

## Summary of Papers

*Dr. Surachai Sirikrai\**

These proceedings start with two papers dealing with the conceptual framework. Tran Van Tho's paper starts with a definition of technology and points out that there are many ways to categorize technology such that the form in which technology is embodied and the level of technology transfer through foreign investment may be divided into production technology, administrative technology and management know-how. He also identifies 3 levels of technological capabilities: 1. operational, 2. duplicative, and 3. innovative.

Using the case of synthetic fibre industry firms in Thailand, he concludes that technology transfer at the factory level has gone rather smoothly but technology at the head office, i.e. human-embodied know how, has not been effectively transferred. Reasons are; 1. communication or language barrier 2. promotion system or management style of Japanese companies 3. lack of qualified manpower in host countries 4. lack of motivation of local investment partner to acquire technology. Paper 2 by Prof. Saito describes the trend in the development of the world economy and that of East Asia, pointing out the importance of the information society and the interdependent nature of relationships among countries. He then proposes the establishment of an Asian Development Corridor which would improve communication, trade, investment, and technology transfer among countries.

On technology, the ADC could be used to promote mutual trust, R & D activities, innovation, and combine innovation and entrepreneurship in the region by exchange of technology information, science and technology resources, development of joint R & D projects and cooperation in other science and technology issues such as intellectual property system and quality control circles.

Moving on to country studies paper on the Philippines provides a further conceptual framework of technology transfer and points out that technology can be acquired through equity participation by foreign companies as well as without ownership or equity participation such as turn-key or licensing agreements. The success of technology transfer depends much on the science and technology potential of the recipient countries and the policy environment of the host countries. Furthermore, the quality of technology transfer can be assessed by 1. completeness 2. appropriateness 3. diffusion and 4. mastery of the technology. The Philippines Case study reveals that there is some technology transfer by Japanese investors but the extent of technology tends to be rather limited. However, the policy of protecting import substitution, and capital-intensive industries which have high dependence on imports hinder the benefits of the utilization of Japanese technology to the Philippines and economy. There is therefore a need to adjust policy to encourage R & D and subcontracting arrangements.

---

\* Director, The Institute of East Asian Studies.

The paper by Linda Low on Singapore highlights the role of the Singaporean government in setting up institutional support and in developing manpower which has led to rather successful absorption of foreign technology. However, there are still complaints by Japanese investors on the lack of qualified manpower and a high turnover of skilled workers which hinder further technological development.

Singapore is also a major investing country in neighboring countries, recently, a new concept of a growth triangle, combining capital, know-how, labour and natural resources, has been implemented in Singapore, Johore in Malaysia and Riau Islands in Indonesia. There are also development in other areas of the world using this concept. The need of Singapore to upgrade her technology and to compete with other countries in Asia is emphasized.

The paper on Indonesia presented in the morning elaborates several forms of technology transfer, and broadens the concept to include both "packaged" and "unpackaged" technology transfer. Unpackaged technology includes education studies in foreign countries and acquisition of technologies through various means, while packaged technology comes with foreign investment. She also distinguishes intraorganizational and interorganizational technology transfer, and case studies of the OECF project on Flood Control and the Joint Venture on Aluminium are presented.

The Malaysian paper focuses more on acquisition of technology through technology contracts and points out that while there are costs in acquiring foreign technology and terms and conditions seem to be stringent Host countries can try to improve their own absorptive capabilities to maximize the benefit of the technology acquired. The other Malaysian paper by Dr. Jaafar further points out the need for technology transfer in this rapidly changing world economy and his case study also gives the interesting conclusion that there is no significant difference in cultural values between Malaysian and Japanese managers. It is not impossible for Malaysian managers to learn the art of Japanese management.

Finally, the Thai paper highlights the limitations of technology transfer in the electronics industry in Thailand with little changes in product ranges, productive processes and the dispute of the technological content of foreign joint venture firms.

