場の視察を通して、日系企業がタイへ多大な投資を行っており、さらに将来増加する傾向が見られることを学んだ一方、日本政府のODAがタイから求められている技術援助よりむしろ資金援助が強調されてしまう点を指摘している。

- 設楽まゆ子 東工大生命工学科 B4

「まず最初に日系企業についてだが、タイにある日系企業を訪ねたときの私自身の印象からすると、企業のタイの工業への貢献は大きいと思う。タイの人々を雇用者として雇うだけでなく、タイ人のマネージャーを育て上げることにも力を入れている。そしてそれは日本のやり方ではなく、タイ人にあったやり方で教育を行っている。そして日系企業はタイを生産の場としてだけでなく、研究開発の拠点として注目し始めている。そのようなことからタイの工業は日系企業からの貢献をもっともっと期待することができるであろう。

しかし、一方で日本の政府からの ODA 支援の評価は思ったほどではないようである。実際、ODA 支援は資金的に大きな援助を行っている。しかしタイの工業が求めているのは人材育成のための技術的なサポートであるということをもっと認識しなければならないと思う。」

- 特に研究開発の重要性と生産工程の自動化という観点では、タイと日本の研究者・技術者のキャリアパスの価値観にはいまだ大きな違いがある。
- シラプラパー・サンパアサー カセサート大学物理学科 B4 「タイ人にとっては、一般的に経営者の給料および社会的位置が研究者・技術者より高く認識されている・・・」
- 笹本真司 東工大開発システム工学科 B4

「日本では、一つの企業で長く働くことはごく普通のことだ。ゆえに、企業には高い技術をもった人が沢山いる。このことは、日本企業の強みの一つである。しかし最近は、多くの企業が人件費削減のため、正規社員を削減しているが、結果として、熟練技術者の不足という問題に直面することになった。

人件費削減のもう一つ手段として、プロセスの自動化がある。しかし、システムが複雑になるため、一度設置してしまうと、あとで細部の変更・修正が難しくなってしまう。」

- この JAYSES プログラムでは7日間に渡り現地訪問を行い、東工大生およびチュラロンコーン大学、キングモンクット王工科大学ラカバン校、タマサート大学シリントーン国際工科大学、カセサート大学の学生に対しタイの産業における日本の技術の影響について理解を深める機会を与え、次の世代に技術開発を担う両国の有望な若者の交流の促進を目指している。
- クリエ・パチマノン 世界の朝ニュース報道

#### ภาษาไทย:

- เทคโนโลยีที่ใช้กันอยู่ในภาคอุตสาหกรรมของไทยส่วนหนึ่งมีต้นกำเนิดมาจากประเทศญี่ปุ่น ในฐานะผู้นำด้านการพัฒนา เทคโนโลยีของโลก หลักสูตรภาควิชาวิทยาศาสตร์และวิศวกรรมศาสตร์ในมหาวิทยาลัยญี่ปุ่น เปิดโอกาสให้นักศึกษาได้สัมผัส การนำเทคโนโลยีของพวกเขาไปใช้จริงในต่างประเทศด้วย
- Japan-Asia Young Scientist and Engineer Study Visit หรือ JAYSES ได้นำนักศึกษาภาควิชา วิทยาศาสตร์และวิศวกรรมศาสตร์จากมหาวิทยาลัยของญี่ปุ่นมายังประเทศไทย เพื่อเข้าร่วมกิจกรรมรับฟังบรรยายและดูงานใน

โรงงานอุตสาหกรรมของไทยที่นำเทคโนโลยีจากญี่ปุ่นมาใช้

ประโยชน์กับทั้งไทยและญี่ป่น"

