

**Future Assistance for the Infrastructure  
Sector of the Mekong Region  
(Recommendations)**

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**Infrastructure Development Institute - Japan**

- In the metropolitan areas of each country, increases of in the numbers of vehicles (especially, two-wheel motorcycles), due to increasing population and increasing standard of living, is noticeable. A major problem in metropolitan areas is traffic congestion and that in the local areas is traffic accidents.

## **(2) Railways**

- Every country excluding Laos has a railway network.
- Only parts of sections in metropolitan areas are electrified. The transportation capacity of railways in each country is generally low, mainly because most railway lines are single-tracked, and because many sections that were destroyed by war have not been restored completely. The width of most tracks is a meter gauge, but other gauges also exist.
- To improve railway networks and vitalize regional trade, existing networks need to be repaired and improved, and service standards refined, in addition to construction of new railway networks.
- The “Trans-Asia Railway” project is a cross-border international railway network development project in the region.
- As for Laos, which is the only country in the region without a railway network, an international railway network scheme linking Nong Khai and Vientiane is now underway. It will operate on the Thailand-Laos Friendship Bridge completed over the Mekong River in 1994.

## **(3) Water transport**

- There are a number of river ports in each country in the Mekong region, making use of the Mekong River, the downstream section of the Hong River, and the main courses and the tributaries of the Tonle Sap River. However, problems exist related to these rivers, such as water depth fluctuating 5 - 10 m in some sections in the rainy and dry seasons, and restrictions being placed on the sizes of vessels that can enter these water systems, especially during the dry season.
- Inefficient operation of ports, with long stay times of cargo ships after reaching berth, is a major problem in every country, which is attributable to the deterioration of port facilities and insufficient cargo-handling facilities. Customs procedures also pose a problem, such as long retention times of transit cargos for inspection.
- Water transport on the Mekong river is divided at the Khong Falls on the border of Laos and Cambodia because of a large head of water. This poses a constraint in that cargos from the upstream area of the Mekong River must be carried to ports in Vietnam or Thailand by land.

## **(4) Airport**

- Every country in the Mekong region has an international airport.

- The characteristic of international air transport in every country in this region is that a large share is held by the transport of tourists and the share of cargo transport is small.
- Except for some international airports \*<sup>4</sup>, the level of facility development is low, with many problems to be solved before achieving safe and mass air transportation.
- Concerning air traffic control, various problems are pointed out, such as the difficulty of obtaining a clearance such as for change of a flight altitude during bad weather and communication difficulties due to the low quality of audio-communication systems and other reasons. This is caused by the fact that many flights take the same routes and many flight routes cross one another in Southeast Asia.

**(5) Water supply and sewerage**

- The level of development of water supply and sewerage systems is low in Vietnam, Laos, and Cambodia.

**(6) Electricity and energy**

- The Mekong River has a large potential for hydroelectric development. While a large-scale hydroelectric development project is underway in China in the upper reaches of the Mekong River, hydroelectric projects in the four countries in the lower reaches of the river proposed by the former Mekong Commission (MC) have not been advanced for various reasons.
- There are abundant primary energy sources such as coal, water, and natural gas, but their locations within the Mekong region are unbalanced.

**(7) Flood control and water resources**

- Flooding occurs every year in countries along the Mekong River. For example, in the 2000 Cambodian flood, there was devastating human and economic damage involving most of the national land.

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\*<sup>4</sup> Various airport network projects in the Mekong region are in progress, such as rehabilitation of Vientiane International Airport (Laos), construction of No. 2 Bangkok International Airport (Thailand), and construction of New Hanoi International Airport (Vietnam), but development of the air network in the region as a whole is not sufficient.

# **Future Assistance for the Infrastructure Sector of the Mekong Region (Recommendations)**

## **Contents**

Introduction (Compiling Recommendations) .....	1
1. Present Status and Problems of Development in the Mekong Region .....	4
1.1 Outline of Politics, Society, and Economics .....	4
1.2 Economic Conditions and Problems .....	4
1.3 Living and Social Conditions and Problems .....	6
1.4 Economy and Social Bases .....	7
2. Overview of Development Strategy .....	10
2.1 Outline of Past Assistance from Japan to the Mekong Region .....	10
2.2 Trend of Assistance to the Mekong Region from Donors and NGOs .....	12
3. Future Assistance to the Mekong Region in the Infrastructure Sector .....	15
3.1 Direction of Development and Tasks of Infrastructure .....	15
3.2 Details of Future Assistance in the Infrastructure Sector .....	19
3.3 Ways to Advance Assistance .....	36

# **Future Assistance for the Infrastructure Sector of the Mekong Region (Recommendations)**

## **Introduction (Compiling Recommendations)**

### **(1) Background**

- With the arrival of a new age when international interdependence is expanding and a new form of international exchange is evolving, it is becoming increasingly important to strengthen collaboration among countries in the region under a common regional development vision, and to systematically develop an international infrastructure with its location and effects stretching over multiple countries, in addition to infrastructure development within each country.
- In the “Japan-ASEAN Action Plan” established in December 2003<sup>\*1</sup>, Japan announced its intention to emphasize development of the Mekong region in the form of economic cooperation and policy planning.
- Japan has promoted economic cooperation with the Mekong region in accordance with the “Greater Mekong Subregion (GMS) Program” proposed by the Asian Development Bank (ADB). However, with the establishment of “Japan-ASEAN Action Plan”, Japan is being challenged to define a new policy for developing the Mekong region.
- In the light of the fact that infrastructure is the basis of people’s lives, and can contribute to the continued improvement of their lives through the economic growth of a given country or region, development of adequate infrastructure is a very important task in the Mekong region.

