

## CHAPTER 11: AGRICULTURE, LIVESTOCK HUSBANDARY AND FISHERY

### 11.1 20-year Partnership at a Glance in Agriculture, Livestock Husbandry and Fishery

The 20-year partnership for the growth and development in the area of the agriculture, livestock husbandry and fishery in Vietnam can be summarized according to the historical background and priority development issues given in the table below.

In Vietnam, self-sufficiency in rice as staple food had been largely achieved when Japan's ODA was resumed. As of today, GOV has regarded agriculture as a measure of obtaining foreign currency by export and improving farmer's livelihood in rural areas. Japan's ODA has been implemented in conjunction with this policy of GOV.

**Table 11-1: Summary of Partnership for Agriculture, Livestock Husbandry and Fishery Sector Development**

	5th SEDP (1991-1995)	6th SEDP (1996-2000)	7th SEDP (2001-2005)	8th SEDP (2006-2010)	9th SEDP (2011-2015)
Background Topics	<ul style="list-style-type: none"> <li>- Paris Peace Agreements on Cambodia Conflict(1991)</li> <li>- Resumption of Japan's ODA(1992)</li> </ul>	<ul style="list-style-type: none"> <li>- Restoration of Vietnam - US diplomatic relations (1995)</li> <li>- Formal entry into ASEAN (1995)</li> <li>- Asian Currency Crisis (1997)</li> </ul>	<ul style="list-style-type: none"> <li>- Vietnam-US Bilateral Trade Agreement (2000)</li> <li>- Signing of Japan-Vietnam Investment Agreement;</li> <li>- Japan-Vietnam Joint Initiative (2003)</li> </ul>	<ul style="list-style-type: none"> <li>- Formal entry into WTO (2007)</li> <li>- Approving the National Target Program on Building a new Countryside during 2010 – 2020 (2010)</li> </ul>	<ul style="list-style-type: none"> <li>• Prime Minister Dung visits Japan (2011)</li> </ul>
Sector Situation	<ul style="list-style-type: none"> <li>- Renovation of farmers' cooperatives</li> <li>- Exploitation of unoccupied fields for cultivation</li> </ul>	<ul style="list-style-type: none"> <li>- Enhancement of agricultural industry</li> </ul>	<ul style="list-style-type: none"> <li>- Change economic structure of the industries, the economic sectors, preliminary that of agriculture and rural economy, manufacturing and services industry</li> <li>- Developing the specializing areas of agricultural production</li> </ul>	<ul style="list-style-type: none"> <li>- Agricultural development</li> <li>- Modernization of rural infrastructure</li> <li>- Improvement of living standard</li> </ul>	<ul style="list-style-type: none"> <li>- Modernization and industrialization of agriculture</li> </ul>
Sector Priorities in SEDP	<ul style="list-style-type: none"> <li>- Ensure domestic demands and export demands, especially rice and animal foods</li> <li>- Develop</li> </ul>	<ul style="list-style-type: none"> <li>- Ensure national food security</li> <li>- Increase food commodity production</li> <li>- Improve dietary quality</li> <li>- Reduce malnutrition</li> </ul>	<ul style="list-style-type: none"> <li>- Exploitation for land conservation</li> <li>- Creating Jobs for non - agricultural sector</li> <li>- Development of infrastructure</li> <li>- Development of specialized</li> </ul>	<ul style="list-style-type: none"> <li>- Producing agricultural products with high quality, high added value and multiple</li> <li>-Industrialization &amp; modernization</li> <li>- Enhancing</li> </ul>	<ul style="list-style-type: none"> <li>- Food security</li> <li>- Large scale &amp; efficient agriculture for high quality and competitiveness products</li> <li>- Enhancing export for job</li> </ul>

	5th SEDP (1991-1995)	6th SEDP (1996-2000)	7th SEDP (2001-2005)	8th SEDP (2006-2010)	9th SEDP (2011-2015)
	<ul style="list-style-type: none"> <li>industrial crops to supply materials for processing industry</li> <li>- Enhance and rearrange state-owned enterprises</li> </ul>	<ul style="list-style-type: none"> <li>- Expand industrial crops &amp; fruit, livestock &amp; poultry</li> <li>- Increase production of goods associated with processing industry &amp; exports</li> <li>- Expand rural markets</li> <li>- Promote development &amp; upgrading of socio-economic infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>production area</li> <li>- Diversification of agricultural products</li> <li>- Promotion to plant industrial crops</li> <li>- Extension of livestock husbandry</li> <li>- Adjustment of offshore fishing and coastal fishing</li> <li>- Development of infrastructure</li> <li>- Establishing the industrial and minor handicrafts sites</li> <li>- Development of industrial crops</li> </ul>	<ul style="list-style-type: none"> <li>linkage of industry and agriculture</li> <li>- Development of modernized infrastructure</li> <li>- Enhancing export</li> <li>- Development of high-tech agriculture</li> </ul>	<ul style="list-style-type: none"> <li>creation</li> <li>- Promotion of high-tech agriculture</li> <li>- Promotion of fisheries</li> <li>- Enhancing processing of agricultural product</li> <li>- Tackling with climate change</li> </ul>
Direction of Japan's ODA	<ul style="list-style-type: none"> <li>- Improvement of living standard in rural area</li> </ul>		<ul style="list-style-type: none"> <li>- Development for sustainable economic growth</li> <li>- Poverty reduction</li> </ul>	<ul style="list-style-type: none"> <li>- Human security</li> <li>- Poverty reduction</li> </ul>	<ul style="list-style-type: none"> <li>- Poverty reduction</li> <li>- Improvement of income gap</li> </ul>
Priority Issues of Japan's ODA	<ul style="list-style-type: none"> <li>- Construction and Improvement of Infrastructure</li> <li>- Exploitation of appropriate agricultural field</li> <li>- Technical improvement of post-harvest</li> <li>- Diversification of agricultural production</li> <li>- Development and extension of agricultural technology</li> </ul>		<ul style="list-style-type: none"> <li>- Construction and improvement of infrastructure</li> <li>- Introduction of good variety</li> <li>- Development and extension of agricultural technology</li> <li>- Improvement of transportation</li> <li>- Enhancing functions of agricultural cooperatives</li> <li>- Enhancing farmer's banking</li> <li>- Diversifying farm management</li> </ul>	<ul style="list-style-type: none"> <li>- Construction and improvement of infrastructure</li> <li>- Improvement and expansion of agricultural technology</li> <li>- Enhancing functions of agricultural cooperatives</li> <li>- Enhancing farmer's banking</li> <li>- Promotion of indigenous industry</li> <li>- Improvement of plant quarantine</li> </ul>	<ul style="list-style-type: none"> <li>- Construction and improvement of infrastructure</li> <li>- Improvement of safety of food</li> <li>- Technical improvement of agricultural production</li> <li>- Enhancing system of plant variety protection</li> <li>- Enhancing functions of agricultural cooperatives</li> <li>- Development of livelihood diversification</li> </ul>

(Source : Prepared by the Study Team)

## 11.2 Historical Review of Development and Growth in Agriculture, Livestock Husbandry and Fishery

Changes in agricultural sector development can be summarized in an overview of the SEDP established by GOV. Other donors, such as World Bank, Asian Development Bank (ADB), Agence Française de Développement (AFD), Australian Agency for International Development (AusAID), have also assisted Vietnam since the 1990s. As representative of other donors, aid from the World Bank and ADB is described below.

(1) World Bank

World Bank resumed their assistance to the Socialist Republic of Vietnam from 1994. They conducted or approved 35 projects with 2.5 billion dollars in total for the agricultural sector of Vietnam. They focused on the diversification of crops and development of a non-agriculture industry in the rural areas when their ODA was resumed. They gradually extended their priorities to promoting intensive agriculture, enhancing international competitiveness, and producing high quality and safe food products. In addition, they promoted a participatory irrigation management system ahead of other donors.

**Table 11-2: List of Projects for the Agricultural Sector by World Bank as of 2012**

No.	Approval Date	Project Name	Amount (thousand dollars)
1	1978.8	Dau Tieng Irrigation Project	60,000
2	1994.1	Agricultural Rehabilitation Project	96,000
3	1995.4	Irrigation Rehabilitation Project	100,000
4	1997.10	Forest Protection and Rural Development	21,500
5	1998.6	Agricultural Diversification Project	66,900
6	1999.5	Mekong Delta Water Resources Project	101,800
7	1999.11	Coastal Wetlands Protection and Development Project	31,800
8	2000.7	Hon Mun Marine Protected Area Pilot Project	1,000
9	2001.6	Community Based Rural Infrastructure Project	102,780
10	2001.10	Northern Mountains Poverty Reduction Project	110,000
11	2002.5	Strengthening Community Driven Development	420
12	2004.3	Water Resources Assistance Project	157,800
13	2004.6	Poverty Reduction Support Credit III	100,000
14	2004.8	VN-Avian Influenza Emergency Recovery Pr	5,000
15	2005.6	Poverty Reduction Strategy Credit IV	100,000
16	2006.6	Vietnam - Poverty Reduction Support Credit V	100,000
17	2007.3	VN - Program 135 Phase 2 Support Credit	50,000
18	2007.3	VN-Avian & Human Influenza Control &Prep	20,000
19	2008.6	Vietnam Poverty Reduction Support Credit 7	150,000
20	2008.9	Low-Cost Housing: Waste Rice Straw Construction Panels	200
21	2008.9	VN - Agriculture Competitiveness Project	59,800
22	2009.5	Second Program 135 Phase 2 Support	100,000
23	2009.9	Vietnam Livestock Competitiveness and Food Safety	65,260
24	2010.4	Second Northern Mountains Poverty Reduction Project	150,000
25	2010.6	Vietnam Poverty Reduction Support Credit 9	150,000
26	2010.6	VN-Project Preparation TA Facility	100,000
27	2010.6	VN- Natural Disaster Risk Management Project - Additional Finance	75,000

No.	Approval Date	Project Name	Amount (thousand dollars)
28	2010.11	GRDRR-Vietnam DRM Capacity Building	1,500
29	2011.6	VN-VAHIP additional financing	10,000
30	2011.6	VN - Mekong Delta Water Management for Rural Dev	160,000
31	2012.4	Wildlife consumption in Vietnam: Reforming policies and practices to strengthen biodiversity conservation	1,000
32	2012.5	Coastal Resources for Sustainable Development Project	100,000
33	2012.11	Vietnam Climate Change Development Policy 2	70,000
34	2013.3	Vietnam - Coastal Resources for Sustainable Development	6,500
35	2013.5	Vietnam Inclusive Innovation Project	55,000

(Source: World Bank)

## (2) Asian Development Bank

ADB started their aid for the agricultural sector in Vietnam in 1993. They have conducted or approved 30 projects and 0.7 dollars have been provided as of 2012. Their focal point has been improving agricultural productivity and developing the agricultural infrastructure and capacity development since the commencement of their assistance. They have recently begun to pay attention to the quality, safety, logistics and retailing of agricultural products, conservation of farm environment and climate changes.