- นักศึกษาจากสถาบันเทคโนโลยีแห่งโตเกียวให้ความเห็นว่า ระบบการศึกษาของไทยมีการสอบแข่งขันที่ทำให้เขาเชื่อว่า นักศึกษาต้องมีความสามารถจริงๆ ถึงจะได้เข้าเรียน ส่วนที่ญี่ปุ่นจะเน้นเรื่องคุณภาพงานวิจัยซึ่งเป็นจุดแข็งของวิศวกรญี่ปุ่น
- ยูกิ มินะมิโนะ (นักศึกษาปริญญาตรีชั้นปีที่ 4) ภาควิชาไฟฟ้าและอิเล็กทรอนิกส์ สถาบันเทคโนโลยีแห่งโตเกียว
   "ผมขอพูดในสองมุมมอง จากมุมมองด้านการศึกษา สิ่งที่แตกต่างกันมากคือในประเทศไทยนั้น ทั้งสอบเข้ามหา ลัยยากและกว่าจะเรียนจบก็ยาก แต่ว่าที่ญี่ปุ่นนั้นเรียนจบง่าย แต่คุณภาพการศึกษาในระดับบัณฑิตวิทยาลัยที่สูง มากๆ คือจัดแข็งของญี่ปุ่น ส่วนมุมมองด้านวิศวกรรมศาสตร์ จุดแข็งของไทยคือ ความสามารถของวิศวกรไทย นักวิทยาศาสตร์คนญี่ปุ่นเล่าให้เรา ฟังว่า คนไทยมีสายตาที่ดีมาก อย่างเวลาตรวจหาผลิตภัณฑ์ที่บกพร่องก็ไม่ต้องใช้กล้องขยาย แต่วิศวกรที่เก่งๆ ของญี่ปุ่น ก็ยังมองไม่เห็น ไม่ใช่แค่นั้น คนไทยมีทักษะการปฏิบัติ ในการผลิตรถยนต์ หรืออุปกรณ์อิเล็กโทรนิกส์ เมื่อประมาณ 10 ปีก่อนคนญี่ปุ่นก็มีทักษะนี้ แต่มันค่อยๆ หายไป ในรุ่นต่อๆ มา มันสำคัญมาก ที่ภาคอุตสาหกรรม จะต้องคำนึงถึงทักษะ ในทางกลับกัน ญี่ปุ่น มีข้อเค่นก็คือ ความเป็นหุ้นส่วนกับไทย ปีนี้พอดีครบบรอบ 120 ปีความสัมพันธ์ทางการทูต ความสัมพันธ์อันยาวนานนี้ ไม่ใช่เฉพาะด้านการทูต แต่รวมถึงด้านวิทยาศาสตร์ และธุรกิจอื่นๆ ด้วย มันเป็นสิ่งที่เป็น
- ค่าจ้างแรงงานที่ไทยถูกกว่า คือปัจจัยสำคัญที่ดึงคูดการลงทุนจากบริษัทญี่ปุ่น ซึ่งประโยชน์ในทางกลับกันคือคนงานไทยได้รับ การถ่ายทอดความรู้ในเทคโนโลยีอุตสาหกรรมที่เป็นประโยชน์ด้วย
- ยูกิ ซึนามิ (นักศึกษาปริญญาโทชั้นปีที่ 2) ภาควิชาวิศวกรรมโยชา สถาบันเทคโนโลยีแห่งโตเกียว
   "ครั้งหนึ่ง ประเทศไทยเคยเป็นฐานการผลิตของประเทศญี่ปุ่น เพราะค่าจ้างแรงงานถูก ซึ่งก็สนับสนุนการจ้างงานใน
   ประเทศไทย การที่บริษัทญี่ปุ่นเข้ามาก็ทำให้สังคมไทยได้พัฒนาไปด้วย ซึ่งเห็นได้จากความสะควกสบาย ดังนั้น
   ในตอนนี้ เราหวังว่าประเทศไทยจะไม่เป็นแค่ฐานการผลิต แต่จะเป็นฐานในการค้นคว้าและพัฒนาด้วย ซึ่งหลายบริษัท
   กำลังเน้นเรื่องการพัฒนาคุณภาพแก่คนงานด้วยการอบรมความรู้เพิ่ม"
- ตัวเลขการลงทุนของญี่ปุ่นในภาคอุตสาหกรรมไทยล่าสุด อยู่ที่ประมาณ 8,600 ล้านบาท มายุโกะ ชิตะระ จากโตเกียวเทคกล่าว ว่า จากที่ได้เห็นระหว่างมาดูงาน พบว่าบริษัทเอกชนญี่ปุ่นลงทุนกับประเทศไทยมาก และคาดว่าน่าจะเพิ่มขึ้นในอนาคตด้วย แต่ รัฐบาลญี่ปุ่นกลับสนับสนุนในรูปของเงินทุนมากกว่าเทคโนโลยี
- มะยุโกะ ชิตะระ (นักศึกษาปริญญาตรีชั้นปีที่ 4) ภาควิชาเทคโนโลยีชิวภาพ สถาบันเทคโนโลยีแห่งโตเกียว
   "ภาคเอกชนของญี่ปุ่น กับการที่มาเปิดบริษัทในประเทศไทย คิดว่าพวกเข้ามีส่วนสร้างอุตสาหกรรมไทยมาก แน่นอน ไม่ ต้องพูดถึงการที่บริษัทเหล่านั้นมาจ้างคนไทยจำนวนมาก และไม่ได้ใช้ระบบญี่ปุ่นแต่ปล่อยให้เป็นไปแบบไทยเอง บริษัทญี่ปุ่นไม่ได้มองประเทศไทยเป็นประเทศที่เน้นการจ้างแรงงาน แต่มองว่าเป็นฐานสำหรับงานพัฒนา และ ค้นคว้าวิจัย และเทคโนโลยีระดับสูงด้วย คิดว่า ประเทศไทยจะเห็นบริษัทญี่ปุ่นขยายการลงทุนในอนาคต แต่การลงทุน จากรัฐบาลญี่ปุ่นกลับไม่ได้รับการพดถึงมากนัก ที่จริงรัฐบาลญี่ปุ่นั้นให้เงินสนับสนุนแอะ แต่พวกเขาจำเป็นด้องเล็กเห็น

# ถึงความต้องการ ให้สนับสนุนด้านเทคโนโลยีด้วย"

- อย่างไรก็ตาม ค่านิยมเกี่ยวกับความก้าวหน้าในวิชาชีพในหมู่นักวิทยาศาสตร์และวิศวกรไทยกับญี่ปุ่นยังแตกต่างกันอยู่ โดยเฉพาะเรื่องการให้ความสำคัญกับงานค้นคว้าวิจัย และการใช้เครื่องจักรแทนที่คนงาน
- ศรประภา สรรพอาษา (นักศึกษาปริญญาตรีชั้นปีที่ 4) ภาควิชาฟิสิกส์ คณะวิทยาศาสตร์ มหาวิทยาลัยเกษตรศาสตร์

