## **Executive Summary**

## **Chapter 1 Objectives and Methodology of the Study**

## 1-1 Background to the Study

In response to the growing awareness of the importance of donor-partner cooperation in tackling development challenges and global development issues, the Ministry of Foreign Affairs, Japan (MOFA) has hosted several "Tokyo Workshops on ODA Evaluation". Since it was held initially in 2001, five "Workshops on ODA Evaluation" have been organized.

At the third workshop in November 2003, a proposal was made by Vietnamese representatives from the Ministry of Planning and Investment (MPI) to conduct a joint monitoring and evaluation exercise with a possible impact on capacity building. In July 2005 MPI and MOFA agreed to execute the joint evaluation of the Japanese ODA program for transport sector development in the Red River Delta area.

## 1-2 Objectives of the Study

The objectives of the Joint Program Evaluation Study are:

- (1) To plan and execute a joint program evaluation study of the Japanese ODA program for transport sector development in the Red River Delta area,
- (2) To promote the understanding on the part of the Vietnamese counterparts regarding program evaluation on ODA through the participatory approach to the study.

## 1-3 Methodology of the Study

ODA evaluation practice from the "ODA Evaluation Guideline" which was established by the Ministry of Foreign Affairs, Japan (MOFA) is used for the joint program evaluation study. According to the Guideline, this study is classified as a "Program-level Evaluation", and in particular it was further classified as a "Sector Program Evaluation".

The Guideline adopts a comprehensive evaluation method for the Program-level Evaluation (Sector Program Evaluation), in which the object is evaluated from three points namely, purpose, process, and results.

The evaluation of purpose examines the relevance of the purpose of the Program. The evaluation of results assesses the effectiveness and impact of the results of the program. The evaluation of the process verifies the appropriateness of the planning process of the program.

Firstly the object of the study needs to be identified. A "quasi-program" was developed expediently for evaluation purposes, based on "the Master Plan Study of Transport Development in the Northern Part in the Socialist Republic of Vietnam (1994)" conducted by JICA (herein after called "the Master Plan 1994"). The "quasi-program" was named as "The Japanese ODA Program for transport infrastructure development in the Red River Delta area" (herein after called "the Red River Delta Transport Development Program").

The Master Plan 1994 was the first master plan to target the transport sector in the northern part of Vietnam, proposing a complex integrated network of transport systems and services in the four sub-sectors including the road, railway, sea and port, and inland waterway transport sectors. This evaluation study utilized the framework of the Master Plan 1994 in order to create a "quasi-program" as an object for the study.

The Red River Delta Transport Development Program is made up of a group of Japanese ODA projects consisting of 13 Yen loan projects, 2 grant aid projects, 2 technical cooperation projects, and 8 development studies, the implementation of which was carried out during the target period between 1994 and 2004 (the list of Japanese ODA projects under the Program is provided in Table 1-1).

However, other donors' projects relating to the framework of the Red River Delta Transport Development Program (i.e. the other donors' projects for the transport sector in the Red River Delta area implemented from 1994 to 2004) were also reviewed as a reference. The other major donors in the transport sector in Vietnam were the World Bank, the Asian Development Bank, Germany, France, the United Kingdom and Canada (the list of other major donors' ODA projects under the Program is provided in Table 1-2).

After identification of the program scope, the "Objective Framework" was prepared. Borrowing the framework of the Master Plan 1994, the objective of the Red River Delta Transport Development Program is identified as "the establishment of a new transport system in the Red River Delta area for the promotion of economic development in northern Vietnam, the alleviation of north-south regional disparity, and support for the transition to a market economy and internationalization." (the objective framework is provided in Figure 1-2 and Figure 1-3)

The Program is basically divided into four transport sub-sectors: the road, railway, port and sea, and inland waterway sub-sectors. It became evident that the Japanese ODA projects under the Program concentrate on the road transport sub-sector, followed by the port and sea, and railway transport sub-sectors. As far as the inland waterway transport sub-sector is concerned, although one master plan study was carried out, no tangible project materialized. This means that main target areas of the Program can be said to be the road, railway, and port and sea transport sub-sectors. On the other hand, most of other donors' ODA projects focus on the road and railway sub-sectors, the other two sub-sectors receiving very little assistance from other donors.

After preparation of the objective framework, the "Evaluation Framework" was

prepared. The evaluation framework is a tool for identifying the evaluation approach and the type of information and data required for the evaluation analysis, which includes (i) the view point of evaluation, (ii) evaluation criteria, (iii) evaluation indicators, (iv) required information, and (v) the source of information (the evaluation framework is provided in Appendix 1).

Since this study is a joint evaluation activity between Japan and Vietnam, the planning and preparation process of the study, including the preparation of the objective framework and the evaluation framework, was carried out with the mutual agreement of the two evaluation teams of Vietnam and Japan.

Also an "ODA Evaluation Seminar" was held at VJCC (Vietnam-Japan Human Resource Cooperation Center) in Hanoi on 10th and 11th of August with approximately 40 participants from the relevant ministries and agencies of Vietnam and Japan invited. The seminar was organized for the technical transfer of Japanese ODA evaluation methods and practices from Japanese team to the Vietnamese officials. During the seminar, the purpose of the study, the proposed evaluation methodology, the research plan, the implementation schedules and so on, were shared by both participants.