The paper provides a useful conceptual framework for the analysis of technology transfer and concludes that Thailand should be concerned about the problem of tariff without technology transfer and should gear for technical support and not economic protection.

Besides the papers presented, we have also heard many interesting points from commentators and from discussions, including the keynote address by Minister Korn which emphasizes transfer between individuals. Many discussants have pointed out that foreigners will transfer technology only if they have to do so, for cost or other reasons. It is up to the host countries' governments and investment partners and workers, etc. to try to learn from their foreign investors. In addition, direct investment is by no means the only way to acquire technology and there are other ways of acquiring technology such as purchase of technology without foreign ownership and control. The crux of the problem is how we can make best use of these technologies, by trying to adapt, improve and develop so that our own technological capabilities are enhanced.

# ใบสมัครสมาชิกการสารฯไทย-ญี่ปุ่นศึกษา

ข้าพเจ้ามีความประสงค์ที่จะเป็นสมาชิก วารสารไทย-ญี่ปุ่นศึกษา มีกำหนด.....ปี  
ตั้งแต่ฉบับเดือน.....ถึงฉบับเดือน.....ประจำปี พ.ศ. 25.....

## โปรดส่งวารสารไปยัง

น.ส./นาย/นาง..... นามสกุล..... อายุ..... ปี อาร์พ.....  
บ้านเลขที่..... ซอย..... ถนน.....  
ตำบล/แขวง..... อำเภอ/เขต..... จังหวัด..... รหัสไปรษณีย์.....  
หรือที่ทำงาน.....  
โทรศัพท์.....

อัตราค่าสมาชิก	ปีละ 90 บาท (3 เดือน-พร้อมค่าจัดส่ง)
ราคาเดือนละ	30 บาท
กำหนดออกเดือน	เมษายน สิงหาคม ธันวาคม

ข้าพเจ้าส่ง  ตัวแลกเงิน  ธนาณัติ  เท็คไปรษณีย์  
จำนวน.....บาท ( ) มาพร้อมนี้

หมายเหตุ สังจัยบรรณาธิการวารสารไทย-ญี่ปุ่นศึกษา สถาบันเอเชียตะวันออกศึกษา  
อาคารศูนย์ญี่ปุ่นศึกษา ปท.นธ. ศูนย์รังสิต 12121

ลงชื่อ.....  
วันที่.....

၁၁၁

กองบรรณาธิการวารสารไทย-ญี่ปุ่นศึกษา  
สถาบันเอเชียตะวันออกศึกษา  
อาคารศูนย์ญี่ปุ่นศึกษา  
มหาวิทยาลัยธรรมศาสตร์ ศูนย์รังสิต  
ปทุมธานี 12121





AIR CONDITIONING, PLUMBING SYSTEM & METAL FINISHING SYSTEMS ENGINEERS & CONTRACTORS



**THAI KENZAI TRADING CO., LTD.  
THAI KENZAISHA CO., LTD.**

5th Fl., Thaniya Bldg., 62 Silom Rd. Bangkok.

Tel : 236-8055-9 Fax: 236-3502, 238-2869



**TKC Group**

Thai Kenzaisha Co., Ltd.

Token Interior & Design Co., Ltd.

Thai Kenzai Trading Co., Ltd.

Thaiken Maintenance & Service Co., Ltd.

TKA Co., Ltd.

*Welcome to the ideal place  
for seminar*



## JAPANESE STUDIES CENTER

THAMMASAT UNIVERSITY  
RANGSIT CAMPUS



Canteen



A.V. Room



Japanese garden

Facilities include main conference room, four seminar rooms,  
recreational lounge, dining room and 30 twin - bedrooms with private bath.

FOR RESERVATION OR MORE INFORMATION, PLEASE CONTACT :

JAPANESE STUDIES CENTER  
INSTITUTE OF EAST ASIAN STUDIES  
THAMMASAT UNIVERSITY, RANGSIT CAMPUS  
TEL. 5160040 - 2