  "เพราะว่าในประเทศไทย เงินเคือนและฐานะทางสังคมของวิศวกรและนักวิทยาศาสตร์เฉยๆ จะด้อยกว่าผู้บริหารซึ่งมี
  เงินเดือนสูงและเป็นเจ้านาย.. "
- ชินจิ ซะสะโมะโตะ (นักศึกษาปริญญาตรีชั้นปีที่ 4) ภาควิชาวิศวกรรมการพัฒนานานาชาติ สถาบันเทคโนโลยีแห่งโตเกียว
  "ในญี่ปุ่นนั้นเป็นเรื่องธรรมดา ที่พนักงานจะทำงานให้กับบริษัทหนึ่งนานๆ และบริษัทก็จะมีพนักงานที่มีความสามารถ มันเป็นข้อได้เปรียบของบริษัทญี่ปุ่น แต่ทุกวันนี้บริษัทญี่ปุ่นพยายามจ้างพนักงานประจำน้อยลงเพื่อลดค่าใช้จ่าย ผลก็คือ พวกก็เจอกับปัญหาคลาดแคลนผู้เชี่ยวชาญ การลดค่าใช้จ่ายกับคนงาน อีกวิธีก็คือการนำเครื่องจักรมาแทนที่แต่มันก็ยาก ที่จะพัฒนาเร็วๆ เพราะระบบซับซ้อนต้องใช้เวลาปรับ"
- โครงการ JAYSES ครั้งนี้ เปิดโอกาสให้นักศึกษาจากมหาวิทยาลัยโตเกียวเทค ร่วมศึกษาดูงานกับนักศึกษาไทยจาก มหาวิทยาลัยเกษตรศาสตร์ สถาบันเทคโนโลยีนานาขาติสิรินธร มหาวิทยาลัยธรรมศาสตร์สถาบันเทคโนโลยีพระจอมเกล้าเจ้า คุณทหารลาดกระบัง และจุฬาลงกรณ์มหาวิทยาลัย เป็นเวลา 7 วัน เพื่อเน้นสร้างความเข้าใจ ในการนำเทคโนโลยีญี่ปุ่นมาใช้กับ อุตสาหกรรมไทย เป็นการสร้างความสัมพันธ์ในกลุ่มคนที่จะก้าวขึ้นมามีบทบาทในการพัฒนาเทคโนโลยีรุ่นต่อไปของทั้งสอง ประเทศ
- แคลร์ ปัจฉิมานนท์ โลกยามเช้า รายงาน

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	Y. Sunami	Civil Eng.	<i>M2</i>		
	M. Shitara	Bio Eng.	<i>B4</i>		
	S. Sasamoto	DevEngSys	<i>B4</i>		
Script review:	P. Rungsangt	hiwakorn CompScience	e <b>B4</b>		

Annex g

## **News Letter of Kasetsart University**

http://www.ku.ac.th/english2003/news/july50.html

#### News

## July 2007

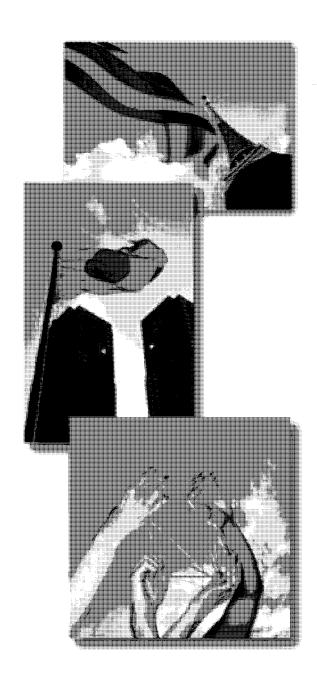


Mr. Tsugihiro SHIMURA, International Cooperation Coordinator, International Planning Office, Tokyo Institute of Technology, Japan, had an academic discussion with administrators of Kasetsart University about the Japan – Asia Young Scientist and Engineer Study Visit (JAYSES), on July 17, 2007, at 15.30 hrs., the 10th Floor, International Affairs Division, the KU Golden Jubilee Building.

| January | February | March | April | May | June | July | August | September | October | November | December



ธนาภรณ์ โกราษฎร์ หัวหน้าห้องปฏิบัติการเทคโนโลยีโลหะ



ชาวญี่ปุ่น นิฮงจิน ประเทศญี่ปุ่น นิฮง หรือจะ นิบปง หรือจะแจ๊บปัง หรือ ญี่ปุ่นเฉย ๆ แบบที่เรา ๆ เรียกกันก็ตาม ขึ้นชื่อว่าญี่ปุ่น ผมจะนึกถึงอย่างแรกเลย คือ คนญี่ปุ่น นักร้องญี่ปุ่น และดาราญี่ปุ่น ตามลำดับ (จากหลังไปหน้า?) ซึ่ง นั้นคงไม่มีสาระอะไรกับจดหมายข่าวเอ็มเทคครับ แต่หากเป็นในเรื่องของเทคโนโลยี โลหะแล้ว เมื่อพูดถึงญี่ปุ่น แน่นอนครับ รถยนต์ญี่ปุ่นครับ สายการผลิตอันทันสมัย ระบบ KAIZEN และ KAMBAN อันโด่งดัง ซึ่งเทคโนโลยีการผลิตและขึ้นรูปโลหะ ที่มีคุณภาพ ล้วนเป็นส่วนประกอบที่สำคัญในสายการผลิตเหล่านั้นครับ และการผลิต และขึ้นรูปโลหะ ด้วยการทำงานที่เที่ยงตรงและแน่นอนแบบ just in time ที่ทั่วโลกยอมรับเป็นแบบอย่างในการบริหารการผลิตที่ยอดเยี่ยมนี่เอง ก็นำไปสู่การ ผลักดันให้สายการผลิตสัญชาติอื่น จำเป็นต้องพัฒนาและปรับตัวตาม และนำมาซึ่ง การถ่ายทอดความรู้และเทคโนโลยีแบบญี่ปุ่น โดยชาวญี่ปุ่นครับ