The agencies responsible for the joint evaluation study are the Ministry of Foreign Affairs (MOFA) of Japan, the Ministry of Planning and Investment (MPI) and the Ministry of Transport (MOT) of Vietnam. Japan and Vietnam organized joint evaluating study teams and the two teams jointly conducted the study.

## Chapter 2 The Red River Delta Transport Development Program

The target area, the Red River Delta area, is the political and cultural center of Vietnam. Hanoi city plays an important role in the region's socio–economic activities in terms of purchasing power, capital, technology and labor force, especially trained labor force. Nearly 100% of the Red River Delta's population is of the Kinh majority. The administrative units of the Red River Delta area include 11 provinces: Ha Noi, Vinh Phuc, Bac Ninh, Ha Tay, Hai Duong, Hai Phong, Hung Yen, Thai Binh, Ha Nam, Nam Dinh, and Ninh Binh.

The Red River Delta area is the most populated with 17,649,000 people in 2003, of which nearly 80% are in rural areas. While construction industry accounted for 44% of the regional GRP, and services accounted for 45% of the regional GRP, agriculture accounted for just 11%. In fact, not only the Red River Delta area but also the whole Vietnam is faced with the issue of transforming an agricultural labor force to one for other activities (industry, construction, services).

During the last decade, the Red River Delta area has been aggressive in attracting foreign direct investment (FDI) and official development assistance (ODA). The Red

River Delta area is second after the South East region in terms of regional GDP, with its share of the national GDP at 21% in 2003. Its regional economic growth rate is higher than the average of Vietnam. It also has achieved remarkable results in the sphere of poverty reduction.

The Japanese ODA projects under the Program in the Red River Delta mainly target the three transport sub-sectors: road, railway and port and sea. The Japanese ODA projects may be classified into three categories according to their purposes and scopes: (i) direct assistance in physical infrastructure development, (ii) human resource development, and (iii) intellectual support for sector development policy formation. The Japanese ODA projects for the three sectors have a combination of these three types of assistance.

Regarding the road sub-sector, major national highways such as NH No.1, NH No.5, NH No.10, and NH No.18 are all targets for Japanese ODA projects under the Program. The number of Japanese ODA projects under the Program totals 16 projects (nine Yen loan projects, two grant aid projects, one technical cooperation project and four development studies) (see Table 2-3).

Regarding the railway sub-sector, the Hanoi-Ho Chi Minh City (HCMC) line is a target for the Program. The number of Japanese ODA projects under the Program totals two projects (one Yen loan project and one development study). (see Table 2-4).

Regarding the port and sea sub-sector, two major ports in the northern part of Vietnam, Hai Phong Port and Cai Lan Port are targets for the Program. The number of Japanese ODA projects under the Program totals six projects (three Yen loan projects, one technical cooperation project, and two development studies). (see Table 2-5).

Regarding the inland waterway sub-sector, there is only one development study (see Table 2-6).

The location of Japanese ODA projects under the Program is provided in Figure 2-5.

## **Chapter 3 Results of the Evaluation**

## 3-1 Relevance of Purpose

#### 3-1-1 Consistency with Japanese Prior Policies

In this section the relevance of the purpose was examined. The approach adopted was (i) to analyze the purpose of the Red River Delta Transport Development Program including the ideas and direction of the Program; then (ii) to examine the consistency between the basic philosophy, principles, priorities, and measures of the Japanese prior policies and the purpose, ideas, and direction of the Program. The Japanese prior policies to be examined were the ODA Charter 1992 and 2003, the Medium-Term Policy 1999 and 2005, the Country Aid Principles to Vietnam 1994-1999 and the Japan's Country Assistance Program for Vietnam 2000 and 2004. As a result, a general

consistency was confirmed on the following major points:

- The Program is for infrastructure improvement which is regarded as the prerequisite for socio-economic development and a very effective measure for both sustainable economic growth and poverty reduction;
- (2) The Program constructed infrastructure which stimulates both domestic and international economic activities and leads to an increase in foreign direct investment. In this way, the Program's aims include the promotion of the transition to and the expansion of a market-oriented economy;
- (3) The Program fully mobilized Japan's different ODA schemes in the planning and implementation process, and this combination contributed to a maximization of the general effects of aid and to cost saving;
- (4) The Program emphasized human resource development, which was a major component of "human security" at various stages of the planning and implementation process;
- (5) The Program was carried out in Vietnam, which is a country located in the priority region for Japanese ODA;
- (6) The Program utilized Japan's experience and expertise, especially that of the Japanese private sector;
- (7) The Program maintained a very positive position regarding international cooperation and collaboration and a greater rationality and efficiency prevailed in the course of socio-economic development;
- (8) The Program respected and encouraged the initiative of the Vietnamese authorities concerned and this reflected the core position of Japan's ODA policy in supporting self-help endeavors.