### **(2) Purpose**

- The purpose of these recommendations is to envisage the future state of the Mekong region and to delineate an assistance policy for this region in the infrastructure sector (including institutional building and human resources development), based on the “New Concept of the Mekong Region Development” presented in the “Japan-ASEAN Action Plan” (December, 2003).

### **(3) Preconditions**

- From a mid- to long-term viewpoint (approximately 5 - 10 years), the direction of the Mekong region’s development and the expected state of the infrastructure that supports it as a development base will be defined. Concurrently, priority projects that should be given assistance preferentially selected and classified into a short-term project group (approximately 3 years) or a mid- to long-term project group.

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<sup>\*1</sup> This action plan contains more than 100 substantial measures to be implemented in the near future, and was formulated on the basis of the “Tokyo Declaration for the Dynamic and Enduring Japan-ASEAN Partnership in the New Century,” which will become the guidelines for the cooperative relationship between Japan and ASEAN countries in the future.

- The expected development of infrastructure will be studied for the Greater Mekong Subregion (hereafter referred to as the GMS), which includes Cambodia, Laos, Myanmar, Thailand, Vietnam, and Yunnan Province of China. Projects to be implemented only in China will not be included among the projects targeted in this report.
- The recommendations in this report are based on a broad analysis of the present state and future issues associated with infrastructure, which includes electricity, energy, and other diverse sectors, but discussions on actual projects and assistance are limited to the land, infrastructure, and transport sectors.

**(4) Working Group**

- These recommendations were compiled by the Infrastructure Development Institute – Japan, having been commissioned by the Ministry of Land, Infrastructure and Transport of the Japanese Government. The “Mekong Region Development Committee” was set up to engage in intensive investigations and discussions, which contributed greatly to the compilation of this document.

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## **Meetings of the Mekong Region Development Committee**

The 1<sup>st</sup> meeting      June 14, 2004

The 2<sup>nd</sup> meeting      July 29, 2004

The 3<sup>rd</sup> meeting      October 25, 2004

# **1. Present Status and Problems of Development in the Mekong Region**

## **1.1 Outline of Politics, Society, and Economics**

- The Mekong River is one of the most prominent rivers in the world and its river basin extends over six countries.
- In 2002, the economic growth rate of the entire region was as high as 6.2%, and the rate has continued to rise in recent years.
- Cambodia, Laos, Myanmar, and Vietnam (hereafter referred to as CLMV) are currently in the process moving towards a market economy, with diversification of industrial structure and liberalization of trade and investment evolving. Also, economic relationships with China and India are expanding.
- Indexes show that achievement of Millennium Development Goals, which were set by the United Nations, is generally improving. But, many of the countries in the Mekong region are still far from achieving targets related to basic living standards, such as “halving the proportion of people suffering from poverty and hunger” and “reducing under-five mortality by two-thirds.”

## **1.2 Economic Conditions and Problems**

### **(1) Economic growth**

- In 2002, the economic growth rate in the entire Mekong region was as high as 6.2%, and this rate continues to rise. Therefore, it can be said that the Mekong region as a whole is a region where a high economic growth can also be expected in the future.
- There is concern about a growing economic gap among the three country groups: [1] Thailand which has already reached a high economic standard; [2] Vietnam and Yunnan Province in China, which are continuing relatively steady economic growth; and, [3] Laos, Cambodia, and Myanmar, whose economic growth rates are comparatively low.
- The gaps in Growth Domestic Product (GDP) per capita among the countries is tending to decrease. For example, the GNP per citizen of Thailand (the highest among the GMS countries) in 1992 was 5.3 times higher than that of Myanmar (the lowest among the GMS countries), but the rate decreased to 4.3 times in 2002. Nevertheless, a large gap still exists.
- Within each country, an economic gap is generally widening between urban and rural areas.

### **(2) Economic gap**

- Economic gaps exist within each country. For example, the proportion of poor people is higher in the following areas: northwestern and central Vietnam; northern and southern Laos; northern Cambodia; and northern and northeastern Thailand.
- A large economic gap is also found between urban and rural areas

### **(3) Industrial structure**

- Outside Thailand, the percentage of the population engaged in agriculture is still high. But, the industrial structure has been diversifying in recent years with the growth of manufacturing and service industries.
- The CLMV countries are facing the common challenge of moving towards a market economy. Growth of the private sector is expected in these countries.