นานมากแล้วครับ ในสมัยที่หน่วยงานอย่างสำนักงานพัฒนาอุตสาหกรรม สนับสนุน หรือ BSID ในชื่อเดิมคือ MIDI มีโครงการนำผู้เขี่ยวชาญจากประเทศ ญี่ปุ่นเข้ามาช่วยเหลืออุตสาหกรรมไทย ในลักษณะการถ่ายทอดเทคโนโลยีและ ประสบการณ์ผ่านงานที่ปรึกษา และการบรรยายความรู้ เป็นเวลาประมาณ 10 ปี ที่แล้วครับ ซึ่งในตอนนั้นผมเองได้มีโอกาสพบกับผู้เขี่ยวชาญจากประเทศญี่ปุ่น ท่านหนึ่ง ภายในโครงการนี้ ท่านมีชื่อว่าอาจารย์ทากิ มีความเชี่ยวชาญด้านการ หล่อโลหะเป็นอย่างดี ทำให้ไม่ใช่เฉพาะผมเท่านั้น หลาย ๆ ท่านที่คร่ำหวอดอยู่ ในแวดวงอุตสาหกรรมมานานกว่าผมย่อมเห็นภาพการทำงานของผู้เขี่ยวชาญจาก ต่างประเทศเป็นอย่างดี ซึ่งแน่นอนว่าผู้เชี่ยวชาญเหล่านั้น ทุกท่านจะต้องสูงวัย ผ่านประสบการณ์มาอย่างโชกโชน กรณีตัวอย่างที่สามารถยกมาสอน มาอ้างอิง เรียกว่าเขียนกันไม่รู้จะได้เป็นตำราสักกี่สิบเล่ม ยกตัวอย่าง ดร. จอห์น เพียร์ซ อาจารย์และผู้เขียวชาญด้านโลหะที่ร่วมงานกับผมที่เอ็มเทคนี้ก็เป็นคนหนึ่งครับ ซึ่งอายุไม่น้อย ผ่านพ้นวัยเกษียณอายุราชการไปแล้ว แต่ยังมีไฟอยู่ และที่สำคัญ มีความมุ่งมั่นที่จะร่วมเป็นส่วนหนึ่งในการช่วยเหลืออุตสาหกรรมไทย (เนื่องจาก อุตสาหกรรมในประเทศตนเอง ไม่จำเป็นต้องช่วยแล้ว?) ซึ่งภาพเหล่านั้นคือสิ่งที่ เราคุ้นตาครับ หากจะหนุ่มแน่น แข็งแรง และเป็นตัวแทนจากต่างประเทศมาร่วม งานในประเทศไทยเราก็สามารถพบได้ ในกรณีตัวแทนที่มาในรูปของ technical service มากกว่าการมาเป็นอาสาสมัคร หรือ volunteer และหากจะลองนึกเล่นๆ ครับ ว่าจะมี โอกาสหรือไม่ ที่วันหนึ่ง วัฒนธรรมเปลี่ยนไป ผู้เขี่ยวชาญที่เป็นกลุ่มอาสาสมัครสูงอายุเหล่านั้น ไม่ต้องการมาประเทศไทยแล้ว ถึงวันนั้น ประเทศไทยจะทำอย่างไร ทรัพยากรผู้เขี่ยวชาญที่มีอยู่ ในวันนี้ จะสามารถพัฒนาขึ้นไปเป็นผู้เขี่ยวชาญที่ประสบการณ์แก่กล้าได้ในวันข้างหน้าเช่นเดียวกับ ท่าน ๆ เหล่านั้นได้หรือไม่ หรือในอีกทางหนึ่ง ผู้เขี่ยวชาญของไทยเอง อาจกลายสภาพเป็น อาสาสมัครช่วยเหลือประเทศอุตสาหกรรมใหม่อย่างเวียดนาม หรือกัมพูชา ก็เป็นไปได้ ทางออก ที่มหาวิทยาลัยอย่างโตเกียวเทค ดำเนินการเพื่อสานสัมพันธ์ระหว่างนักเทคโนโลยีด้วยการบ่มเพาะ นักเทคโนโลยีรุ่นใหม่ที่มีความพร้อมตั้งแต่วัยรุ่น อายุน้อย ๆ มาทำงาน มาเรียนรู้ และมา แลกเปลี่ยนความเข้าใจในด้านเทคโนโลยีแล้วนั้น ได้มีการดำเนินการแล้วครับ ถึงจะไม่เชิงเป็นความ ช่วยเหลือเหมือนบรรดาผู้เขี่ยวชาญอาวุโสที่มาแล้วมีแต่ช่วยและช่วยก็ตามที แต่ก็เรียกว่าได้ประโยชน์ ตัวแทนภาคเอกชนและอุตสาหกรรมของไทยที่เข้าร่วม ก็มีพอสมควรเลยทีเดียว

คณะนักศึกษาญี่ปุ่นประชุมเพื่อเตรียมความพร้อม สำหรับโครงการที่ Tokyo Tech

ภาพถ่ายคณะใน บ. TMAP-EM ศูนย์วิจัยของ TOYOTA (27 ส.ค. 2550)