#### 3-1-2 Consistency with Vietnamese Needs

Secondly, consistency with the needs of Vietnam was examined, these being represented by the Ten-Year Socio Economic Development Strategy 1991-2000 and 2001-2010, the Five-Year Socio-Economic Development Plans (Fifth: 1991-1995) (Sixth: 1996-2000) (Seventh: 2001-2005), the Comprehensive Poverty Reduction and Growth Strategy (CPRGS), and the Vietnam Transport Development Strategy by 2020. As a result, the consistency was confirmed on the following major points:

- (1) Since one of the original ideas of the Program was to construct infrastructure which stimulates physical distribution and other socio-economic activities, thus reducing poverty and increasing general income and social welfare in rural areas, it is compatible with the overall goal of the ten year strategy (1991-2000).
- (2) In this sense also, the ideas of and the identified priority projects in the Program are consistent with the contents of the "Strategic Directions for Transportation

Infrastructure Development" of the ten year strategy (2001-2010).

- (3) The Program is also consistent with the basic logical framework of the three five year plans. The immediate purposes and contents of the priority projects in the program are identical to the strategic directions of the three five year plans. Thus, the overall consistent relationships are observed.
- (4) The basic purposes of CPRGS are harmony between sustainable growth and the attainment of poverty reduction and social equity. The CPRGS clearly states in Part IV that large scale infrastructure development plays an important role, through its spillover effects, by helping to create more resources for implementing development goals, accelerating growth and eradicating poverty. Therefore, the Program has significant consistency with CPRGS.
- (5) The overall goal of the Vietnam Transport Development Strategy is expressed as to meet the rapidly growing and diversified transport needs at the same time as strengthening the quantity and quality of transport infrastructure. The Program was designed to develop a well balanced infrastructure in the general transport sector on the surface, covering road, railway, sea and river (inland waterway). Since the overall goals and the strategic directions of the strategy are the same as the purposes and contents of the priority projects identified in the Program, it is clear that there is continuity and consistency between this strategy and the Program.

## 3-1-3 Advantages in Implementation of the Program by Japanese Initiatives

Thirdly, the advantages of the implementation of the Program by Japanese initiatives is examined focusing on three aspects of advantage such as (i) the advantage of Japan as a country, (ii) the advantage of Japanese companies; and (iii) the advantage of the capability of Japanese professionals. This survey was conducted through questionnaires and interview surveys by Japanese engineering consultants and contractors as well as Vietnamese counterpart ministries and agencies and local sub-contractors involved in the Japanese ODA projects under the Program. The major views expressed by the respondents can be summarized as follows:

- (1) Japan has an advanced technology and abundant experience in development projects throughout the world;
- (2) Japan has a good ODA system with a strong economy and is able to provide large funds for development projects;
- (3) Japanese ODA is timely and responds directly to local needs;
- (4) Japanese companies and professionals are enthusiastic in technical transfer of advanced technology to local counterparts;

(5) Japanese companies and professionals have a professional and effective working manner.

# 3-1-4 Comparison of Aid Policy and Programs between Major Donors and Japan

Fourthly, an overall review of the aid policy and programs of the major donors was carried out together with a comparison with Japanese aid policy and the Program. The overall goal of all major donors emphasized the pursuit of poverty reduction through/with sustainable economic development. In this sense, the overall goal among major donors including Japan is substantially identical. Regarding the major donors' program objectives and priorities in Vietnam, there are similarities and differences with the objective of the Japanese Program. This means a variation in the individual ODA projects of each donor, resulting in a complementary relationship among major donors' ODA projects in the transport sector as illustrated in the objective framework of the program in Figure 1-3.

## 3-2 Effectiveness and Impact of Results

## 3-2-1 Achievement of the Program Purpose

The analysis for the achievement of the Program purpose was conduced based on the following principal approach: (i), The linkage between the sub-sector objectives and each component of Japanese ODA as well as other major donor's ODA projects is examined according to the definition of the Program; (ii) Based on (i), measurable indicators are selected. If any concrete measurable indicators or targets had already been identified in JICA's Master Plan 1994, they were respected. If not, appropriate measurable indicators were set up by the study team; (iii) then according to the degree of the relationship/linkage between the output of each project and the outcome in each sub-sector, the contribution of Japanese ODA as well as that of the ODA of other major donors was assessed.

## Road Transport Sub-sector

In the road sub-sector, traffic volume, travel time, pavement ratio, road density and road accessibility were examined. Traffic volume of NH No.1, NH No.5, NH No.10, and NH No.18 as selected stations in general increased constantly. Traveling time on the national roads shortened. The paved road ratio of all kinds of road in the northern part of Vietnam improved from 25.4% in 1995 to 54.0% in 2003, already achieving the original target of 40-50% in 2010. The road density by land area in the Red River Delta was 1.16 km/km2 in 2004, which is higher than the national average (0.36 km/km2 in 2003). Regarding road accessibility, the Red River Delta provides the shortest distance from hamlet to the nearest road. The Red River Delta has attained the most developed road network in Vietnam.

#### Railway Transport Sub-sector

In the railway sub-sector, the volume of cargo and passenger transport, the number of

train trips per day, train operation and running hours on the Hanoi-HCMC land other four major lines, the Hanoi-Hai Phong line, Hanoi-Dong Dnag line, Hanoi-Quan Trien line, and Haoni-Lao Cai line were examined. The volume of passenger transport (passenger-km) on the Hanoi-HCMC line showed the highest and most constant increase at 9.8 per cent of the annual average growth rate from 1994 to 2004. The summation passenger transport volume of the five major railway routes was 9.4% of the annual average growth in the period. Whilst the volume of cargo transport (ton-km) on the Hanoi-HCMC line indicates the lowest increase among the major five routes, it is at 5.6 per cent of the annual average growth rate from 1994 to 2004. However, the summation cargo transport volume of the five major railway routes indicated a constant upward tendency in volume except for the three years from 1996 to 1998, for which the annual growth rate is 6.9%. Also the number of train trips increased and a reduction in running time was observed on each line.