**Table 11-3: List of Projects for Agricultural Sector by ADB as of 2012**

No.	Approval Date	Project Name	Scheme/ Amount: (thousand dollars)
1	1999.7	Agriculture Sector Program	T.A.
2	2000.11	Tea and Fruit Development Project	Loan (40,200)
3	2000.12	Strengthening the Planning Capacity at MARD (formerly Strengthening Capacity for Planning at MARD)	T.A.
4	2001.6	Training in Fishing Port Management	T.A.
5	2001.12	Central Region Livelihood Improvement	Loan (43,090)
6	2001.12	Forests for Livelihood Improvement in the Central Highlands Project	T.A. (800)
7	2002.2	Gender Strategy and Implementation Plan for Agriculture and Rural Development	T.A.
8	2002.12	Agriculture Sector Development Program (Policy Reform Loan)	Loan (60,000)
9	2002.12	Agriculture Sector Development (Investment Loan)	Loan (30,000)
10	2003.5	Agriculture Sector Development Support (formerly Support for Agriculture Reforms)	T.A.

No.	Approval Date	Project Name	Scheme/ Amount: (thousand dollars)
11	2003.10	Agriculture Science and Technology	T.A. (900)
12	2003.10	Promoting Silk Income for the Rural Poor in Central Highlands (formerly Supporting Poor Farmers in the Central Highlands Through Eri Silk Production)	Grant
13	2004.11	Rural Infrastructure and Sustainable Livelihood Improvement in Central Region	T.A. (800)
14	2004.11	Gender Mainstreaming Action Plan for Agriculture and Rural Development	T.A.
15	2004.12	Developing Agricultural Insurance	T.A.
16	2005.7	Strengthening Agriculture Science and Technology Management	T.A.
17	2005.8	Supporting Community-Based Agricultural Extension and Training in Mountainous Districts	Grant
18	2006.11	Emergency Rehabilitation of Calamity Damage Project	Loan (50,970)
19	2006.12	Agriculture Science and Technology	Loan (30,000)
20	2007.4	Quality and Safety Improvement of Agricultural Products	T.A. (750)
21	2007.10	Integrated Rural Development Sector Project in the Central Provinces	Loan (91,000)
22	2008.7	Strengthening Water Management and Irrigation Systems Rehabilitation Project	T.A. (1,120)
23	2008.12	Emergency Rehabilitation of Calamity Damage Project (Supplementary)	Loan (25,500)
24	2009.3	Quality and Safety Enhancement of Agriculture Products and Biogas Development Project	Loan (96,500)
25	2009.11	Climate Change Impact and Adaptation Study in the Mekong Delta	T.A. (500)
26	2009.12	Northern Chu and Southern Ma Rivers Irrigation System	T.A. (800)
27	2010.4	Sustainable Rural Infrastructure Development Project in the Northern Mountain Provinces	T.A. (1,300)
28	2010.10	Sustainable Rural Infrastructure Development Project in Northern Mountain Provinces	Loan (108,000)
29	2011.12	Development of the Northern Chu and Southern Ma Rivers Irrigation System Project	Loan (110,000)
30	2012.6	Promoting Climate Resilient Rural Infrastructure in the Northern Mountain Provinces	T.A.

Note: T.A: Technical Assistance

(Source: ADB)

### **11.2.1 Overview**

Self-sufficiency in rice, a staple food, had been largely achieved when Japanese ODA was resumed in 1992. At that time, the main interest of GOV in the agricultural sector was renovation of agricultural cooperatives, exploitation of unused land and promotion of exports, which have developed very slowly. Export of agricultural products has continued to be an important means of obtaining foreign exchange for the past 20 years. Therefore, food processing, food security, high quality and valued added production have been key issues. Simultaneously, development of rural infrastructure including improvement of irrigation facilities, increasing farmers' income and livelihood diversification have been also important issues in order to reduce poverty in rural areas.

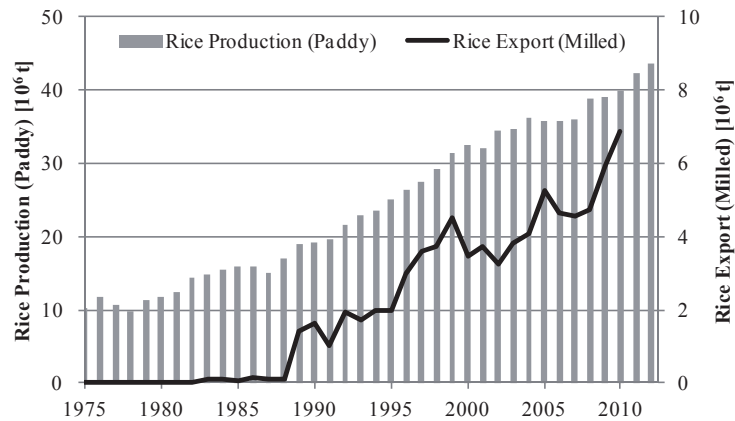
From beginning of this century, the aim of the GOV has been to improve the efficiency of agricultural activities through labor-intensive measures such as consolidating production bases, promoting large-scale mechanization and modernization. In addition, the GOV has also begun to address the issue of climate changes from 2010.

As of 2013, the national target of Vietnam is to join the ranks of modern industrialized nations by 2020. Toward this goal, it strives to achieve “processed agricultural and fishery products” and “mechanized farming” that are two of the six items listed in its industrialization strategy. Through processed agricultural and fishery products, agricultural efficiency will be pursued through high value-added products and large-scale mechanization.

### **11.2.2 Prior to 1995 (until the 5th SEDP)**

#### **(1) Status of Sector Development**

Agricultural production decreased from 1964 and the import of rice, the staple food in Vietnam, began in 1965 due to the Vietnam War. In the 1980s, the group agriculture system was liquidated by *Doi Moi*. With the demise of the former agricultural system, farmers were motivated and agricultural production increased. At the end of the 1980s, GOV started to export rice. Under the 5th SEDP, rice self-sufficiency and rice export were mentioned as important issues. Furthermore, GOV considered agricultural products as means to obtain foreign exchange and promoted the production of industrial crops and animal products.

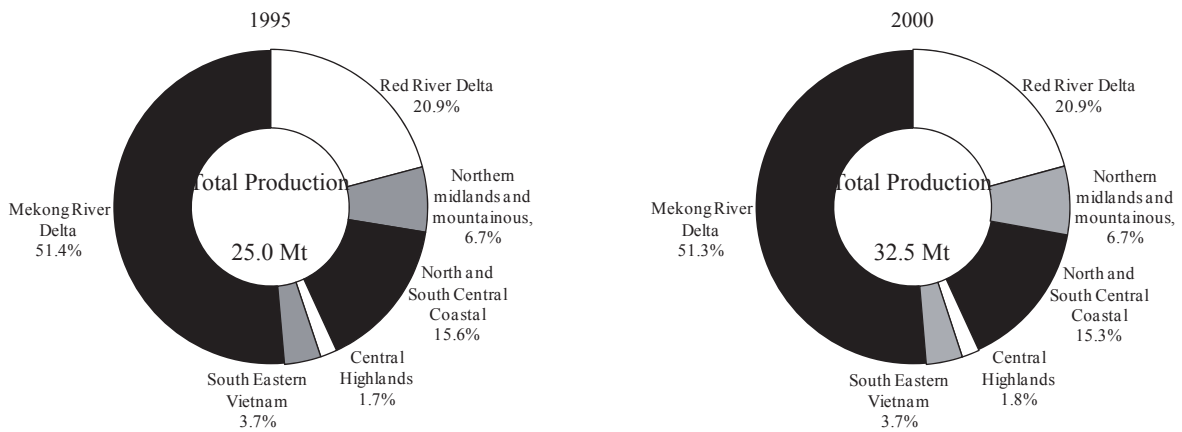


(Source: FAOSTAT)

**Figure 11-1: Rice Production and Export Quantum in Vietnam**

**11.2.3 From 1996 to 2000 (6th SEDP)**

Under the 6th SEDP, food security was an important issue. Although rice production was adequate to satisfy domestic demand, rice distribution to rural areas was insufficient because rice production was concentrated in both the Red River and Mekong deltas; and this situation was further exacerbated by an inadequate transport system in Vietnam.



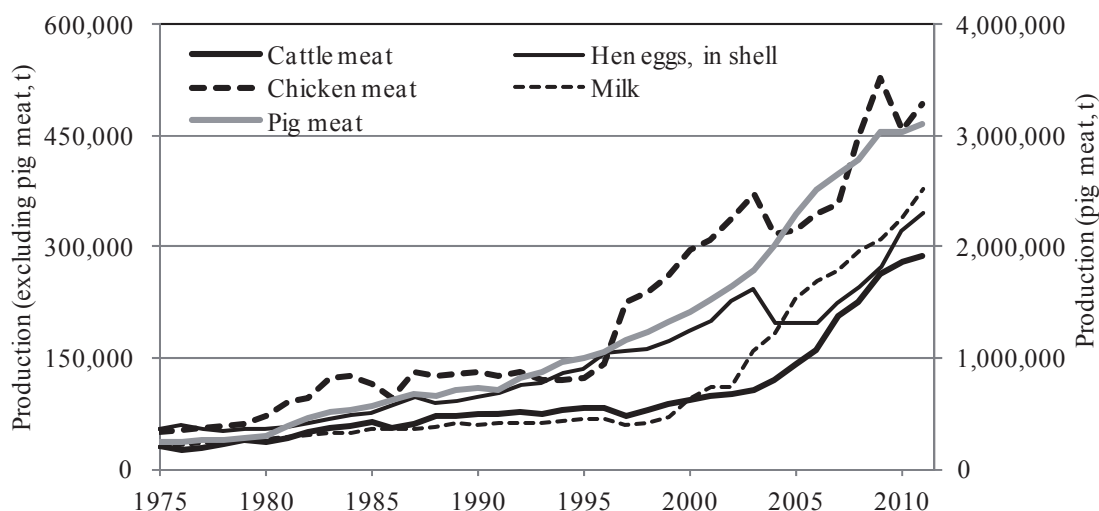
(Source: GSO)

**Figure 11-2: Proportion of Rice Production in Each Area (Left: 1995, Right: 2000)**

In the 6th SEDP, quality improvement, diversification and processed agricultural products were mentioned as the important issues. Export as well as income improvement by developing the domestic agricultural market were set as a target.

However, increased production and export of animal products were not achieved to the satisfaction of the GOV during the previous 5<sup>th</sup> SEDP, thus it continued to be an important goal

in the 6<sup>th</sup> SEDP.



(Source: FAOSTAT)

**Figure 11-3: Transitions in the Volume of Animal Products**

#### 11.2.4 From 2000 to 2005 (7th SEDP)

Domestic food supply had improved and the percentage of the population living under the food poverty line had dropped to less than 10% in 2002.

**Table 11-4: Changes in the Poverty Rate in Vietnam**

Year	1993	1998	2002	2004	2006	2008	2010	2011	2012
Entire Country	58.1	32.4	28.9	18.1	15.5	13.4	14.2	12.6	11.1
Urban Area	25.1	9.2	6.6	8.6	7.7	6.7	6.9	5.1	3.9
Rural Area	66.4	44.5	35.6	21.2	18.0	16.1	17.4	15.9	14.4

(Source: 1993: VASS, 1998 – 2012: GSO)

In this SEDP, the focus was on intensive production of agriculture, diversification of agricultural products, promotion of commercial crops and fisheries, and development infrastructure, including irrigation facilities. Research and development of industrial crops for processing and value added were targeted to promote agriculture as an export industry. Through these measures described above, GOV tried to improve income and the living standard in rural areas.