ร่วมถ่ายภาพที่หน้าโรงงานของ บ.DENSO นิคมอุตสาหกรรมอมตะนคร รวมทั้งเยี่ยมชมระบบการบริหารจัดการนิคมอุตสาหกรรมอมตะนคร ( 28 ส.ค. 2550)

อาสาสมัครภายในโครงการที่มาจากประเทศญี่ปุ่น เป็นนักศึกษาใน หลักสูตรวิศวกรรมศาสตร์ ทั้งในระดับปริญญาตรีและปริญญาโท ซึ่งโดยรวมก็คือ วิศวกรและนักวิทยาศาสตร์อายุน้อย ๆ เข้ามาเรียนรู้ ช่วยในบางเรื่องที่พวกเขาได้ รับการสอนจากประเทศญี่ปุ่น และเป็นประโยชน์กับอุตสาหกรรมไทย รวมถึงเรียน รู้ แลกเปลี่ยนประสบการณ์การทำงานกับอุตสาหกรรมเพื่อนำกลับไปปรับใช้หรือ ขยายผลสู่ความร่วมมือด้านอื่น ๆ ระหว่าง 2 ประเทศต่อไป โครงการที่ผมกล่าว ถึงนี้คือ โครงการ JAYSES2007 ครับ

ก่อนจะเข้าสู่เนื้อหาภายในโครงการทั้งหมด ผมขอย้อนกลับไปถึงที่มาของ เรื่องที่ผมจะเขียนถึ้งในครั้งนี้ว่ามีที่มาอย่างไรก่อนนะครับ เริ่มต้นจากช่วงต้นเดือน ้กันยายนที่ผ่านมาไม่นานนี้ ผมได้รับแจ้งจาก รศ. ดร. ธีรพงษ์ พิพัฒน์พงษ์ อาจารย์ และนักวิจัยศูนย์ข้อมูลวิทยาศาสตร์นานาชาติและการคำนวณ (GSIC) สถาบัน เทคโนโลยีแห่งโตเกี้ยว และอีกหลายตำแหน่งทางวิชาการภายในมหาวิทยาลัย โตเกียวเทค หนึ่งในนักวิจัยไทยที่ก้าวไกลในต่างแดน และดำเนินกิจกรรมต่างๆ ที่เกี่ยวกับประเทศไทยโดยตลอด ดร. ธีรพงษ์ แจ้งข่าวให้ผมทราบว่า มีโครงการ ความร่วมมือระหว่างประเทศญี่ปุ่น โดยสถาบันเทคโนโลยีแห่งโตเกียว หรือ โตเกียวเทค (Tokyo Tech) กับประเทศไทย โดยการดำเนินโครงการที่มีจุดเริ่ม ต้นมาจากความร่วมมือของประเทศญี่ปุ่นกับชาติในกลุ่มอาเขียน (ASEAN) เพื่อกิจกรรมด้านความร่วมมือในการพัฒนาศักยภาพของวิศวกรและนักวิทยาศาสตร์ รุ่นเยาว์ของภูมิภาค ทั้งจากประเทศญี่ปุ่นเองและประเทศที่ร่วมโครงการ โดยเฉพาะ อย่างยิ่ง ปีนี้ ซึ่งเป็นปีที่ครบรอบ 120 ปี ความสัมพันธ์ทางการทูต ไทย-ญี่ปุ่น ซึ่งการดำเนินโครงการต่าง ๆ คงจะมีเกิดขึ้นอย่างต่อเนื่อง แต่โดยเฉพาะในส่วนของ โครงการด้านการพัฒนาวิศวกรและนักวิทยาศาสตร์รุ่นเยาว์ กิจกรรมในประเทศไทย เป็นการดำเนินการร่วมกับหน่วยงานหลัก คือ สำนักงานพัฒนาวิทยาศาสดร์และ เทคโนโลยี หรือ สวทช. และมหาวิทยาลัยที่ร่วมส่งนิสิตนักศึกษาเป็นสมาชิกใน โครงการ ได้แก่ จุฬาลงกรณ์มหาวิทยาลัย มหาวิทยาลัยเกษตรศาสตร์ สถาบัน เทคโนโลยีเจ้าคุณทหารลาดกระบัง และสถาบันเทคโนโลยีนานาชาติสิรินธร เป็นต้น ในระบบการศึกษาร่วมที่ส่งผลต่อความร่วมมือด้านอื่น ๆ ทั้งในเชิงงาน ค้นคว้าวิจัย งานพัฒนาการศึกษา งานบริหารจัดการ และงานภาครัฐ ซึ่งรวมถึง บทบาทที่ดีด่อความสัมพันธ์ระหว่างประเทศ



รับฟังบรรยายสภาวการณ์ลงทุนของนักลงทุนจากประเทศญี่ปุ่น ที่สำนักงาน BOI (29 ส.ค. 2550)

ผมข้ามส่วนสำคัญที่สุดของงานนี้ไปครับ คือชื่ออย่างเป็นทาง การของโครงการนี้คือ JAYSES: Japan-Asia Young Scientist and Engineer Study Visit - International Exchange Program by TokyoTech International Office to celebrate the 120th Anniversary of Japan-Thailand Diplomatic Relations - ซึ่งยาวเหยียด แต่สามารถแปลออกมาสั้น ๆ ได้ดังใจความความที่ผมกล่าวไปแล้วครับ คือเป็นโครงการความร่วมมือ ที่เป็นประโยชน์กับทั้งวิศวกรวัยรุ่นของทั้งไทยและญี่ปุ่นจริง ๆ โดย เฉพาะอย่างยิ่ง การทำงานร่วมกันระหว่างนักศึกษาจาก 2 ประเทศ ก็เป็นผลลัพธ์ในเชิงมิตรภาพและการแลกเปลี่ยนความ เข้าใจทางวัฒนธรรมระหว่างกันได้เช่นกัน