#### Port and Sea Transport Sub-sector

In the port and sea transport sub-sector, the volume of cargo and the containerized ratio at Hai Phong Port and Quang Ninh Port (Cai Lan Port) were examined. The volume of cargo handling dramatically increased at Hai Phong and Quang Ninh Ports. The Phase I of the Hai Phong Port Improvement Project completed in 2001, and then the container cargo ratio in Hai Phong port improved dramatically from 23% in 1994 to 46% 2004. The container terminal Quang Ninh (Cai Lan) Port became available for use in 2004, and then the container cargo ratio improved rapidly from 4% in 2000 up to 30% in 2004.

#### Contributions by Major Donors

Regarding contributions by other major donors, the assistance of the World Bank, the ADB, France and the UK also played a key role for the infrastructure development of road transport and its positive outcome. Whilst Japanese assistance focused on the development of the main national roads in the area, other major donors assisted greatly in provincial and rural road infrastructure development. The contribution of major donors is high in the road transport sub-sector.

In the railway transport sub-sector, German and France have actively supported the supply of locomotives, signal systems, O&M facilities, equipment etc. These improvements for railway infrastructure must have assisted the confirmed achievements of the Program. Also Germany assisted with the institutional report of railway sub-sector. The contribution by France and Germany is substantial in the realization of a positive outcome for the railway transport sub-sector.

In the port and sea transport sub-sector, France provided the signal lighting system at Hai Phong Port and fire boats, and Germany supplied the hopper suction dredger. However, in comparison with the assistance of Japan to the port and sea transport sub-sector, their assistance was relatively small in terms of their scales and contents. As far as the direct relationship between the assistance of France and Germany and the improvement of cargo volume and containerized ratio at Hai Phong Port and Quang

Ninh (Cai Lan) Port is concerned, their contribution is limited in the realization of a positive outcome for the port and sea transport sub-sector.

## Overall Achievements of the Program

The Program has achieved a considerable improvement in the three target sub-sectors. Particularly the development of road transport and port and sea transport improved the connectivity of the two transport modes. These combinations of activities stimulated the further expansion of the activities of each sub-sector and influenced the economic activities in the target area. It is evident that the Program has contributed much to the establishment and development of a new transport system in the Red River Delta.

It is important note that the timing of the Program was appropriate, in that the pace and speed of development in each sub-sector has not became a bottleneck for economic growth in the last decades. On the contrary, it can be said that the Program has strongly supported growing economic activities in the area.

#### 3-2-2 Potential Risks to be noted

Whilst a considerable development of the transport sector has been achieved, there is a growing concern about operation and maintenance (O&M) issues, particularly the O&M of roads and bridges. The O&M issues include the following institutional and financial issues: (i) the weak financial source of O&M due to the accelerated expansion of investment for the transport sector which has led to an imbalance between investment and O&M; (ii) a weakness in not having a consistent O&M plan and rational O&M budget allocation in the investment plan (for road construction) and the current budget plan (for road maintenance) due to the separate planning processes of the different ministries; and (iii) a weakness in acquiring an efficient and effective O&M system due to the lack of a road administration body responsible for the overall management of the project cycle of road projects in the planning, construction, and O&M stages.

#### 3-2-3 Financial Contribution on the Transport Investment Plan of Vietnam

Investment into the Transport Sector is one of the biggest concerns of the Government of Vietnam and the donor community. From 1993 up to October 2005, there were 26 donors from different countries and organizations committed to ODA in Vietnam for the transport sector with an amount of 5.635 billion US dollars, accounting for more than 23% of the total ODA in Vietnam for the same period. The ODA investment for the road sub-sector is the biggest proportion accounting for 71% of the total ODA committed for the transport sector in the whole country. The lowest rate is for Inland Waterway which is less than 1%, while the proportions for railway, maritime and air transportation accounted for about 7.4%, 16.9% and 3.7% respectively.

Among the major donors, Japan has become the biggest contributor for the transport sector of Vietnam with more than 2.9 billion US dollars, accounting for more than 52%

of the total ODA commitment of all donors for the transport sector and for about 35% of the total ODA from Japan for Vietnam. A big proportion of Japanese ODA for the transport sector was invested in the Red River Delta area with more than 1.95 billion US dollars, or about 66.7% of the total Japanese ODA for the whole transport sector in Vietnam. Split into transport sub-sectors, about 80% was committed for road transport in the area.

#### 3-2-4 Impact on Economic Development

#### Research Methodology and Analytical Framework

The economic impact study looked at three dimensions of the economic impact which were identified by JICA's Master Plan (1994) and placed as overall goals of the Program' objective in the objective framework of the Program: these were (i) the impact on the regional economic development of the Red River Delta; (ii) the impact on the mitigation of the regional economic gap between the North and South; and (iii) the impact on the promotion of the transition to a market economy system and internationalization. In addition, a case study on the impact of the development of trade and economic activities between Vietnam and China was carried out in order to demonstrate the uniqueness of this study approach.