In this period, the 5-year development plan of MARD is also formulated by following the basic concept of the SEDP. The plan of MARD focused on ensuring food security, enhancing competitiveness, and creating employment. Through above mentioned measures, MARD set a goal of the plan to achieve improvement of rural livelihood, eradication of hunger, and



reduction of poverty.

#### **11.2.5 From 2006 to 2010 (8th SEDP)**

In this SEDP, development of rural infrastructure, urbanization and modernization of rural areas, improved efficiency and industrialization of agriculture, as well as improved quality, diversification, and accelerated export of agricultural products were important issues. The GOV focused on the disparity in living standard and income between the urban and rural areas. Measures to correct this problem as well as starvation and poverty were targeted.

Emphasis was placed on increasing production by improving efficiency without expanding crop fields and to change the crop from rice to other more suitable crops.

Under the 8th SEDP, MARD issued their 5-year development plan focusing on enlarging scale of crop field, improving productivity and sustainability, and strengthening competitiveness of agricultural production with applying advanced science and technology. The objectives of this plan was not only to meet the domestic and export demand, but also to create a more prosperous, fairer, democratic and civilized society in rural areas.

Moreover, "The National Target Program on Building a New Countryside During 2010-2020" was established and issued to accelerate dynamism of reducing poverty in rural areas. The program instructed goals together with adequate system and measures to achieve the goal until 2020. Regarding the agricultural sector, the program focused on development of irrigation infrastructure, dissemination of agricultural technology, addition of agricultural product's value, improvement of post-harvest technology, and conservation and improvement of industry of traditional craft.

#### **11.2.6 From 2011 to 2015 (9th SEDP)**

The focus is on the modernization and industrialization of agriculture. Food security has also come to the forefront in terms of environmental conservation, political stability and social security. In addition, creation of specialized areas for high-tech agriculture and large-scale crop fields as well as quality improvement of agricultural products are mentioned. In order to tackle climate change, renovations in science and technology and their application are mentioned.

MARD's 5-year development plan in this period focuses on same objectives as previous two plans, such as improvement of productivity and quality, enhancement of competitive, and improvement of livelihood in rural areas. In addition, two objectives are newly described in the plan. One is adequate usage and conservation of natural resources. The other is capacity development to strengthen international competitiveness considering regional integration like

ASEAN.

### 11.3 Japan's ODA in the Agriculture, Livestock Husbandry and Fishery Sector

#### 11.3.1 Overview

The number of projects carried out or are being carried out by Japan's ODA as of July 2013 is shown in the table below.

**Table 11-5: Number of ODA Projects for Vietnam in Agricultural Sector**

	War compensation	Grant	Loan	Development Study	Technical cooperation	Total
Agricultural Sector	1(1)	3(3)	2(0)	5(5)	19(13)	30(22)

Note: ( ) means a number of projects completed  
(Source: JICA Study Team)

To implement ODA projects, GOJ formulated a Country Assistance Program or Country Assistance Policy and ODA projects have been conducted based on them. The first Country Assistance Program for Vietnam was established in 2000 and it was revised in 2004, 2009 and 2012 as Country Assistance Policy.

GOJ's target has consistently been assistance to reduce poverty, improve farmers' livelihood, develop rural infrastructure (see Chapter 13), enhance farmers' organizations, and improve and disseminate agricultural technology in the agricultural sector of Vietnam. In addition, GOJ has provided assistance in the post-harvest processing of agricultural products to promote exports, to improve distribution, to strengthen the plant quarantine system, and the plant variety protection system. Such assistance was conducted in conjunction with the GOV's policy to acquire foreign currency through the export of agricultural products. The impact of Japan's ODA can be seen in the reduced poverty rate especially in rural areas and the increase in the amount of exported agricultural products.

In this section, Japan's ODA projects are briefly assessed to confirm whether the plan and contents of the projects are suited to GOV policy in the five-year plan.

#### 11.3.2 Before 2000 (Country Assistance Policy)

Before the Country Assistance Program was established in 2000, Japan's assistance policy in Vietnam's agricultural sector attached importance developing the agricultural infrastructure, improving post-harvest technology, and agricultural technology development and dissemination to diversify agricultural production, in order to improve the living standard in rural areas. Development of suitable land for agriculture was also implemented by improving the social and

economic infrastructure in the area where they were undeveloped. In addition, the agriculture and rural development sector was considered one of the most important sectors in Japan's ODA for Vietnam.

ODA projects carried out in Vietnam's agricultural sector in 1999 are shown in the table below.

**Table 11-6: List of ODA Projects in Vietnam's Agricultural Sector (-1999)**

No.	Start	End	Project Title	Scheme (Amount: million yen)
1	1963	1973	Phan Rang Irrigation Project	War compensation
2	1971.9	1972.3	Technical Cooperation for Faculty of Agriculture, Can Tho University	Development study
3	1970.3	1975.5	Can Tho University Agricultural Department Technical Cooperation Project	Project-type technical cooperation (provision of equipment: 160)
4	1993	1993	Improvement of Facilities and Equipment of Faculty of Agriculture, Can Tho University (1/2)	Grant (788)
5	1994	1994	Improvement of Facilities and Equipment of Faculty of Agriculture, Can Tho University (National bond 2/2-1)	Grant (235)
6	1995	1995	Improvement of Facilities and Equipment of Faculty of Agriculture, Can Tho University (National bond 2/2-2)	Grant (1,283)
7	1995.3	1998.3	Survey on Fisheries Resource	Development study
8	1996.10	1998.3	Study on Model Rural Development in Nam Dan District, Nghe An Province	Development study
9	1998.9	2003.8	The Education and Research Capability Building Project of Hanoi Agricultural University	Project-type technical cooperation (778)
10	1999.3	2000.10	Study on Integrated Agriculture Development Plan in Dong Thap Muoi Area	Development study

(Source: JICA Study Team)

Japan's first ODA project in the agricultural sector of Vietnam was the "Phan Rang Irrigation Project." The project was planned and implemented to irrigate 24,300 ha using two water sources. One was the discharge from the Da Nhim hydraulic power plant (see Chapter 6) and the other was the Song Coi River. After the project, the "Study on Agricultural Development Plan in Phan Rang Area" was also conducted in the 1970s.

“Technical Cooperation for Faculty of Agriculture, Can Tho University” was conducted in the 1970s. Can Tho City is located in the Mekong Delta, which is a main southern grain belt, and the agricultural faculty of Can Tho university was positioned as the center of agricultural development in the Mekong Delta. However, since this project was undertaken by the Vietnam Republic, it was discontinued with the collapse of the country in 1975. "Improvement of Facilities and Equipment of Faculty of Agriculture, Can Tho University” was started in 1993, immediately after resuming ODA to the Socialist Republic of Vietnam in November 1992. This project has helped improve its capabilities in research and education by providing equipment and buildings.

The Fisheries Resource Survey was started in 1995 to support the fishery development plan. Fishery is an important industry, which supplies protein to the Vietnamese population and generates export products. The plan was supposed to accelerate the development of offshore fishing and to adjust the production balance between coastal and offshore fishing.

The north central coastal region that includes Nghe An Province is the country’s poorest area with more than 20% of the populace living under the poverty line. The living standard in Nam Dan District is especially low because of a depreciated and degraded agricultural infrastructure and frequent flood hazards. In view of this situation, GOV requested GOJ to provide technical assistance to establish a development plan for the area. JICA conducted the “Study on Model Rural Development in Nam Dan District, Nghe An Province,” where a rural development master plan was prepared and a feasibility study for a priority project was implemented.

Although the Doi Moi policy was enacted ten years ago, legislating agricultural policies in line with the market economy, research and development, and developing human resources involved in disseminating agricultural technology continues to remain urgent issues. In order help resolve these issues, "The Education and Research Capability Building Project of Hanoi Agricultural University" was carried out to strengthening the training and educational capability of the university.

Dong Tap Moi district located in the Mekong Delta suffered from flood and acid soil. In order to achieve sustainable agriculture and improve farmers’ income, "Dong Tap Moi Agricultural development planning study" was carried out to establish a master plan and conduct an F/S on drainage improvement as well as agricultural development.

### **11.3.3 2000 to 2004 (Country Assistance Program in 2000)**

The Country Assistance Program for Vietnam was formulated for the first time in 2000. In this program, priority continued to be placed on the "agriculture and rural development sector." At

the time, income inequality was growing in conjunction with rapid economic growth. Therefore, GOV considered well-balanced development and poverty reduction as essential.

Structural changes in the agriculture, forestry and fishery sector were taking place because of an increase in cereal and commercial crop production, the expansion of fruit planting areas and the growth of fisheries and animal husbandry along with the development of a market economy. As these structural changes were intended to help livelihood diversification and commercial improvement for farmers, support was necessary. Therefore, for the purpose of improving agricultural productivity and securing market access, assistance was provided to develop irrigation and drainage facilities, to introduce better crop varieties, improve and disseminate agricultural technology, organize farmers, and introduce and enhance a rural financial system.

ODA projects that have been carried out in the agricultural sector of Vietnam between 2000 and 2003 are shown in the table below.

**Table 11-7: List of ODA Projects in Vietnam's Agricultural Sector (2000 to 2003)**

No.	Start	End	Project Title	Scheme (Amount: million yen)
11	2000.3	2005.2	Project of Strengthening National Institute of Veterinary Research	Project-type technical cooperation (748)
12	2000.10	2005.10	Project for Improvement of Cattle Artificial Insemination Technology	Project-type technical cooperation (615)
13	2001.3	2016	Phan Ri - Phan Thiet Irrigation Project	Loan (E/S: 437, Construction: 4,874)
14	2002.12	2004.2	the Project for Construction of Marine Culture Research and Development Center in Nha Trang	Grant (873)
15	2009.2	2007.9	Strengthening of Food Industries Research Institute	Technical cooperation (560)
16	2003.8	2004.12	Improvement of Rural Living Condition in Nam Dan District in Nghe An Province (1)	Grant (472)
17	2004.5	2005.3	Improvement of Rural Living Condition in Nam Dan District in Nghe An Province (2)	Grant (755)

(Source: JICA Study Team)

GOV focused on animal husbandry as a protein source for the Vietnamese citizen. Livestock farmers, however, suffered from contagious diseases and parasite infections of their livestock caused by natural tropical conditions. In order to solve these problems, GOV required technical

assistance from Japan to develop the capacity of the staff at the National Institute of Veterinary Research. Thus, the GOJ conducted “Project of Strengthening National Institute of Veterinary Research” to enhance the capacity of the institute and to disseminate knowledge and technology to local veterinarians.

Assistance for the animal husbandry sub-sector had not been implemented until this time. In view of the need to improve the nutrition of its citizens, "The Project for Improvement of Cattle Artificial Insemination Technology in Vietnam" was conducted to promote technology transfer to strengthen human resources as well as provide facilities and equipment.