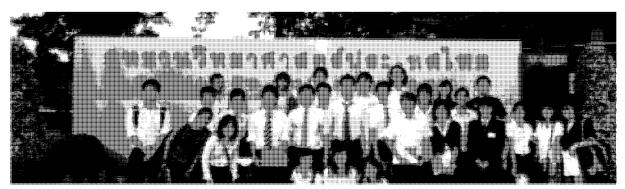
นักศึกษาได้รับการสัมภาษณ์เผยแพร่ภาพของกิจกรรม ออกอกาศทางข่าวช่อง 3 อสมท. รายการโลกยามเข้า (29 ส.ค. 2550)

กำหนดการที่โครงการ JAYSES2007 ดำเนินการนั้น เริ่มตั้งแต่ กิจกรรม ที่เป็นการเรียนรู้ร่วมกันระหว่างนักเรียนไทยและญี่ปุ่น ก็ได้แก่ การเข้าเยี่ยมชมสถาน ประกอบการด้านอุตสาหกรรมในประเทศไทย ที่มาจากประเทศญี่ปุ่น ก็หลายแห่ง ชึ่งมีวัตถุประสงค์เพื่อการเรียนรู้การประยุกต์ใช้แนวทางการทำงานแบบญี่ปุ่นร่วมกับ การผลิตในอุตสาหกรรมไทย และการเยี่ยมชมอุตสาหกรรมไทยด้วย ซึ่งก็น่าจะเป็น การเปรียบเทียบการทำงานได้เป็นอย่างดี นอกจากในส่วนของการเรียนรู้การทำงาน ในอุตสาหกรรม คณะนักเรียนจาก 2 ประเทศ ยังได้ร่วมรับพังการบรรยายการดำเนิน โครงการของ JICA ในประเทศไทย รวมถึงการได้มีโอกาสนำเสนอ การประชุม หารือ กิจกรรมการเสวนาต่าง ๆ ที่เป็นการแลกเปลี่ยนข้อมูลและความเข้าใจใน ้ด้านเทคโนโลยีทางอุตสาหกรรมระหว่างนักเรียนทั้ง 2 ชาติ โดยความมุ่งหวังถึง ผลที่จะเกิดขึ้นในอนาคตที่ทางคณะทำงานของโตเกียวเทค ตั้งความหวังไว้ครับ นั่น คือ จำนวนนักเรียนญี่ปุ่นที่มีความสนใจออกไปศึกษาต่อในต่างประเทศจะมีเพิ่มมาก ขึ้น ในขณะเดียวกัน นักเรียนไทยที่เดินทางเข้าศึกษาต่อในประเทศญี่ปุ่นก็มีจำนวน เพิ่มมากขึ้นเช่นกัน นอกจากนั้น ในเชิงนโยบาย กิจกรรมต่าง ๆ ยังเป็นการคาด หวังผลไปสู่การสร้างเครือข่ายความร่วมมือกันระหว่างกลุ่มนักเรียนในมหาวิทยาลัย ขึ้นนำในภูมิภาคด้วย ซึ่งแน่นอน ไม่ได้เกิดผลดีแก่เฉพาะตัวนักเรียนและนักศึกษา แต่ผลที่แท้จริงนั้นเกิดกับสถาบันการศึกษา ซึ่งก็คือมหาวิทยาลัยทุกแห่งที่ร่วมใน โครงการนั่นเองครับ

รับฟังการบรรยายกิจการและเยี่ยมชมกิจกรรมของ สถาบันวิจัย ปตท. (29 ส.ค. 2550) ร่วมรับฟังบรรยายโครงการ AUN/SEED-Net ของ JICA (30 ส.ค. 2550)



การเสนอบลงานที่ ฮวทช. ดำเนินรายการโดย ดร. ฮีรพชษ์ ( 3 ก.ย. 2550)



คณะนักศึกษาไทยและญี่ปุ่น ร่วมทัศนศึกษาหน่วยงานวิจัยและห้องปฏิบัติการต่างๆ ภายใน สวทช. เป็นการจบโครงการ JAYSES2007 (3 ก.ย. 2550)



ในวันสุดท้ายของโครงการ คือวันจันทร์ที่ 3 กันยายน 2550 มี การนำเสนอผลของการดำเนินโครงการให้กับผู้มีส่วนเกี่ยวข้องในโครงการ ได้แก่ ผู้ประสานงานโครงการ เจ้าหน้าที่จากฝ่ายต่าง ๆ และแน่นอน นักเรียนนักศึกษาจากมหาวิทยาลัยและสถาบันที่เข้าร่วม ทั้งไทยและญี่ปุ่น และที่สำคัญคือการมอบประกาศนียบัตรเพื่อเป็นการขอบคุณจาก โตเกียวเทค แก่นักเรียนไทย ที่ได้มีส่วนร่วมในการแลกเปลี่ยนประสบการณ์ และมิตรภาพกับบรรดานักศึกษาจากโตเกียวเทค ประเทศญี่ปุ่น ตลอด ระยะเวลา 1 สัปดาห์ ที่ได้ร่วมงานกัน