The economic impact study used an analytical framework based on a hypothetical role for the transport development program on regional economic growth, illustrating the process between the development of the transport network and regional economic growth (see Figure 3-44). The economic impact study placed emphasis more on the process than on the impact. The impact level, which includes businesses and local governments, measures how important the Program in particular and the regional transport network in general, is to business and economic development.

The impact study was conducted through (i) the study of existing studies on similar issues; (ii) questionnaires and interview surveys for companies and local authorities in all of the provinces in the Red River Delta; and (iii) a literature survey on socioeconomic statistical data and information.

## Results of the Economic Impact Study

(1) The Program has facilitated economic growth in the Red River Delta and reduced poverty in the region. The Red River Delta has achieved remarkable results in poverty reduction with the contribution of Japan's ODA Program in transport. Even though there is little evidence to prove that the economic gap between North and South has been reduced, it is possible to say that the economic growth rate in the South is faster than that in the North. The Program has contributed to the economic development of provinces in the North. Assistance plays a positive role in not widening the economic gap between North and South. Since there are several factors contributing to economic growth and the economic growth rate, it is reasonable to guess that there are also negative factors widening the economic gap between North and South.

- (2) The Program is only one of several factors facilitating the development of the private sector in both registering and actual operating. It does not directly assist Vietnam in its transition to a market economy but it has positively contributed to economic growth and poverty reduction. Therefore, it is difficult to show direct linkage between the Program and the transition to a market economy Vietnam. However, the economic growth itself is an important factor in encouraging the development of the private sector, which is an important indicator of the transition to a market economy.
- (3) Most of the projects under the scope of Program are considered important for trade activities between the Red River Delta and China. In descending order of importance, these projects under the Program are, in turn, Hai Phong port, Highway No.1, Highway No.5, Highway No.10, Highway 18, and Cai Lan port. However, there are opinions expressing that view that the impact was not large since there were other factors affecting trade and FDI relations between the Red River Delta and China. Together with the availability of natural resources, domestic demand increases and the improvement of the business policy environment, the improvement of the transport network in Vietnam is no doubt a critical factor in attracting FDI (not from China). There are probably several factors affecting Chinese investment in Vietnam such as capital; geography; demography; and the Chinese government's FDI policy.

#### 3-2-5 Impact on Capacity Building of Vietnamese Counterparts

The capacity building impact study was carried out through questionnaires and interview surveys with Japanese consultants, contractors/suppliers, Vietnamese sub-contractors who were involved in the Japanese ODA projects under the Program and also Vietnamese counterpart personnel in the JICA technical cooperation projects.

From the viewpoint of the Japanese consulting firms, contractors and technical experts, improvement in technical skills and know-how among Vietnamese engineers/professionals was very remarkable due to joint efforts. This result was confirmed exactly by the responses from the Vietnamese personnel concerned. The Japanese side also praised the improvement in long term and comprehensive planning and management skills and the know-how of Vietnamese counterpart institutions.

It is clear now, that mainly due to the joint efforts of the Japanese and Vietnamese institutions and personnel concerned, Japanese ODA projects as a whole have created a certain level not only of technical but also of business morale impacting on Vietnamese engineers/professionals through education/training in technical cooperation projects and the on-the-job-training in Yen loan projects.

#### 3-2-6 Social and Environmental Impact

#### Impact on Environment

Since there has been no comprehensive study of the environmental impact in the

transport sector in the Red River Delta and there is a lack of relevant information, it is difficult to present factual evidence on the environmental impact of the Program. However, it is recognized in general that road system development affects the environment with air and noise pollution. Particularly these negative environmental impacts are often observed in most of the urban area and heavy traffic highways. Waterway transportation development in turn may damage inland water and seawater, particularly in the coastal areas of North and South Vietnam.

#### Impact on Gender

Empirical studies suggest that the development of the road system creates numerous opportunities for women. A shortened traveling time has made people, including women, more able to easily access various kinds of services such as health, education, etc. The most convincing impact is on the occupational change that helps women to generate more income. The economic changes supported by the development of the infrastructure system have thus affected the status and roles of women, both economically and socially. Women earn more and have an extended social environment. New occupations have brought new opportunities for women, turning their potentiality into capability, at the same time requiring women to improve their knowledge and skills. New occupations have brought them not only a higher income but also the extended exercise of social rights. Again, factual evidence for the gender impact by the Program cannot be provided due to a lack of information, but it may be argued that the Program facilitated preferable conditions for a positive impact on gender.

#### Impact on Traffic Safety

As motorization has increased, the number of accidents, fatalities, and injuries sharply increased between 1994 and 2001 in Vietnam. From 2002 to date, there has been a decreasing trend in the number of accidents and injuries. However, unfortunately, this does not apply to the steadily increasing number of fatalities. Traffic crashes occur more frequently in urban areas than in rural areas. However, rural crashes tend to be more severe. The Red River delta and Mekong River delta have the largest number of injury cases, of which Hanoi and Ho Chi Minh City contribute the highest figure. Road network improvement and increased traffic volume inevitably lead to a higher number of traffic related injuries. Major causes for all accidents are lying in the road users. Statistics show that 75-80% of road accidents were caused by road users who did not observe traffic rules and regulations, problems including over-speeding, dangerous overtaking, drunk driving, poor road observation, driver fatigue, and illegal motorcycle racing; only 1-2% were caused by structurally poor roads/bridges and unsafe vehicles.

