## Japanese Contribution to Studies on Rural Economy in Southeast Asia

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#### Abstract

Before the Second World War the information about Southeast Asia was mostly got from the literature of European researchers. But, after the War Japanese have been able to make field research in the rural area in Southeast Asia. Long term systematic field works in Southeast Asia are mainly carried out by *Ajia Keizai Kenkyusho* (the Institute of Developing Economies) and the Center for Southeast Asian Studies, Kyoto University.

Key words: green revolution, Doi Moi, Bumiputra, Dakwah Movement, environmental changes by industrialization.

There are some special Japanese institutions and journals focusing on Asian Studies, and many books have been written in Japanese on Southeast Asia. Among the world's countries, Japan accounts for the biggest share of trade with Southeast Asia, as well as bank loans and foreign investment in Southeast Asia, just as the EU does in Middle-Eastern Europe and the USA does in Central and South America. Japanese FDI (Foreign Direct Investment) was 54 billion USD in 1997, of which 38.5% was invested in the USA and 22.6% in Asia, including 10.5% (5.7 billion USD) in the ASEAN Four (Thailand, Malaysia, Indonesia and the Philippines). Japan is the greatest investor in Thailand, the second greatest in Indonesia, Malaysia and Singapore, and third greatest in Vietnam. Japan invested 49% of its total FDI in Thailand, followed by 27% of the USA, 22% of Singapore and 14% of the UK.

One of the most famous Jananese journals on Southeast Asia is the Monthly Journal of the Institute of Developing Economics (AJIA KEIZAI), published by the Institute of Developing Economics (IDE, Ajia Keizai Kenkyusho, staff of 251, budget of 9.8 billion yen in 1998), sponsored by the Ministry of International Trade and Industry (MITI). Another famous journal is Southeast Asian Studies (Tonan Ajia Keykyu), published by the Center for Southeast Asian Studies, Kyoto University (staff of 16), and a third is Asian Studies (Ajia Kenkyu), published by the Japan Association for Asian Political and Economic Studies (Ajia Seikei Gakkai). There are also journals about the tropics, including the Japanese Journal of Tropical Agriculture, published by the Japanese Society for Tropical Agriculture The Tropical Forestry, published by the Japan International Forestry Promotion and Cooperation Center, and the Journal of the Rural Planning Association, published by the Rural Planning Association.

# 1. Main Japanese Concerns in Studies on Rural Economies in Southeast Asian Countries

#### 1.1 Philippinse

Studies cover four main themes: 1) the green revolution, 2) the influence of land reform on agriculture and rural economy, 3) agricultural development policies, and 4) environmental management. The green revolution, with high-yield rice varieties, has changed the traditional rural structure which existed prior to the 1960s and brought stratification to the rural community structure. The historical bachground of poor peasants on a sugar cane estate on Negros Island, typical of a large land ownership in the Philippines, has also been a major research theme among the Japanese.

The government actively invested in irrigation, so as to prepare an infrastructure for rice fields able to grow high-yield varieties of rice in the latter half of the 1960's. The development of irrigation in marginal mountainous areas is raising the costs of building irrigation systems, but these have been offset by innovation in rice growing techniques. Rural banks (RB) and credit systems in rice-growing rural areas have also been a concern of the Japanese.

#### 1.2 Indonesia

There has been much precise rural community research but they have not been under an integrated theme. The green revolution did not create new classes, but villages which succeeded in mechanization of rice growing could increase their income. Part-time farmers have greater household incomes than do full-time farmers, but the larger the area of managed arable land, the bigger the household income. The new technical innovations forced farmers into economic subordination to urban capital.

#### 1.3 Vietnam

Almost all research here has dealt with economic reconstruction (*Doi Moi*). Main themes have been why the contract system has been implemented since

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1988 and why it succeeded in such a short time. This problem resembles those in former socialistic countries in Middle-eastern Europe, where collective farms have been privatized.

Vietnam is now very active in the production and export of rice. Thailand now faces keen competition from Vietnam on the world market of rice. Production of rice in Vietnam is much cheaper in the South than in the North. But, from the foodstuff security point of view, the government of Vietnam is not willing to depend absolutely on the South in the production of rice. So the cultivation of rice in the North has been carried on by the subsidy of the government.

#### 1.4 Cambodia and Laos

Because of long political turmoil. there has been few research, except for some historical descriptions of rice cultivation in Cambodia.

#### 1.5 Malaysia

One of the main themes on Malaysia has been "Bumiputra" and its influence on rural economies." "Bumiputra" is the name of a policy in effect for 20 years from 1971 to 1990, which aimed at 1) elimination of poverty from all ethnic groups and 2) elimination of the disparities among ethnic groups and areas. In the 1970s populations moved actively among industries and areas, but in the 1980s there was less population movement among rural areas, reflecting the policy of active investment in wider areas than in traditional small towns. The influence of Bumiputra on population mobility reflects the attraction to urban communities (decrease in Chinese population growth rate) and away from rural communities.

Until the end of the 1970s, the main rice cultivation policy was to raise the self-sufficiency rate of rice up to 80-90% by 1) double-cropping to accelerate production, and 2) technical innovations. Another aim of agriculture policy was to raise farm household income, but this did not succeed because of small holding and growing costs of rice cultivation. In the 1980s, there appeared a large area of abandoned paddy fields due to the exodus of the rural population to urban centers. Farming has been maintained since then by group farming and mini-estate policies. Some have pointed out, however, that only intensive cultivation of enlarged paddy fields can raise farm household incomes.