Homepage อย่างเป็นทางการของโครงการ JAYSES2007 มีรายละเอียดสำหรับผู้สนใจซึ่งสามารถเข้าไปชมได้ที่นี่ครับ

http://www.ttot.ipo.titech.ac.jp/JAYSES2007/indexe.html

"Eng. Talk" Sep. '07 by Faculty of Engineering Chulalongkorn University

สีภาพอากาศในบ้านเราหรือต่างประเท Chulalongkorn University
เมื่อไม่กี่วันที่ผ่านมาก็เกิดแผ่นดินไหว ซึ่งทำเอาผู้คนที่อยู่ในพื้นที่ภาคใด้เกิดความสื่นตระหนก
ว่าจะเกิดซินามิอีกรอบหรือเปล่า

ปัญหาด้านสิ่งแวดล้อมก็นับว่าเป็นสิ่งสำคัญ ซึ่งงานวิจัยของ ร**ศ. ดร.อุรา ปานเจริญ** ก็เป็นอีกหนทางหนึ่งที่ระช่วยรักษาสิ่งแวดล้อม ฉบับนี้อาจารย์จึงมาพูดคุยกับเรา และยังมี บทความที่น่าสนใจอีกหลายเรื่อง ดิตตามได้ในฉบับครับ

การที่คณะวิศวฯ จะสามารถพัฒนาให้มีศักยภาพมากยิ่งๆ ขึ้นไปตามมาตรฐานของ CUGA หรือระบบประกันคุณภาพของจุฬาลงกรณ์มหาวิทยาลัยนั้น ส่วนหนึ่งก็ต้องมาจากแรงขับเคลื่อน ของเหล่าบุคลากร ซึ่งทางคณะฯ ก็ได้ให้ความสำคัญในเรื่องนี้ ทางคณะฯ จึงได้จัดสัมมนา และอบรมบุคลากรเพื่อให้มีความรู้ความเข้าใจในการทำงานและเพื่อเพิ่มประสิทธิภาพและ ประสิทธิผลในการทำงานมากยิ่งขึ้น ที่ จ. นครนายก และเป็นการสร้างความสัมพันธ์อันดี ระหว่างกันด้วย

กองบรรณาธิการ "ช่วงพูด"

## 0912030313444

ขอแสดงความยืนผีแผ่ รศ. ดร.วันชัย ริจิรวนิช อาจารย์ประจำภาควิชาวิศัย อุตสาหการ ที่คณะวิศัยกรรมศาสตร์ จุฬาสงกรณ์มหาวิทยาลัย แต่งตั้งให้ดำรงส่ง ผู้อำนวยการ สำนักบริหารหลักสูตรวิศวกรรมนานาชาติ ตั้งแต่วันที่ 1 สิงหาคม เป็นต้นไป และขอแสดงความยินดีแผ่ รศ. ดร.สุจริต ดูณชนกุลวงศ์ อาจารย์ ภาควิชาวิศวกรรมแหล่งน้ำ ที่ได้รับการแต่งตั้งให้ดำรงตำแหน่ง ผู้อำนวยการบริหารได้ AUN/SEED-Net (ASEAN University Network/Southeast Asia English Education Development Network) ตั้งแต่วันที่ 11 สิงหาคม 2550 เป็นตันไป

# ฮิศวา จุฬาว จัด Student Follon เพื่อแลกเปลี่ยนตัอคิดเก็บระหว่างนักศึกษาโทย-เน็ปน

เมื่อวันที่ 30 สิงหาคม 2550 คณะวิศวกรรมศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย Student Forum ขึ้น ณ ห้องประชุม ชั้น 2 อาคารเจริญวิศวกรรม คณะวิศวกรรมท จุฬาลงกรณ์มหาวิทยาลัย เพื่อเปิดโอกาศให้นิสิตนักศึกษาทั้งไทยและญี่ปุ่น ได้แคกข้อติดเห็นและเสรนาในหัวข้อด้านเทคโนโลยีต่างๆ ภายใต้การเสรนาหัวข้อ ความแน่นและศักยภาพของประเทศไทยและญี่ปุ่นอิทธิพลทางด้านเทคโนโลยีของประเทศญี่ปุ่น ประเทศไทย บทบาทหน้าที่การส่งทุนขององค์กรเอกชนและรัฐบาลญี่ปุ่นต่อประเทศไท วัฒนธรรมช่างนี้มีอ เป็นต้น

การเสวนาตั้งกล่าร อยู่ภายใต้โครงการทัศนศึกษาด้านเทคโนโลยี (Japan-Asia Scientist and Engineering Study Visit) จัดโดยสถาบันเทคโนโลยีแห่งโตเกียว Institute of Technology) เพื่อให้ทราบถึงสภาวการณ์การพัฒนาอุตสาหกรรมแสนการ ทรัพยากรของไทย อีกทั้งยังเป็นหนึ่งในกิจกรรมเพื่อฉลองความสัมพันธ์ทางการทูตไทย ครบรอบ 120 ปี ซึ่งมีกำหนดระหว่างวันที่ 27 สิงหาคม-4 กันยายน 2550 โดยคณะทัศเรษประสายบด้วยนักศึกษาญี่ปุ่นจากสถาบันเทคโนโลยีแห่งโดเกียว (Tokyo Institute of Technique นิสิตนักศึกษาไทยจากจุฬาลงกรณ์มหาวิทยาลัย สถาบันเทคโนโลยีพระจอมเกล้าลาด สถาบันเทคโนโลยีนานาชาติสิรินธร และมหาวิทยาลัยเกษตรศาสตร์