Of the total traffic accidents in the whole transport sector, railway accidents accounted for 1.5-1.6% in terms of crashes, 1.8-2.35% in terms of fatalities and 0.7-0.8% in terms of injuries. This data shows the relatively severity of railway accidents. The number of railway accidents is low but increasing. Major causes for 50% of accidents lie in the

trains and rolling stock, many of which are out dated and in poor condition. Insufficient training for train operators, poor management, and weak enforcement of related safety laws and regulations are important causes as also.

The absolute figure of maritime accidents is relatively low with an average of 100 accidents per year. However, maritime accidents have increased by 10–15% in recent years. Again, the main causes lie in captains' mistakes (52%), and the poor conditions of vessels (28.4%).

The increase of traffic accidents leads a social and economic loss. Traffic safety issue is commonly shared among international donors including Japan, and it became priority issue for Japanese ODA that has promoted infrastructure development in Vietnam. JBIC and JICA have been performing leading roles for implementation of the preventive measures on road safety such as traffic safety campaign and education, constructing land bridges (flyover) and traffic signals. Also improvement of railways safety is supported through modernization of the existing railway facilities.

## 3-3 Appropriateness of the Planning and Implementation Process

## 3-3-1 Appropriateness of the Organizations involved in the Planning Process

For the overall planning and implementation process of the Program, MOFA (and the Embassy of Japan in Hanoi) represented the Government of Japan and became the counterpart agency of MPI for development policy dialogue as a part of diplomacy, and the following ODA procedure between the two governments. JBIC and JICA are the implementation institutions of each of the Japanese ODA schemes. JBIC is in charge of the Yen loan projects and led implementation process for the Yen loan projects. JICA is in charge of development survey, technical cooperation projects and grant aid projects jointly with MOFA.

The Ministry of Planning and Investment (MPI) represents the Government of Vietnam in general ODA related international affairs with different donors. In addition, MPI is in charge of the overall planning, management and evaluation of ODA projects/programs within the Government of Vietnam. Thus, MPI conducts the difficult task of coordination among the domestic ministries and other institutions concerned.

It is therefore confirmed, through a review of previous official records and responses from interviews, that the leading authorities/agencies concerned in both governments, namely MOFA, JBIC and JICA on the Japanese side and MPI on the Vietnamese side, have jointly made appropriate decisions and followed the due administrative process for the successful implementation of the Program with good international coordination and cooperation (the planning and implementation process of ODA projects is shown in Figure 3-57).

## 3-3-2 Appropriateness of the Needs Assessment in the Planning Process

#### Yen Loan Projects

JBIC is the implementation institution for the Yen loan projects. The needs assessment for the Yen loan projects to Vietnam was carried out with the following steps: (i) JBIC checked projects in the long list which was presented by Vietnamese authorities concerned about consistency with basic development strategies and the plans of both Japan and Vietnam; (ii) JBIC together with ODA Task Force exchanged views on the target sector with Vietnamese authorities concerned and identified the priority issues and needs of the sector; and (iii) based upon the identified priority issues and needs the short list of candidate Yen loan projects was prepared and submitted by the Vietnamese government.

## Grant Aid Projects by the Ministry of Foreign Affairs (MOFA) and JICA

The Ministry of Foreign Affairs (MOFA) and JICA are responsible for grant aid projects. The needs assessment for grant aid projects to Vietnam was carried out with the following steps: (i) after acceptance of the official request from the Government of Vietnam, MOFA and JICA carefully examined the purpose and the content of the requested project; (ii) the consistency with basic development strategies and the plans of both Japan and Vietnam was also checked; (iii) the necessity and appropriateness of the requested facilities/equipments, capability of the execution organization and the institution was studied; (iv) coordination with the JICA master plan studies and/or those of other donors was reviewed; and (v) technical missions were dispatched to clarify the purpose, contents and other conditions even before the basic design stage of the project in cases of necessity.

#### Technical Cooperation Projects by JICA

JICA is the implementation institution for technical cooperation projects. The needs assessment of technical cooperation projects for Vietnam was carried out during the preliminary evaluation stage, mostly through site surveys and discussion in detail with the Vietnamese counterpart implementation institution. Technical cooperation projects were implemented jointly and with very close cooperation between the Japanese expert team and Vietnamese counterpart staff. As a result, the needs assessment was constantly carried out for different issues and the content of these was automatically modified or changed regularly, based on consensus. Besides this, JICA executed mid-term evaluations and post evaluations during the project period thus critically reviewing the purpose, content and the implementation course of the projects.

### **Development Study by JICA**

The development study was also implemented by JICA. The needs assessment for development study of Vietnam was carried out with the following steps: (i) JICA examined the consistency with the basic development strategies and plans of both Japan and Vietnam considering possible future connections with the Yen loan projects;

(ii) JICA dispatched technical missions for clarification of the purpose and the content of the request for development studies in cases of necessity; and (iii) the development needs were identified as study subjects under mutual agreement with the Vietnamese. Furthermore, the actual development study was a process of needs assessment itself.