Irrigation projects had not been implemented as a yen loan project in Vietnam up to that time. “Phan Ri - Phan Thiet Irrigation Project” implemented in 2008 was the first yen loan project for irrigation development. As with the "Phan Rang Irrigation Project," the discharge was used from an upstream hydropower plant (Dai Ninh hydropower plant, refer to Section 7.3). Rehabilitation and construction of an irrigation and drainage system for 15,700 ha (of which 10,700 ha was a new irrigation field) and strengthening the agricultural cooperative were implemented in the project.

A grant aid project, "Construction of Marine Culture Research and Development Center in Nha Trang," was implemented in 1999 based on a national program in aquaculture development. This was the central institute for research and breeding of larval fish. Construction of the center and provision of equipment were carried out by the project.

GOV expected the food industry to help create a new market for agricultural products, to raise farmers’ income and improve the nutrition of the people. However, food processing technology and quality control in Vietnam were not well developed and a large amount of processed food was imported from surrounding countries. Therefore, the GOV requested the GOJ to help develop technical capacity. In view of the conditions, JICA conducted the project, “Strengthening the Food Industries Research Institute,” which focused on developing human resources in food ingredient analysis, development of quality examinations, technical transfer and others.

Based on the results of the “Study on Model Rural Development in Nam Dan District, Nghe An Province,” GOV requested GOJ to implement the priority projects in the master plan. In response to this request, JICA conducted a preparatory study and decided to implement the project, “Improvement of Rural Living Condition in Nam Dan District in Nghe An Province.”

#### **11.3.4 2004 to 2009 (Country Assistance Program in 2004)**

In the Country Assistance Program formulated in 2004, "growth promotion", "living and social

improvements" and "institutional development" were established as the "three pillars" and agriculture and rural development was included in the area of "living and social improvements."

Although the poverty rate was reduced, the gap between the rich and the poor as well as regional disparities grew. Due to such unequal growth, there was an influx of the poor from rural to urban areas. Therefore, continuous assistance to reduce poverty was still needed.

While the Vietnamese economy continued to grow, the social infrastructure remained inadequate. Due to the lack of hardware and software in sanitary systems, safe water was not available over a large area. Moreover, flood hazards frequently occurred due to the lack of flood control measures.

In view of the above situation, the revised assistance program focused on the development and management of infrastructure for living and production activities, technical improvements in agriculture, the establishment and operation of agricultural cooperatives, the promotion of an agricultural financial system and the improvement and diversification of livelihoods based on local industries in the agricultural sector.

Japan's ODA projects in Vietnam's agricultural sector between 2004 and 2008 are shown below.

**Table 11-8: List of ODA Projects in Vietnam's Agricultural Sector (2004 to 2008)**

No.	Start	End	Project Title	Scheme (Amount: million yen)
18	2005.3	2008.2	Improvement of Technique for Thermal Treatment for the Disinfestation on Fruit Flies	Technical cooperation (280)
19	2005.6	2010.6	Capacity Development of Participatory Irrigation Management System through Vietnam Institute for Water Resources Research (VIWRR) for Improvement of Agricultural Productivity in Vietnam	Technical cooperation (600)
20	2006.3	2010.9	Enhancing Functions of Agricultural Cooperatives	Technical cooperation (496)
21	2006.4	2011.4	Project for Improvement of Productive Technology in Small and Medium Scale Dairy Farms in Vietnam	Technical cooperation (Provision of equipment and site activity: 43)
22	2008.2	2011.1	Phytosanitary Regional Training Program	Technical cooperation (81)

(Source: JICA Study Team)

During this period, GOV joined some international organizations, e.g. WTO, and trade in agricultural products became popular in Vietnam. However, it soon became obvious that

required technologies and systems such as plant quarantine were not developed in Vietnam. In view of this situation, a “project to introduce thermal treatment for the disinfestation on fruit flies” was conducted to develop pesticidal technology by steaming treatment according to international standards.

Although the transition to a market economy was in progress, the management of irrigation water was still controlled by a public irrigation company. The company did not understand the farmers’ demand for water and the farmers were not motivated to participate in water management activities. Therefore, the water use efficiency was generally poor. In order to improve this situation, GOV established a law related to water resource management and the project, "Capacity Development of Participatory Irrigation Management System through Vietnam Institute for Water Resources Research (VIWRR) for Improvement of Agricultural Productivity in Vietnam" was implemented to develop the capacity of the officers at MARD and VIWRR.

In order to raise the income of small farmers, who dominated Vietnamese agriculture, through efficient agricultural management, agricultural cooperatives were needed to give the farmers an advantage of scale as well as management and activities to strengthen the operations of the cooperative. Thus, the project, "Enhancing the Functions of Agricultural Cooperatives" was conducted, which established a model cooperative and introduced methods to enhance the functions of the cooperative, and this was disseminated to neighboring areas.

Dairy farming helped improve nutrition, but it also promoted agricultural diversification. However, these benefits did not reach the farmers due to an inadequate dissemination system. To rectify this condition, the GOV established a dairy technology dissemination station, and the GOJ conducted the “Project to Improve the Production Technology of Small and Medium-scale Dairy Farms in Vietnam,” to help diversify economic activities and improve the livelihood of middle to small-scale dairy farmers by developing the capacity of the extension institute and establishing a training system.

Agriculture was the major economic activity in Vietnam and the surrounding three countries—Cambodia, Laos and Myanmar. However, features of an international trade system such as plant quarantine, was not developed. As a result, trade in agricultural products was minimal. In order to tackle this problem, the Government of Laos suggested the "Regional Training Package Program on Phytosanitary Capacity Development” at the 5th JICA-ASEAN Regional Cooperation Meeting (JARCOM) and Vietnam was supposed to play a role of a resource country. GOJ decided to support this program and conducted a “Phytosanitary Regional Training Program.”



### 11.3.5 2009 to 2012 (Country Assistance Program in 2009)

The Country Assistance Program formulated in 2009 focused on comprehensive support to reduce poverty in rural areas, where three-fourths of all Vietnamese living under the poverty line was found. The following were supported in the program: political and institutional improvement that took the poor into account, securing safe food and agricultural products by strengthening an inspection system, improving processing and production technology, strengthening the plant variety protection system, enhancing agricultural cooperatives, and other areas. GOJ also focused on the importance of improving accessibility to the basic social service and the basic infrastructure in rural areas in conjunction with the establishment of dissemination system involving central and rural governments and regional community in order to maximize the impact of Japan's ODA.

The sector of securing safe agricultural product and strengthening of inspection system in above are especially paid attention due to being mentioned in the official documents of EPA between Vietnam and Japan. Therefore, a number of technical cooperation projects related to the sector are conducted as described latter sentence.

ODA projects implemented in the agricultural sector of Vietnam between 2009 and 2011 are shown in the table below.

**Table 11-9: List of ODA Projects in Vietnam's Agricultural Sector (2009 to 2011)**

No.	Start	End	Project Title	Scheme (Amount: million yen)
23	2009.10	2014.10	Improvement of Extension System for Applying Better Farming System and Cultivation Techniques for Poor Farmers in the Mekong Delta	Technical cooperation
24	2009.10	2014.10	Sustainable Integration of Local Agriculture and Biomass Industries	Technical cooperation (SATREPS)
25	2010.12	2013.11	Project for Promotion of Participatory Irrigation Management for Sustainable Small-Scale Pro Poor Infrastructure Development	Technical cooperation
26	2010.7	2014.6	Strengthening the Capacities for the Field of Management of Vietnam's Crop Production Sector for Improving the Productivity and Quality of Crop's Products	Technical cooperation
27	2010.12	2015.12	Project for the Development of Crop Genotypes for the Midlands and Mountain Areas of North Vietnam (DCG)	Technical cooperation (SATREPS)

No.	Start	End	Project Title	Scheme (Amount: million yen)
28	2011.3	2012.9	Preparatory Study on Project of Bio-ethanol Production	Development study
29	2011.7	2013.4	Project for Climate Change Adaptation for Sustainable Agriculture and Rural Development in the Coastal Mekong Delta	Technical cooperation
30	2011.2	2014.2	Project for Strengthening of Tay Bac University for Sustainable Rural Development of the Northwest Region	Technical cooperation
31	2011.3	2014.3	Project for Agriculture Development in Phan Ri - Phan Thiet	Technical Cooperation
32	2011.12	2014.11	Project for Strengthening Capacity of Inspection System for Ensuring Safety of Agro-Fishery Foods	Technical cooperation

(Source: JICA Study Team)

Most of projects that were implemented during this period were technical cooperation projects. During the three years under the Country Assistance Program, nine technical cooperation projects were carried out, which was approximately twice the number of projects that were implemented in the six years under the previous program.

Rice is the staple agricultural product in Vietnam. Although more than half of the country's rice production is carried out in the Mekong Delta, the income of farmers in this region is not high. The GOV strived to implement crop diversification in order to overcome this situation and raise farmer income. The government recommended citrus fruits as a favorable crop for this region, but pest control technology was not been popular among the farmers. Thus, the project, "Improvement of Extension System for Applying Better Farming System and Cultivation Techniques for Poor Farmers in the Mekong Delta" was carried out at the Southern Fruit Research Institute, which is a center to develop and disseminate citrus cultivation technology in the Mekong Delta region, to improve the technology and dissemination activities of the institute.

Since the renovation, although economic growth in Vietnam was prosperous, there remained problems such as a shortage of electricity and the growing gap in living standards between the urban and rural areas. In an effort to tackle these problems, GOJ was asked to establish a system of sustainable integration of local agriculture and biomass industries by GOV. Thus, JICA conducted the technical cooperation project, "Sustainable Integration of Local Agriculture and Biomass Industries" with Ho Chi Minh City University of Technology as a counterpart.

As a result of the project, "Capacity Development of Participatory Irrigation Management

System through Vietnam Institute for Water Resources Research (VIWRR) for Improvement of Agricultural Productivity in Vietnam Project" in the previous term, the living conditions of farmers had improved and crop yield had increased by reducing the labor force. In order to expand these results nationwide, the "Project for Promotion of Participatory Irrigation Management for Sustainable Small-Scale Pro Poor Infrastructure Development" was conducted in the areas which were targeted in the "Sustainable Small-scale Pro Poor Infrastructure Development Plan".

Use of pesticides and chemical fertilizers increased as agricultural production expanded in Vietnam. As a result, the low safety of agricultural products due to microorganisms from pesticide residue became an issue of concern. Although Vietnam became a member of UPOV Convention (International Convention for the Protection of New Varieties of Plants) in 2006 and has been committed to promoting the plant variety protection (PVP) system, there are no significant results due to the lack of a budget, human resources, materials and equipment. Therefore, to promote the PVP system and extension activities to improve the safety of agricultural products, the project, "Strengthening the Capacities for the Field of Management of Vietnam's Crop Production Sector for Improving the Productivity and Quality of Crop's Products," was carried out.

Vietnam has achieved self-sufficiency in rice and actively exports it. However, the self-sufficiency rate of rice in the northern mountainous area is only around 60-70% and food insecurity is chronic. This is a factor, which has prevented poverty reduction and improvement in the living standards of farmers. Although development and improvement of varieties suitable for this area was useful as a solution, breeding technology has not fully developed in Vietnam. Therefore, the "Project for the Development of Crop Genotypes for the Midlands and Mountain Areas of North Vietnam (DCG)" was carried out in order to support and improve breed development.