In the 1970s, the Malaysian Government introduced the "Dakwah Movement" (a revival movement of Islam) into rural communities, along with rural development and governmental reforms. This policy contributed to 1) enlargement of more permanent farm house buildings while establishing the household as the smallest living family unit, 2) a decrease in divorce rates, and 3) a decrease in the number of adopted children.

The appearance and disappearance of the "living sphere" (from German "Lebensraum") has been a concern of the Center for Southeast Asian Studies at Kyoto University.

#### 1.6 Thailand

Some of the main economic themes pursued by the

Japanese after the rapid economic development in the latter half of the 1980s are agro-industries, industrialization policies, plutocracy and income distribution. Traditionally, Thailand was an agricultural country. About 60% of the labor population has been engaged in agriculture. New agribusinesses, such as broiler chicken, tapioca (cassava), natural rubber and sugar, are part of a vertical integration of industries from production to marketing of products. A regional monograph on rural communities and life in Northeast Thailand was created by a team from the Center for Southeast Asian Studies of Kyoto University in the 1960s. Since then, there have been many other monographs in different areas—a unique contribution of the Japanese to the world.

Customs of borrowing and lending land between parents and children has also been a research topic in traditional rural villages. New social relationships and community organizations built through the market economy and rural development are also appearing as a new concern. Comparative studies on economic development of Thailand and Japan from 1855 to 1914 have pointed out that both were similar economically in the mid-19th Century, but the Thai Government showed little interest in technical progress. This is the main reason Thailand, like other colonical countries, has exported agricultural products and imported industrial goods.

#### 1.7 Myanmar

Because of its political isolation, there are few studies on Myanmar, but there has been some field work on upper and lower Burma. Three principal agricultural policies have been state ownership of land, delivery of rice to the government and compulsory crop planting. More commercialization of rice and other agricultural products has been observed in upper Burma than in lower Burma. The green revolution in Myanmar succeeded in the latter half of the 1970s, but owing to lack of land reform and circulation systems for the products, high production levels could not be sustained long. The green revolution in Myanmar involved only technical innovations.

## 2. Japanese Studies on Rice Cultivation in Southeast Asia

Japanese studies on rice cultivation in Southeast Asia are summarized as follows:

- A. The monsoon and natural hazards in rice cultivation
- B. Land ownership

Structure of agricultural land ownership

Land tenure

Share cropping

Land reform

C. Capital and money flow

Role of agricultural cooperatives and agricultural banks (BAAC), commercial banks, private credit and informal credit markets in rice production

D. Labor

Size of rice - producing families and labor

exchange customs, Double-cropping of rice Impact of mechanization on labor forces and rice production

E. Technical progress and rice production Mechanization and chemicalization of rice production

Changing systems of irrigation

The "green revolution" and its evaluation

- F. Circulation of agricultural products
- G. Side jobs and other work in rice-producing areas

Fisheries, handicrafts, etc.

### 3. Necessary Future Studies on Socio-economic Changes in Rice-Producing Southeast Asia

- 1. Envitonmental changes caused by industrialization in rice-producing rural areas
  - A. Which kind of environmental changes can be observed?

Forest cutting and its influence

Conservation and development of water resources

Exploitation of mineral resources

Problems of industrialization (domestic and foreign investment)

Traffic revolution

Educational reform and mass high education Rural development and reconstruction of rural areas

Urban development

Land planning

Policies and programs for preservation of high quality environment

- B. Progress in infrastructure in rural areas Economic infrastructure: roads, waterways, railways, airports, telecommunications, water supply, electricity, sewers, irrigation canals, automobiles, ships, agricultural machines Cultural and social infrastructure: dwellings, schools, libraries, parks, hospitals, police stations, play grounds, museums, assembly halls Institutional infrastructure: educational systems, tax systems, law systems, living customs
- C . Environmental impact on ways of life (genre de vie)

Changing clothing, fashions

Food-from traditional to modern foods Changes in dwelling systems, building materials Ways of thinking and changes in view points and values: education, labor, love, money, life, religion, customs, creeds of life, human relations in multi-cultural societies

- D. Case study: environmental changes due to location of big industry under foreign investment in a rural area
- 2. Areal structure in Southeast Asia

Changes in rural-ruban relationship through traffic revolution and socio-economic changes

A. Markets and circulation of rice (domestic and international)

- B. Changes in rural communities
  Social organizations
  Political structure
  Economic behavior
- C. Population movement from rural to urban districts, overpopulation in and around big cities and accompanying environmental problems
- D. Urban problems in Monsoon Asia
- Modeling of sustainable rice culture in Monsoon Asia
  - A. Agricultural household models
  - B. Community models
  - C. Rural-urban models
  - D. Country models
  - E. Monsoon Asia model
- 4. Land use/cover change in Monsoon Asia
  - A. Sources for regional and national information bases
  - B. Sources for historical information bases
  - C. Classification standards for land use/cover data
  - D. Issues of scale and resolution of land use/cover
  - E. Utility and compatibility of various GIS software
  - F. Applications of land use/cover data in the study of environmental change

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  - (Received on 4 Jan., 2000, and Accepted on 21 Jan., 2000)