#### Ministry of Planning and Investment (MPI)

MPI is defined as representing the Government of Vietnam with relation to foreign donors regarding general government procedures for ODA programs/projects. The needs assessment process on the part of the Government of Vietnam was very deliberate and comprehensive. The fundamental criteria were consistency with the ten year strategies and five year plans and then with genuine local and national needs. The needs assessment process in MPI was (i) each responsible line/sector ministry prepared projects for their own needs assessment through the preparation of a sector master plan and feasibility studies; (ii) these formulated projects were assembled and MPI carry out preliminary technical and administrative screening for these projects, putting the results on the "long list."; (iii) MPI functioned as a coordination agency and consulted with the other important government ministries and committees; (iv) MPI also successively discussed the projects in the "long list" with foreign donors and examined the possibility of ODA application to each project; and (v) after the identification of development needs and the project formulation process, a "short list" of priority projects was prepared by MPI and presented to donors for official consultation.

After careful review and analysis of the official records and extensive interviews with MOFA officials, JBIC and JICA staff, and MPI officials, it is confirmed that the due administrative and field survey process for the identification of the Vietnamese development aid needs was followed and appropriately reflected into the actual purpose and contents of each specific ODA project through the official planning and implementation process. It is also confirmed that MPI followed the due administrative process in cooperation with other Vietnamese ministries and the pertinent institutions for the identification of Vietnamese development aid needs, the formulation of priority projects and the appropriate administrative management of each specific development project through the official planning and implementation process.

#### 3-3-3 Coordination between Japanese ODA Schemes in the Program

In the review of Japanese ODA transport projects in the Red River Delta area, 14 cases of coordination between Japanese ODA Schemes in the Program were observed among 25 related projects.

The main combination was the systematic links between the Yen loan projects and the designated development surveys. The process of the master plan study and the successive feasibility study by the JICA development survey and then the Yen loan project has been well established. This process is very rational and systematic in identifying and evaluating the specific needs in each target area and effective in formulating appropriate ODA projects, especially for large infrastructure projects.

In addition, there were several cases of other forms of combination. JICA technical cooperation projects have trained and thus provided qualified professionals in the field of road construction and sea transport. A MOFA/JICA grant aid project prepared the facilities and equipment for education and training carried out by a JICA technical cooperation project. A JICA master plan study identified the needs for human resource development in the area of sea transport and a JICA technical cooperation project was then implemented for that purpose.

## 3-3-4 Coordination between Major Donors' Aid Programs/Projects and the Program

There was an actual case of coordination among major donors in relation to the Program. This was the Improvement of National Highway No.1. Also, there were the cases of partial coordination in National Highway No.5 between Japan and Taiwan and in National Highway No.18 between Japan and Korea.

For National Highway No.1. project, the World Bank, the Asian Development Bank and the United Kingdom carried out substantial improvement of the road conditions and Japan took the responsibility of rehabilitating and/or reconstructing the road bridges which cross rivers and banks of the highway. The basic and practical reasons for coordination were the large scale of the project as a whole, the need to share the financial burden and an awareness of the urgency for an early completion of the project in order to meet the ever growing volume of traffic on the road.

According to the review of the development aid by the major donors of the transport sector, another kind of coordination was done in the selection of priority sub-sectors. Japan has carried out substantial number of ODA to all transport sub-sectors, but in the road sub-sector, Japan, World Bank, and the Asian Development Bank aided heavily this sub-sector. In the railway sub-sector, Germany and France are the major donors, but Japan also actively aided with significant volume. Japan also cooperated in the strengthening of the capability of sea transport and ports through both Yen loans and technical cooperation.

Consequently, the development of the three major sub-sectors in the transport sector, namely road, railway and sea transport and port, has been supported by both bilateral and multilateral donors. This international concentration of aid by major donors on the three sub-sectors was very effective and efficient as a direct response where fast growing needs for different modes of infrastructure development were arising rapidly.

In addition, the international development partners' group meetings based on different sectors and/or priority issues played an important role in donor coordination.

## **Chapter 4** Lessons Learned and Recommendations

### 4-1 Achievement of the Joint Evaluation Study

This technology transfer on ODA evaluation has been implemented in the actual process of joint evaluation activities, such as participatory workshop, joint research, joint field survey and joint reporting. Also periodic core team member meetings were held for information sharing, monitoring of survey progress, management of constraints and participation to analysis.

After completion of major joint evaluation activities for the Red River Delta Transport Development Program, MPI and the evaluation team worked towards the second objective of this joint evaluation. This is the evaluation of technology transfer between the Vietnamese counterparts, mainly the core team members, and the Japanese evaluation team. A questionnaire was prepared and major questions were asked on the following matters: (i) learning from the evaluation process; (ii) the technical transfer performance of the Japanese teams; (iii) expectations achieved; and (iv) recommendations for the next evaluation

As a general conclusion from this questionnaire and verbal responses from the Vietnamese core team members, joint evaluation activities were recognized as mutually beneficial and meaningful for both the Vietnamese core team members and the Japanese evaluation team. Most of the Vietnamese counterparts involved in this evaluation activity reported that they had learnt more about the theoretical meaning, as well as the systematic evaluation methodology in the practice and management of the actual evaluation process. For the Japanese side, this quality work could not be achieved so thoroughly and efficiently without the sense of ownership and the active participation by the capable Vietnamese core team members, who were quick to absorb the theory and methods and then to apply what they learnt in practice.