While renewable energy has come under the global limelight, GOV has focused on biofuel and declared its gradual introduction. Taking their policy into consideration, GOJ conducted the "Preparatory Study on Project of Bio-ethanol Production" to verify the feasibility of a project to plant and process sweet sorghum into bioethanol and to sell the product in the northern area of Vietnam.

According to recent research, Vietnam is one of the countries most susceptible to climate change. The Mekong Delta area would especially be hard hit by a rise in sea level. Although GOV formulated a national program on climate change, development plans that take climate change into consideration has not been formulated yet. Due to this situation, the Vietnam government

requested GOJ for assistance to create an agricultural development plan for the Mekong Delta region. Thus, JICA conducted the “Project for Climate Change Adaptation for Sustainable Agriculture and Rural Development in the Coastal Mekong Delta” to draw up a development plan and to develop the capacity of the staff members at the Southern Institute for Water Resources Planning.

The poverty rate in Vietnam as a whole has declined steadily, but the poverty rate in the four provinces in the northwestern mountainous region (Lai Chau province, Dien Bien province, Son La province, Hoa Binh province) remains high. Thus, the contribution by Tay Bac University, which is a unique university in the region, to human resources development in order to reduce poverty was highly expected. However, the Department of Agriculture and Forestry at the University had just been established in 2004. The capacity and technology of the faculty was inadequate. Education of human resources involved in agriculture is a key industry in the region. Therefore, the "Project for Strengthening of Tay Bac University for Sustainable Rural Development of the Northwest Region" was carried out. The development of the university system and teaching materials was supported by the project to allow the university to work as a leading organization in human resources development and education in areas targeted for poverty reduction.

Strengthening the agricultural cooperatives was important for the success of the "Phan Ri - Phan Thiet Irrigation Project," in addition to improving agricultural planning capacity, enhancing farmer participation in the project, and capacity development of government officials. In order to appropriately and effectively use the irrigation facilities and contribute to improving the livelihood of farmers, developing the planning and implementation management capacity of the local government was also necessary. To meet this need, the "Project for Agriculture Development in Phan Ri - Phan Thiet," was implemented.

Although economic growth of Vietnam was significant, system of food safety was undeveloped and controlled with inadequate manner. Such mismanagement might conduce a distrust of security of exported food from Vietnam to other countries. Moreover, reliability of food security became more important because Vietnam had just joined WTO and concluded ETA between Japan. In order to strengthen system and organization to check and monitor food safety for export with international standards/guidelines, GOV requested GOJ to provide technical assistance with Japanese advanced knowledge and technology. Then, GOJ conducted "Project for Strengthening Capacity of Inspection System for Ensuring Safety of Agro-Fishery Foods" to establish an applicable checking/monitoring system and develop capacity of inspectors in the system.

### 11.3.6 2012 and Later (Country Assistance Program in 2012)

To address the issue of vulnerability, the improvement of the social system and living standard, poverty reduction, and disparity adjustment were established as the issues to be supported in agriculture and rural development. Agriculture and rural development were one of the three priority issues in the Country Assistance Program formulated in 2012. In order to achieve sustainable economic growth, Japan's ODA in the agricultural sector of Vietnam focused on improving agricultural productivity, utilizing local resources to develop local industry, promoting high value-added production of agriculture and fishery with improvements to food security, diversifying livelihoods in rural areas to raise farmer income, strengthening food security through the development of rural infrastructure, and establishing countermeasures against transboundary infectious diseases.

ODA projects carried out or scheduled after 2012 in the agricultural sector of Vietnam are shown in the table below.

**Table 11-10: List of ODA Projects in Vietnam's Agricultural Sector (2012 and Later)**

No.	Start	End	Project Title	Scheme (Amount: million yen)
33	2012.7	2015.6	Enhancing Functions of Agricultural Cooperatives Phase 2	Technical cooperation
34	2013.3	2019.12	Improvement of Irrigation System in Northern Nghe An Province	Loan (19,122)

(Source: JICA Study Team)

Because this study was conducted several months after the program was formulated, only two projects have been started or approved.

"Enhancing Functions of Agricultural Cooperatives Phase 2" was conducted based on the cooperative law, which was revised in 2012, in order to spread and expand the results and lessons learnt from the previous project, "Enhancing the Functions of Agricultural Cooperatives" in JFY2006-2011.

Due to the depreciation and degrading of old irrigation facilities, particularly large-scale systems, the growth of irrigation fields slowed down and agricultural productivity declined. Although the largest irrigation infrastructure exists in Nghe An Province, the capacity of water distribution has declined due to depreciation. Meanwhile, the development of an industrial park downstream of the irrigation channel will be implemented. Therefore, upgrading the irrigation facilities to enhance the water distribution capacity is an urgent issue. In view of this situation, the governments of Vietnam and Japan agreed to conduct the loan project, "Improvement of

Irrigation System in Northern Nghe An Province,” to tackle this urgent problem.

### **11.3.7 Collaboration between Vietnam and Japan in the Agriculture, Livestock Husbandry and Fisheries Sectors**

Generally it takes much time to implement ODA project after establishing a project plan. Therefore the timing of the project implementation by Japanese ODA and the demand of GOV did not match every time. Changes in the projects and policies are reviewed and summarized below.

Promoting exports, processing agricultural products and developing rural infrastructure have been important issues since 1991. Agricultural production was the means of obtaining foreign currency rather than food production for the populace.

In contrast, infrastructure improvement, development and expansion of agricultural technology and diversification of agricultural productivity have been mentioned in the support plans of Japanese ODA for Vietnam since aid was resumed. For improvements in irrigation infrastructure, although only three irrigation projects were implemented, many irrigation facilities have been constructed and improved in the “Small-scale Pro Poor Infrastructure Development Project” (refer to Chapter 13). Promoting the export of agricultural products was included in the projects to improve post-harvest technology, distribution, enhancement of the plant variety protection system, food security and value added.

For the past 20 years, livestock husbandry was an important issue in the first decade and fishery in the latter decade in the policy of GOV. In accordance with a interview survey conducted in 2013, both animal husbandry and fishery were also important as the means for obtaining foreign currency even though they were not mentioned in the SEDPs. In recent years, the diet of the Vietnamese people has diversified along with economic growth and the demand for animal protein will increase. In future, Japanese assistance not only for promotion of export, but also satisfying domestic demand will be needed.

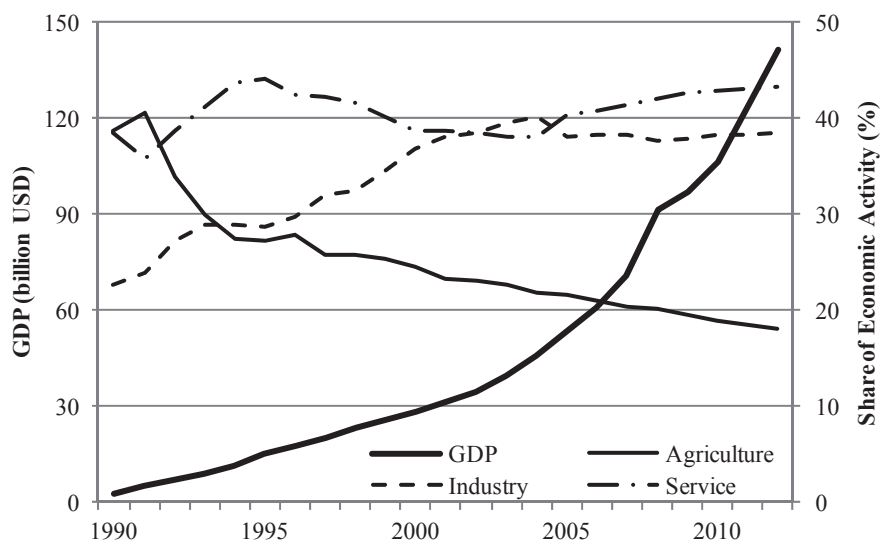
A development study, a grant project and a technical cooperation project were implemented in the fishery sub-sector and two technical cooperation projects were implemented in the livestock husbandry sub-sector. Thus, Japanese ODA policy and the demand of the GOV were almost matched.

## **11.4 Contribution of Japan’s ODA to the Development of the Agriculture, Livestock Husbandry and Fisheries Sectors**

As mentioned above, Japanese ODA has been implemented in response to Vietnamese demand.

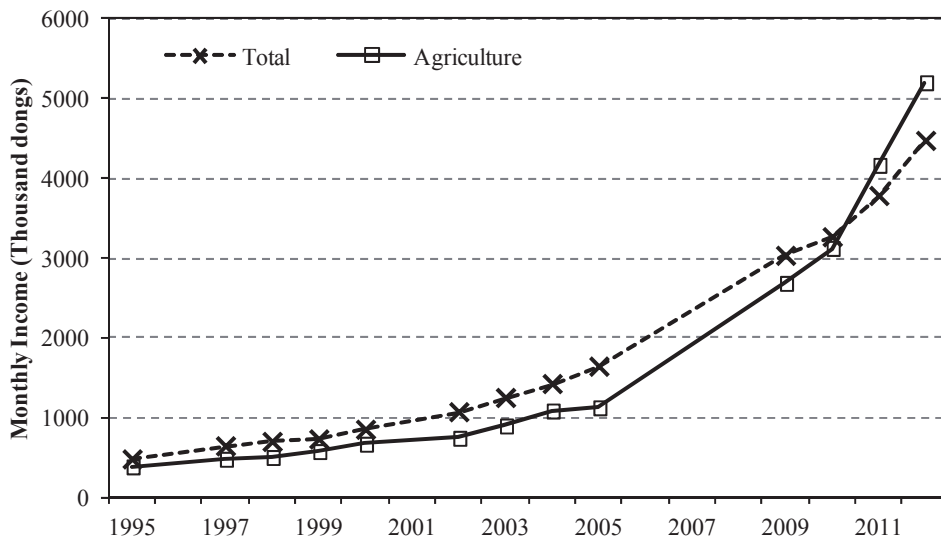
This was the result of interactive project formation, and not on the basis of request, adopted by the GOJ. To get appropriate support based on real demand, counterparts are more willing to join the project and the impact of the project is consequently larger.

As shown in the following figure, Vietnamese economics has continued to grow after the Doi Moi policy. In contrast, the share of agriculture, fisheries and animal husbandry has continued to decline. Labor population in this sector has simultaneously decreased due to GOV policy. However, income has increased and exceeded the average income in Vietnam in 2011.



Note: "Agriculture" includes fisheries and animal husbandry  
 (Source: GSO, World Bank)

**Figure 11-4: Changes of GDP and Share of Each Economic Activity in Vietnam**



(Note: “Agriculture” includes fisheries and animal husbandry)  
 (Source: GSO, World Bank)

**Figure 11-5: Changes in the Monthly Average Income in the Agriculture Sector and Labor in General**

The results shown above signify that the goal of GOV to improve the living standard and increase the income of farmers and the rural people has been achieved in certain areas. It can be said that it is an achievement of Japan’s ODA in Vietnam because GOJ has continued their assistance along with their policy. This achievement is, however, not brought about by one project or one donor. Therefore, it is difficult to evaluate the impact given by Japan’s ODA.

Two sub-sectors that have had a strong impact in the agricultural sector in Vietnam, irrigation and human capacity development, are discussed below.