ฉบับที่ 9/50 เดือนกันยายน พ.ศ. 2550

#### ที่ปรึกษา

ศ. ดร.ดิเรก ลาวัณย์ศิริรศ. ยิ่งยศ เขมะโยธินนางกาญจนา ศุภวิริยกุล

#### USSNIIŠINS

- อ. ดร.อติวงศ์ สุชาโด
- อ. ดร.โปรดปราน บุณยพุกกณะ

#### กองบรรณาจัการ

- อ. ธงชัย โรจน์ถังสดาล
- อ. ดร.ชนินทร์ วิศวินธานนท์
   ผศ. ดร.นิศาชล ตั้งเสงียมวิสัย
   นายณัฐพล จิตต์จนะ
   นางสาวฉัตรทิพย์ ปรางทิพย์
   นางสาวศิรประภา บุญสง

## ที่ทำการเร่างพูด

หน่วยประชาสัมพันธ์ คณะวิศวกรรมศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย เขตปทุมวัน กทม. 10330 โทร. 0-2218-6337

email: info@eng.chulo.ac.th

"วิสัยทัศน์ดี เทคโนโลยีเด่น เน้นความมีศักยภาพ ติดตามได้ในช่างพูด"



นางสาวภูษณิศา ภัทร์โชติเศวต เจ้าหน้าที่สำนักงาน ศูนย์เทคโนโลยือนภาคไทย



# APPRECIATION FOR COOPERATION

SAMPLE

Dear Governor, Mass Rapid Transit Authority of Thailand

I would like to express my gratitude for your kind cooperation with the JAYSES (Japan Asia Young Scientist and Engineer Study Visit), our contribution to celebrate the 120<sup>th</sup> anniversary of Japan-Thailand diplomatic relations by the International Office of Tokyo Institute of Technology.

30 August 2007

Prof. Dr. Chitoshi Miki Executive Vice President Tokyo Institute of Technology

Japan

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Tokyo Institute of Technology - TOKYO TECH- develops distinctive students with outstanding qualities of creativity and leadership. TOKYO TECH is making significant contributions to science and technology in many fields of expertise, creating new and powerful synergies. TOKYO TECH, being a research-based university, is dedicated to education and research, and to exploring knowledge in science and technology. Pursuing excellence, TOKYO TECH serves society and the world.





Tokyo Institute of Technology
International Exchange Program
Japan-Asia Young Scientist and Engineer Study Visit (JAYSES)

# **CERTIFICATE**

This is to certify that

Ms. Jirac sample aphibul,

Chulalongkorn University,

has successfully participated the program of Japan-Asia Young Scientist and Engineer Study Visit (JAYSES),

the official program to celebrate the 120<sup>th</sup> Anniversary of Japan-Thailand Diplomatic Relations, organized by the International Office, Tokyo Institute of Technology during 27<sup>th</sup> August - 3<sup>rd</sup> September 2007.

3rd September 2007

Prof. Dr. Chitoshi Miki Executive Vice President Tokyo Institute of Technology

Japan



Outline

Application (closed) Preparatory study Schedule in Thailand

Forum

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Link

Member Guestbook

Contact



# Final Report **—**

JAYSES Final Reporting Session/Closing Ceremony will be held by the following schedule.

Date&Time: 10 (Wed) October 2007, 13:30-15:00

Venue: Conference Room 10th floor, West 8 Bldg (Nishi-hachi), Ookayama campus

Language: English

Fee: Free of charge, no registration required

Poster: Download PDF (199 KB)

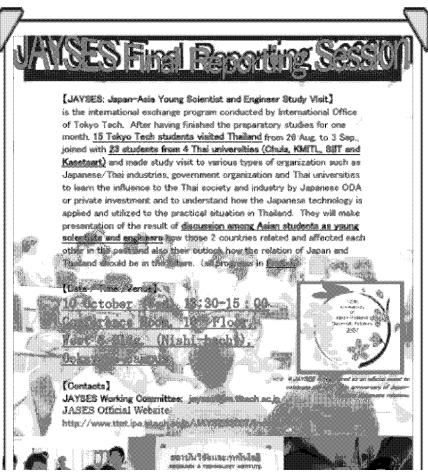
15 Tokyo Tech students visited Thailand from 26 Aug. to 3 Sep., joined with 23 students from 4 Thai universities (Chula, KMITL, SIIT and Kasetsart) and made study visit to various types of organization such as Japanese/Thai industries, government organization and Thai universities to learn the influence to the Thai society and industry by Japanese ODA or private investment and to understand how the Japanese technology is applied and utilized to the practical situation in Thailand.

They will make presentation of the result of discussion among Asian students as "young scientists and engineers" how theose 2 countries related and affected each other in the past and also their outlook how the relation of Japan and Thailand should be in the future.





Forum page counter since 2007/8/19



# **Photos**



Preparatory activity



KMITL/ ReCCIT



Capital Rice



Ota Techno Park



Amata Industrial Estate



Office of the Board of Investment



PTT Research and Technology Institute



MRTA



**BMCL** 



AUN/SEED-Net



Student Forum at Chula. Univ.



Laem Phak Bia Royal Project



TV Program on Channel 3





**Grand Opening Ceremony of TAIST** 



Presentation Forum at TSP



# **JAYSES: Japan-Asia Young Scientist and Engineer Study Visit**JFY 2007 Working Committee

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