### **(4) Investment and trade**

- Trade and investment within the Mekong region have been increasing significantly due to rapid liberalization of trade and investment through the conclusion of a Free Trade Agreement (FTA) and participation in the ASEAN Free Trade Area (AFTA) and World Trade Organization (WTO). Stage 2 of the Cross Border Transportation Agreement within the GMS will be concluded this year. Given these factors, it is expected that trade and investment within the region will increase further.
- Concerning trade within the Mekong region, trade between Thailand and China has been large. But, in recent years, trade between Vietnam and Thailand/China has also been increasing significantly. As a whole, trade within the Mekong region is growing enormously. However, the volume of trade of Cambodia, Laos, and Myanmar is still small. In general, the amount of trade of each country is showing a tendency similar to that of economic growth in those countries.
- Due to the economic growth and participation in the WTO of China, and conclusion of the ASEAN-China free trade agreement, countries in the Mekong region now have direct access to the growing market in China. Trade with India and investment are also expected to expand.
- Concerning investment from foreign countries, Japan is investing heavily in Thailand and Vietnam.
- With the expansion of physical distribution in the Mekong region, the need to speed up customs procedures, introduce one-stop clearance, etc. are growing.

### **(5) External debt and external assistance**

- The external debt of Vietnam is not a serious concern. But, Cambodia and Laos have problems in that the balance of debt is relatively large compared to their revenues. Hence, it is necessary to provide assistance, while paying attention to the macroeconomic conditions of those countries.
- Assistance from Thailand to the surrounding countries through the ACMECS (Ayeyawady - Chao Phraya - Mekong Economic Cooperation Strategy), and Development Triangle Initiatives <sup>\*2</sup> adopted by Cambodia, Laos, and Vietnam, are underway in this region.

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<sup>\*2</sup> A support program for the poorest seven provinces located on the borders of three countries (Cambodia, Laos, and Vietnam) with Vietnam is taking a leading role.

## **(6) Tourism**

- The number of tourists traveling to the Mekong region is increasing. The country accepting by far the largest number of tourists is Thailand. Tourists traveling to Vietnam have also been increasing recently.
- Cambodia and Laos have many underdeveloped tourist resources. A new regional cooperation efforts have been initiated to promote tourism, such as the Emerald Triangle Initiative (ETI) <sup>\*3</sup> adopted by Thailand, Cambodia, and Laos.

## **1.3 Living and Social Conditions and Problems**

### **(1) Population**

- The total population of the Mekong region as of 2002 was approximately 260 million. The population has been increasing slowly and is expected to increase at an annual rate of 2.6% - 1.0% in the future. It is also expected that the population movement into urban areas will increase in all countries.
- As for the structure of population, the younger demographics account for a large percentage, and the labor force is expected to grow.
- Approximately 75 million people of minority ethnic groups live mainly in mountainous areas.

### **(2) Poverty**

- Poverty has been improved gradually, but approximately 5.5 million people still live below the poverty line.
- The percentage of undernourished pupils and people suffering from hunger is decreasing, but approximately one third of children below the age of five years are still in a state of poor nourishment.

### **(3) Education**

- The percentage of children receiving primary education is improving gradually. The literacy rate is high as a whole, except in Laos and Cambodia.
- The gender gap in education is improving gradually, but a gap of more than 20% exists in Laos and Cambodia.

### **(4) Public health**

- The infant mortality rate is improving gradually, but the level is still high in Laos and Cambodia.

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<sup>3</sup> In April 2003, an international wide-area tourism development project called the “Emerald Triangle” was started by Thailand, Cambodia, and Laos.

- The average life expectancy is over 70 years in Thailand and Yunnan Province of China, and approaches 70 years in Vietnam.
  - The maternal mortality rate is improving gradually, but the level is still high in Laos and Cambodia.
- (5) HIV/AIDS**
- The HIV/AIDS problem is most serious in Cambodia.
- (6) Water supply and sewerage**
- Access to safe water is gradually improving as a whole.
  - The percentages of people without access to sanitation facilities are high in Laos, Yunnan Province of China, and Cambodia.
- (7) Natural disasters**
- Inundation and sediment-related disasters occur every year due to flooding of the main course and tributaries of the Mekong River. The scale of damage is large and there are numerous disaster hazard areas. Damage is expanding due to the increased development and expansion of urban areas in recent years.
- (8) Environment**
- The forested area is decreasing in every country in the Mekong region, except in Vietnam.
  - Environmental problems are occurring in urban areas due to the convergence of population and increased development in urban areas.

#### **1.4 Economy and Social Bases**

##### **(1) Highways/Roads**

- Typified by the Asian Highway (AH) project, development of arterial highways, as cross-border traffic routes, has been underway in the Mekong region to improve transport in the region. They are also core road networks within each country.
- Traffic bottlenecks are seen at localized areas, such as tunnels, bridges, unpaved sections, and sections with a narrow road width.
- Problems related to the functional reliability of the transport infrastructure exist, such as the closing of roads in the rainy season due to aging infrastructure and low paving rate.
- One problem common to all countries is a shortage of finance, human resources, and technologies for the adequate maintenance of roads.
- Also, the functional improvement of local road networks is an important issue to be addressed. It is important to have a substantial effect on road networks by repairing and improving existing roads, in addition to constructing new roads.