#### 11.4.1 Irrigation

Although the average annual rainfall throughout Vietnam is more than 1,500mm, Ninh Thuan Province and Binh Thuan Province, where Phan Rang Irrigation Project was implemented and the Phan Ri – Phan Thiet Irrigation Project is under construction, have only 800 – 1,000mm rainfall annually. In these conditions, stable and efficient agriculture is difficult without adequate irrigation facilities.

In the 1960s, the Phan Rang Irrigation Project was planned and implemented. While direct evaluation of project effect for the beneficiary is difficult because the project was completed about 40 years ago and the data of that time is not available, the advantage of irrigation agriculture compared with rainfed agriculture is well known.



Furthermore GOV and GOJ agreed in March of 2013 to implement the project, “Improvement of Irrigation System in Northern Nghe An Province,” as a Japanese yen loan project. Due to the improvement of depreciated irrigation facilities, efficient water use is expected. The irrigation area will extend up to 29,000 ha after the improvement work is completed. In addition, the improvement plan will include a water supply program for an industrial park downstream of the irrigation channel. Thus, the project will help develop the living standard of the rural community in both the industrial as well as agricultural sectors.

#### **11.4.2 Assistance in Education**

Assistance in education in the agricultural sector started with the “Can Tho University Agricultural Department Technical Cooperation Project” in 1970. Can Tho University was founded by the request of local residents to lead agricultural development in the Mekong delta area. Although the project stopped at the end of the Vietnamese War, “Improvement of Facilities and Equipment of Faculty of Agriculture, Can Tho University” was implemented just after the resumption of Japanese ODA to construct facilities and to provide equipment.

Hanoi Agricultural University was founded in 1956 as an institute to provide higher education for future leaders at government and research institutes. Because the university was developed with the support of East Europe, but its functions and capacity dropped after the end of the communist-bloc countries. In view of this situation, GOV requested the support of GOJ and “The Education and Research Capability Building Project of Hanoi Agricultural University” was implemented by Japanese ODA.

After completion of these projects for the two universities, “Improvement of Environmental Education in Agricultural Sciences” was implemented as a mini-project at Can Tho University from 1999 to 2000 and the “Project for the Development of Crop Genotypes for the Midlands and Mountain Areas of North Vietnam” is now under implementation at Hanoi Agricultural University from 2010.

### **Column 11-1: Saving Water**

The southeastern region is not humid but dry. Without irrigation facilities, stable and efficient rice cultivation would be difficult. A half century ago, the irrigation project, Phan Rang Irrigation Project, was conducted in Ninh Thuan Province located in this dry region. Using discharge water from the Da Nhim hydraulic power plant constructed in a project that was as part of Japan's war compensation, the irrigation project showed a high cost-benefit performance because



Canal constructed by Phan Rang Irrigation Project. After some rehabilitation, canals are still functioning.

the cost of water source development was saved. The construction team encountered many problems and difficulties during the Vietnamese War. After construction was completed, the irrigation canals have been called the "Japan Canal" and continue to distribute water to the fields.



Headworks constructed at the beginning of the main canal of Phan Ri – Phan Thiet Irrigation Project.

The second irrigation project under Japan's yen loan program, the "Phan Ri – Phan Thiet Irrigation Project," is currently under construction in Binh Thuan Province, the neighboring Ninh Thuan Province and in the dry region. Discharge water from the Dai Ninh hydraulic power plant will be used for irrigation like the Da Nhim for Phan Rang. Due to the favorable assessment given to the Phan Rang

Irrigation project by the Vietnamese people, the same method was applied to this new project.

Reference: Report of JICA Vietnam

(<http://www.jica.go.jp/vietnam/office/information/report/index.html>)

## **Column 11-2: Long Term Relationship**

### Can Tho University

Despite the revolution taking place in the neighboring country, the project, “Technical Cooperation for the Faculty of Agriculture, Can Tho University” was started during the Vietnamese War in March, 1970. Can Tho University was established in 1966 by the request of the local communities to function as the core for development in the Mekong Delta.

In 1968, two years after the establishment of the university, the agricultural faculty was started. The project was started just after the faculty was established. Because this project was assistance for the Republic of Vietnam (South Vietnam), it was discontinued due to the demise of the country in 1975.

In 1993, “Improvement of Facilities and Equipment of the Faculty of Agriculture, Can Tho University” was conducted just after Japan’s ODA was resumed in 1992; and it was the first assistance provided for the agricultural sector of the Socialist Republic of Vietnam. The constructed building and the equipment that was provided by the project were still functional in 2013. Equipment provided by former project conducted in 1970s were also still in use. It is almost 40 years old but functions well. The Dean, Dr. Hoa, said, “Technical cooperation by dispatched experts is useful without a doubt, but after the project was turned over from the experts to the C/P, it has been difficult to transfer knowledge and technologies. But we continue using the provided facilities until they breakdown. We really appreciate Japan’s support.” Presently, the faculty has a few friendship programs with Japanese universities. Their relationship with Japan will continue in future.



University building constructed by  
“Improvement of Facilities and Equipment of  
Faculty of Agriculture, Can Tho University”

### Hanoi University of Agriculture

In the late 1950s, Dr. Luong Dinh Cua, the Pater of Vietnamese agriculture, worked as the vice rector of Hanoi University of Agriculture. He had studied agriculture in Japan and spent his life developing agriculture in Vietnam after returning to his home country from Japan. Forty years later the “Project for the Development of Crop Genotypes for the Midlands and Mountain Areas” has been implemented since 2010. Thanks to the Dean, Dr. Cuong, and other executives of the university, this project has continued very smoothly due to his and that of the other executives’ experience to study in Japan under the former project. Therefore, they were very familiar with the characteristics of the Japanese people and the Japanese working style.

Such historical ties and long-term friendships may be an essential factor for the success of an ODA project.

## **11.5 Features of Japan's ODA and Lessons Learned from Past Collaboration in Agriculture, Livestock Husbandry and Fisheries**

As mentioned in Section 11.4, one of the characteristics of Japan's ODA is how projects are formulated. GOJ approves and implements a project based not only on the GOV proposal, but also in discussion with the GOV. According to an interview conducted by this study, several C/Ps thought this technical cooperation procedure was different from other donors. Japan's ODA technical cooperation projects dispatch Japanese experts for the long term. They often discuss with the C/P about what they should do and how to implement it. According to the interview results, C/Ps have a favorable impression about this procedure.

Although they gave some positive comments, they also complained about the complexity of the preparation process. Since it generally takes a long time to prepare and to approve the project, the C/P's original request may have changed by the time the project is implemented. In contrast to these complaints, some C/Ps expressed gratitude for the well prepared proposal documents; and they are able to implement the project effectively by following the program established in the proposal.

In addition, it is said that GOJ spends too much time evaluating the proposal and approving the project, but the projects are implemented quickly, in contrast, GOV moves through the proposal process rapidly, but slows down during the implementation stage.

Regarding provision of equipment and facilities, although the C/Ps were satisfied with its accuracy, they say that it is very difficult to maintain the equipment because many of them are made in Japan and the expendable parts are not easily obtained in Vietnam.

The favorable remarks by the Vietnamese side about the dispatch of long-term experts are an outcome anticipated by the GOJ, which wants "Japanese assistance with a visible face." However, it is recommended that some of the difficulties mentioned above be addressed.