Whilst the following views were expressed by the Vietnamese counterparts that (i) they needed additional time for the implementing schedule of the study especially for the planning and preparation stage; and (ii) they felt difficulties to conduct the evaluation activities in parallel with doing their own official duties at their ministries during the implementation period of the study.

#### 4-2 Lessons Learned

The lessons learnt in this joint evaluation study are as follows. First, the basic concept that infrastructure development in the transport sector contributes to both economic growth and poverty reduction is confirmed.

Second, infrastructure development is seen to be very efficient in the sense of overall time and cost saving and more effective in long term socio-economic development if a specific sub-sector is selected as the priority sub-sector and all available resources are concentrated in order to attain a certain level of satisfaction of the development needs and demands.

The third lesson is in human resource development. The contents of the extensive, mainly Japanese private sector OJT were not limited to the practical technology transfer of advanced technology or the use of sophisticated machinery, but management skills and know-how for long-term and comprehensive planning and implementation were also included. In addition, the Vietnamese counterparts were impressed with the working ethic of the Japanese engineers/professionals, their diligent working attitude, pursuit for quality in their work and the emphasis on team work.

More significant, some of the leading Vietnamese personnel recognized the general and long term positive impacts of human resource development programs for their organizations and responded that they started or strengthened their own OJT programs.

The fourth lesson was in effective coordination and cooperation among different Japanese ODA schemes. This kind of coordination and cooperation was very effective in the minimization of overall transaction costs, speedy planning and the maximization of the quality of output (products and services).

Fifth, the same was true in the cases of aid cooperation and coordination among donors. As mentioned above, there was a very good example of coordination between Japan, the World Bank, and the Asian Development Bank for the National Highway No.1 Project. Another good example of coordination and the division of roles in road construction between the World Bank, U.K., the Asian Development Bank and Japan was observed in the development of a comprehensive road network in the Red River Delta area within a relatively short time.

Sixth, many positive impacts were identified in the infrastructure development of the transport sector. In the road sub-sector, problems observed were an increase in repair and maintenance costs, and an increase in traffic accidents. Therefore, there is a need to prepare numerous different appropriate counter measures to solve these problems.

Seventh, the firm development aid policy position for the priority sector and sub-sector by the Government of Japan created the foundation for continuity and thus the accumulation of outcome of development aid. The priority sector and the sub-sector of Japanese ODA to Vietnam have not basically changed between 1994 and 2005. This firm policy position has provided significant stability and continuity over the years in the selection, planning and implementation of priority projects.

Eighth, the joint evaluation activities were recognized as mutually beneficial and meaningful as a first step. If the joint evaluation activities are to be promoted in the future, more intensive and elaborate works in the preparation stage will bring about further outcomes.

#### 4-3 Recommendations

Based on the whole analysis, recognition of the achievements of the program, and

lessons learnt, this evaluation study presents the following recommendations.

- 1. For long term development aid strategy for the infrastructure sector in Vietnam, especially in the Red River Delta area, the "selection of and concentration on priority sub-sectors and/or issues" policy approach should be continued. This kind of strategy has proved meaningful for overall time and transaction costs and also for the achievement of substantial development aid.
  - However considering the concerns such as the increase in repair and maintenance costs and the increase in traffic accidents in Vietnam, it is recommended that these matters are considered as priority issues and that the development of effective counter measures is also required. As the counter measures against traffic accidents, JICA is currently undertaking a development survey on human resource development on traffic safety in Hanoi. In near future, preparation of a master plan on traffic safety of national scale may be desirable.
- 2. As far as human resource development is concerned, there are three practical recommendations as follows:
  - (1) The components of human resource development in the Yen loan projects should be enhanced. Also the coordination between JICA and JBIC such as dispatching JICA experts to the Yen loan projects, while it is already existing, must be continually promoted. For this purpose, financial and staffing arrangements are necessary.
  - (2) In JICA technical cooperation projects relating to the vocational training, technical education and classroom training are regular activities. However, understanding the significance of the OJT and responding to practical needs, an increase in practical training opportunities in the curriculum may be necessary for further capacity development of students and trainees.
  - (3) Regarding JICA development surveys, more effective use of the counterparts training program must be considered. If the counterparts training program is designed not only to make the transfer of specific technical skills and subjects but also to promote the technology transfer of the survey skills in general and management know-how of the projects, the development surveys will produce more comprehensive development effects.
- 3. The significant achievements are very evident in the transport sector, where the aid coordination and cooperation among different Japanese ODA schemes has taken place for a long time. Because the project-based aid tends to decrease and the program-based aid will be more important, such coordination and cooperation is highly recommended.
- 4. Aid coordination and cooperation among donors has also gained significant achievements. It is also recommended MPI and MOT should utilize the partnership group and take more initiative in promoting international partnerships with a sense

of ownership.

- 5. As described above, the firm development aid policy position of the Government of Japan for the priority sector and sub-sector created a foundation for continuity and thus the accumulation of development aid. Therefore, it is recommended that the priority sector and the sub-sector for Japanese ODA to Vietnam are maintained until the time comes when both the governments of Vietnam and Japan agree to make a strategic change.
- 6. For the technology transfer of the evaluation technology, it is necessary to execute appropriate technology transfer to the Vietnamese government officials and the private consultants, reflecting their specific needs. In this case, it is important to fully utilize the limited financial and human resources and time.