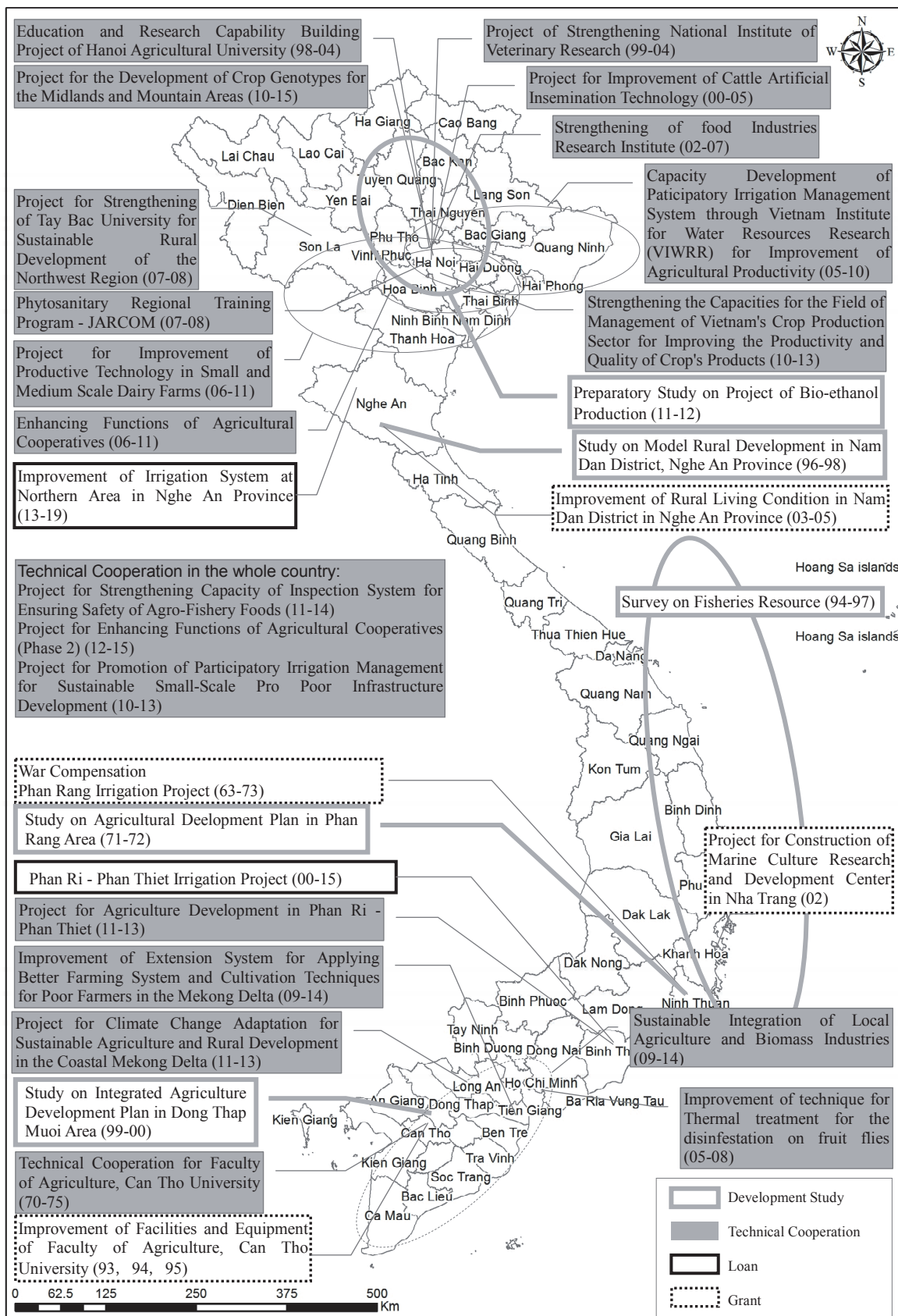


Figure 11-6: Project Sites in the Agriculture Sector in Vietnam



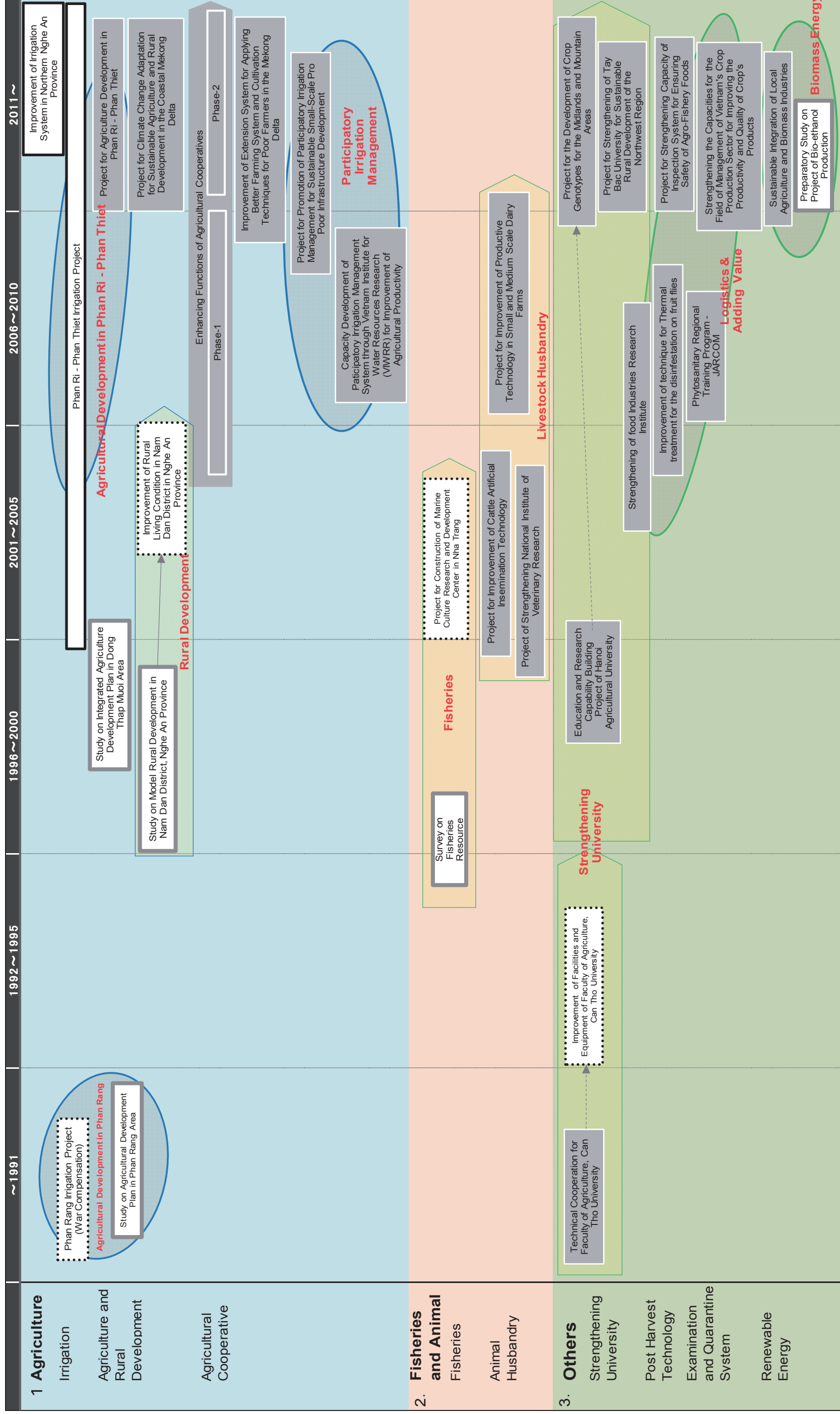


Figure 11-7: JICA Country Strategies and Projects in the Agriculture Sector in Vietnam





## **CHAPTER 12: ENVIRONMENTAL MANAGEMENT, CLIMATE CHANGE, AND SOLID WASTE MANAGEMENT**

### **12.1 20-year Partnership at a Glance in Environmental Management, Climate Change, and Solid Waste Management**

The 20-year partnership for development in environmental management, climate change, and solid waste management in Vietnam can be summarized according to historical background and priority development issues; as shown in Table 12-1.

#### **(1) Environmental Management**

This sector could be originated an establishment of the Vietnamese Ministry of Science, Technology, and Environment (MOSTE) in 1992, and the first step of Japanese ODA is the Study on Environment Management Plan for Protection of Halong Bay (1998-99). Historically, the focal point of Japanese ODA has been changed from Environmental Impact Assessment (EIA) of specific ODA projects to preparation of master plan (M/P) preparation and implementation of technical assistance (T/A) on environmental management considering socio-economic development conditions of Vietnam. The fundamental event in Vietnam was revision of the Law on Environmental Protection (LEP) in 2005 (Law No. 52/2005/QH11). Based on requests of the Vietnamese side, GOJ has carefully selected and implemented ODA projects mainly for capacity development of human resources and concerned organizations.

#### **(2) Climate Change**

This new sector has mainly targeted to respond required actions on the United Nations Framework Convention on Climate Change (UNFCCC). Key events of GOV in this sector were the National Target Program (NTP) for respond to Climate Change (Decision No.158/2008/ QD-TTg) and the National Climate Change Strategy (NCCS) (Decision No.2139/ 2011/ QD-TTg). Due considering actual situations of Vietnam, GOJ has supported Vietnam focusing on human resource development and basic data preparation related to climate change.

#### **(3) Solid Waste Management**

Key events of GOV in this sector were an inauguration of the revised Law on Environmental Protection (LEP) in 2005 (Law No. 52/2005/QH11), the regulation on solid waste management (Decree No.59/ 2007/ ND-CP), and the National Strategy on Integrated Solid Waste Management 2025-2050 (Decision No.2149/2009/ QD- TTg). GOJ has supported Vietnam through loan projects in line with an urban environment improvement program including grant aid for collection vehicles and other equipment. Recently, GOJ is also implementing capacity development on 3R activities.

**Table 12-1: Summary of Partnership for Environmental Management, Climate Change, and Solid Waste Management**

Item	5th 5-year Plan (1991-1995)	6th 5-year Plan (1996-2000)	7th 5-year Plan (2001-2005)	8th 5-year Plan (2006-2010)	9th 5-year Plan (2011-2015)
1) Back-ground Topics	<p>&lt;Env Management&gt; -1993: Basic Environmental Law in Japan -from end of pipe to win-win</p> <p>&lt;Climate Change&gt; -1992: UNCED in Rio -1994: United Nations Framework Convention on Climate Change (UNFCCC) coming into force -1995: COP1 in Berlin, Berlin mandate</p> <p>&lt;Solid Waste&gt; -mass production, consume, and dumping -1992: Basel Treaty</p>	<p>&lt;Env Management&gt; -global environment issues</p> <p>&lt;Climate Change&gt; -1997: COP3 in Kyoto, Kyoto Protocol (KP) = Joint Implementation (JI), Clean Development Mechanism (CDM), and Emission Trade (ET)</p> <p>&lt;Solid Waste&gt; -3R trend -1998: The 4<sup>th</sup> Basel Treaty Convention Conference on hazardous waste lists</p>	<p>&lt;Env Management&gt; -Environmental Management System (EMS) introduction -issues on dioxin (DXN) and POPs</p> <p>&lt;Climate Change&gt; -2001: COP7 in Marrakech, Low Development Countries Fund (LDCF), Special Climate Change Fund (SCCF), and Adaptation Fund (AF) under Global Environment Fund (GEF)</p> <p>&lt;Solid Waste&gt; -hazardous waste management -2005: Mottainai campaign = 3R+ Respect</p>	<p>&lt;Env Management&gt; -issues on asbestos and oxidant -Strategic Environmental Assessment (SEA)</p> <p>&lt;Climate Change&gt; -2006: COP12 in Nairobi</p> <p>&lt;Solid Waste&gt; -solid wastes 80-90%, &amp; medical wastes 100% to be collected and treated</p>	<p>&lt;Env Management&gt; -issues on PM2.5 -2013: Minamata Convention on Mercury (Hg)</p> <p>&lt;Climate Change&gt; -2011: COP17 in Durban -2012: COP18 in Qatar -2013: COP19 in Warsaw (planned) -Japan Credit Mechanism (JCM)</p> <p>&lt;Solid Waste&gt; -recycle society and smart city</p>
2) Sector Condition	<p>&lt;Env Management&gt; -devastated by Vietnam war -health damage by dioxin (DXN)</p> <p>&lt;Climate Change&gt; -no data and information</p> <p>&lt;Solid Waste&gt; -poor collection and open dumping</p>	<p>&lt;Env Management&gt; -becoming worse water environment -1995-2000: Vietnam and Canada Environment Project (VCEP-I)</p> <p>&lt;Climate Change&gt; -no data and information</p> <p>&lt;Solid Waste&gt; -urban wastes</p>	<p>&lt;Env Management&gt; -heavy air and water pollution -starting serious pollution sources control -2001-2006: VCEP-II project</p> <p>&lt;Climate Change&gt; -no data and information</p> <p>&lt;Solid Waste&gt; -urban wastes</p>	<p>&lt;Env Management&gt; -river basin management in Cau, Nhue-Day, and Sai Gon-Dong Nai rivers -2008: Ve Dan case in Thi Vai river</p> <p>&lt;Climate Change&gt; -2008: establishment of Department of Meteorology and Hydrology for Climate Change (DMHCC) in MONRE</p> <p>&lt;Solid Waste&gt; -urban and industrial wastes</p>	<p>&lt;Env Management&gt; -2011: completed compensation of Ve Dan case -2008-2013: VPEG project</p> <p>&lt;Climate Change&gt; -DMHCC in MONRE has cope with CC issues receiving assistance from 6 donors -basic data preparation</p> <p>&lt;Solid Waste&gt; -urban, industrial, and hazardous wastes</p>
3) Priority Policy and Task	<p>&lt;Env Management&gt; -1992: MOSTE/DOSTE was established in VN -1994: Ha Long Bay UNESCO World Heritage registration</p> <p>&lt;Climate Change&gt; -1994: VN ratified</p>	<p>&lt;Env Management&gt; -preparation of Law on Environmental Protection (LEP) and its by-law -protection and improvement of the environment by stopping and reducing environmental pollution in urban and industrial zones</p> <p>&lt;Climate Change&gt; -1998: VN ratified</p>	<p>&lt;Env Management&gt; -2002: MONRE/ DONRE was established in VN -Law No.52/2005/ QH11: Law on Environmental Protection (LEP) -Decision No. 328/2005/ QĐ-TTg : approving National Target Program (NTP) on environmental Pollution by 2010 -Decision No.256/2003/QĐ- TTg: National strategy on environmental protection 2010-2020 -Decision No.64/2003/QĐ-TTg: 439 priority pollution sources among 4,295 in total -Decree No.67/2003/ ND-CP: environmental protection charge</p> <p>&lt;Climate Change&gt; -2005: Directive</p>	<p>&lt;Env Management&gt; -Decision No.16/2007/ QĐ- TTg: National monitoring network -Decree No.120/ 2008/ND-CP: river basin management</p> <p>&lt;Climate Change&gt; -Decision No.158/2008/ QĐ-TTg: National Target Program (NTP) for respond to CC</p>	<p>&lt;Env Management&gt; -Decision No. 1393/2012/ TTg: National Green Growth Strategy (GGS) -Decision No. 1216/2012/ TTg: National Environment Protection Strategy to 2020 with vision to 2030 -2014: Revision of LEP (planned)</p> <p>&lt;Climate Change&gt; -Decision No.2139/ 2011/ QĐ-TTg: National Climate Change Strategy (NCCS) -Decision No.43/ 2012/ QĐ-TTg: Establishment of the NCC Commission -Decision No.1183/2012/ QĐ-TTg: NTP to respond to CC 2012-2015 -Decision No.1474/2012/ QĐ-TTg: National Action Plan on CC in 2012-2020 -Decision No.1775/2012/</p>

Item	5th 5-year Plan (1991-1995)	6th 5-year Plan (1996-2000)	7th 5-year Plan (2001-2005)	8th 5-year Plan (2006-2010)	9th 5-year Plan (2011-2015)
	United Nations Framework Convention on Climate Change (UNFCCC)  <Solid Waste> -no clear policy	Kyoto Protocol (KP)  <Solid Waste> -Decision No. 152/1999/QĐ-TTg National strategy for solid waste management in industrial and urban areas until 2020	No.35/2005/CT-TTg: On the Implementation of KP to UNFCCC <Solid Waste> -Decision No.153/2004/QĐ-TTg: strategic orientation for sustainable development (Vietnam Agenda 21) -Decision No.1216/2004/QĐ-TTg : National strategy on environment protection until 2020, vision to 2030 -Law No.52/2005/ QH11: LEP	<Solid Waste> -Decree No.59/2007/ND-CP: solid waste management -Decision No. 1440/2008/QĐ-TTg: Plan of waste treatment facilities in three focal economic zones the North, the Center, and the South until 2020 -Decision No.2149/2009/QĐ-TTg: National strategy on integrated solid waste management 2025-2050	QD-TTg: Project for GHG Emission Management, Management of Carbon Credit Business Activities to World Market  <Solid Waste> -promotion of 3R based on the Green Growth Strategy (GGS)
4)Direction of Japanese ODA	<Env Management> -EIA for infra development  <Climate Change> -no specific action  <Solid Waste> -no specific action	<Env Management> -EIA for infra development -M/P of environmental management in Ha Long Bay  <Climate Change> -no specific action  <Solid Waste> -Environmental M/P in Hanoi	<Env Management> -Urban environment improvement project (drainage) - Environment and social consideration for infra development -T/A for CD in VAST/IET  <Climate Change> -no specific action  <Solid Waste> -grant for equip and vehicles -M/P of urban environment improvement	<Env Management> -Urban environment improvement project (sewerage) -M/P and CD on river basin water environment management -T/A for CD on water environment management  <Climate Change> -advisory work by JICA experts  <Solid Waste> -Urban environment improvement project -3R initiative in specific city	<Env Management> -Urban environment improvement project (treatment) -T/A for CD on air and water quality management -T/A for CD on environmental management in Halong Bay  <Climate Change> -CC program and donor coordination -Emission source inventory DB <Solid Waste> -Urban environment improvement project -T/A for CD on 3R initiative
5)Focal Point of ODA	<Env Management> -none  <Climate Change> -none  <Solid Waste> -none	<Env Management> -mostly focusing on EIA in infrastructure development -M/P preparation for specific purpose  <Climate Change> -none  <Solid Waste> -solid waste management in line with urban environment	<Env Management> -starting T/A by JICA direct project  <Climate Change> -none  <Solid Waste> -spot assistance on demand -preparation of M/P for specific cities	<Env Management> -M/P and T/A are in usual -program approach in urban environment improvement  <Climate Change> -only governmental policy dialogue through JICA expert -CDM actions  <Solid Waste> -system support including sanitary dumping -introducing 3R -hazardous waste	<Env Management> -program approach -integration with grass-roots projects and JOCV  <Climate Change> -support international treaty action -basic information -carbon off-set  <Solid Waste> -Asia 3R international initiative forum in Hanoi

(Source: Prepared by the Study Team)

## 12.2 Historical Review of Target Sector Development

The target sector development and the Japanese ODA including major ODA projects is reviewed from the 5<sup>th</sup> to the 9<sup>th</sup> SEDP. The Japanese ODA in environmental management and climate change sectors has focused on capacity development on administrative enforcement of C/Ps and concerned organizations through T/A projects. As for solid waste management sector, it has been broadly conducted by grant aid for equipment, T/A on 3R introduction, and loan projects on urban area environment improvement coupled with drainage and sewerage components. In addition, general approach and activities of major donors are summarized in this Chapter.

### **12.2.1 Environmental Management**

#### **(1) In the 5th 5-year Plan (1991-1995)**

During this period, GOV did not promulgate specific policies and targets in the environmental management sector. Rather, GOV had put high priority on infrastructure rehabilitation and development due to the devastation by the Vietnam War.

In 1992, GOV established the Ministry of Science, Technology, and Environment (MOSTE) within central government and the Department of Science, Technology, and Environment (DOSTE) in provincial governments to cope with environmental issues by officially clarifying the administrative mandates and responsibilities of institutions. This was the first step to an institutional set-up in Vietnam to tackle pollution control and environmental management despite the severe lack of legal documents and budget, insufficient human resources, and a shortage of equipment and instruments for monitoring and analysis.

#### **(2) In the 6th 5-year Plan (1996-2000)**

During this period, environmental conditions in Vietnam had been generally recognized worse and being deteriorated mainly due to the rush to develop the economy and rehabilitate the social infrastructure. Therefore, MOSTE set the direction and approach to protect and improve the environment by stopping and reducing environmental pollution in urban and industrial zones. This period also showed a strong momentum to prepare the basic Law on Environmental Protection among politicians and MOSTE officers concerned about the environment.

In order to strengthen the capability of MOSTE and DOSTE, the Canadian International Development Agency (CIDA) took the first initiative by implementing the Vietnam and Canada Environmental Project (VCEP-I) from 1995 to 2000. This VCEP-I took a comprehensive approach to assist the Vietnamese side focusing on capacity building and covered both the administrative and technical fields of environmental protection and management.

During these years, Japan was the top donor to Vietnam in socio-economic development especially for infrastructure rehabilitation and construction in the northern Vietnam, and its projects were seen as highly credible and reliable by GOV. The Japanese ODA also comprehensively contributed to urban environment improvement in HNI and HCMC in water supply, urban drainage, sewerage, and solid waste. However, other donors such as the USA and WB critically commented about environmental degradation and the detrimental effects from large-scale infrastructure construction by the Japanese ODA. In response to these criticisms, the GOJ decided to conduct the Environmental Management Project in Ha Long Bay aiming at preparation of M/P and capacity development in environmental protection and management along the Ha Long Bay World Heritage Area in Quang Ninh province from JFY1998 to 1999. In fact, this project could be one of the monumental projects of Japanese ODA to Vietnam in environmental protection similar to VCEP-I.

**Table 12-2: Major Project List of Japan's ODA in Environmental Management Sector from JFY1996 to 2000**

Project Title	Type & Year (JFY)	Location & C/P	Objectives & Targets	Note
1. The Study on Environmental Management Plan for Protection of Halong Bay	-Dev't Study -1998-1999	-World Heritage -Quang Ninh prov. -PPC & DONRE	1)Environment management M/P & zoning 2)Priority projects and implementation plan (I/P)	World Heritage Site

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision  
(Source: JICA Study Team)

(3) In the 7th 5-year Plan (2001-2005)

In 2002, GOV restructured MOSTE/DOSTE to MONRE/DONRE, where the science and technology sector was divided and the natural resource sector was reorganized to include land and water resources. The GOV then promulgated the Law on Environmental Protection in 2005 (Law No. 52/2005/QH11: LEP). This means that MONRE/DONRE had a concrete legal base and began substantial administrative activities on environmental management including preparation of regulations such as decrees, decisions, and resolutions accordance with LEP.

Based on the successful results of VCEP-I, GOV and CIDA agreed to carry out VCEP-II from 2001 to 2006 targeting similar components of capacity development (CD). Avoiding duplication with VCEP-II, GOJ decided to conduct a technical assistant (T/A) project from JFY2003 to 2006 targeting CD of the Institute of Environmental Technology in the Vietnamese Academy of Science and Technology (VAST/IET) under MONRE with the intent to introduce advanced and practical technology in environmental protection and to promote better collaboration between the academic institute and administrative organization such as MONRE/DONRE.

**Table 12-3: Major Project List of Japan's ODA in Environmental Management Sector from JFY2001 to 2005**

Project Title	Type & Year	C/P & Location	Objectives & Targets	Note
2. The Project for Enhancing Capacity of Vietnamese Academy of Science and Technology in Water Environment Protection (Phase-1)	-T/A -2003-2006	-VAST/IET in Hanoi	1)CD on water environment technology 2)Technical manual & guideline 3)Advanced analysis equip for lab	-

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision  
(Source: JICA Study Team)

(4) In the 8th 5-year Plan (2006-2010)

The 8th 5-year Plan stated the following priority targets and goals in order to resolve issues such as a) harmonizing socioeconomic development and reasonable use of natural resources, environmental protection,

and rehabilitation, b) focusing on solutions for environmental pollution in industrial, residential zones, craft villages, and large cities, c) enhancing the effectiveness of state management in environmental protection, d) providing the orientation for sustainable development strategy in Vietnam, and e) organizing the Vietnam Agenda No. 21 on sustainable development at all levels and sectors. In addition, the following numerical goals were given in the plan.

- 1) Ratio of newly constructed production facilities applying the clean technology or being equipped with pollution reducing devices and waste treatment devices is 100%,
- 2) Ratio of production and business facilities achieving environmental standards is over 50%,
- 3) Constructing the wastewater treatment system in 100% of the urban zone from class 3,
- 4) Constructing the wastewater treatment system in 50% of the urban zone class 4 and in all industrial and processing zones.

During this period, environmental degradation was severe due to a lot of point pollution sources in the urban and industry sectors both in the air and water environment. One of the top issues was the Ve Dan case in Thi Vai river. In view of these recent conditions, GOV promulgated the Decision No. 328/2005/QĐ-TTg to approve the National Target Program (NTP) on Environmental Pollution by 2010 targeting the following points;

- 1) Investigate, inventory, treat, and manage 70% of discharge sources, waste type and discharge amount nationwide,
- 2) Collect, transport, and treat 90% of total solid waste discharge in urban and industrial zones,
- 3) Treat 100% hazardous medical solid waste and 60% of hazardous industrial waste by suitable technologies.

Thus, GOV introduced strict regulations to control point pollution sources by a) listing 439 priority factories and facilities as the primary targets (Decision No.64/2003/QĐ-TTg), b) conducting administrative guidance, c) enforcing sanctions, d) charging pollution fee (Decree No.67/2003/ND-CP), f) introducing the pollution discharge license (Decree No.149/2004/ND-CP), g) establishing the Vietnam Environmental Protection Fund (VEPF) (Decision No.82/2002/QĐ-TTg), and h) river basin management (Decree No.120/2008/ND-CP).

Responding to GOV's great efforts in environmental protection, GOJ conducted T/A projects in CD of administrative enforcement in water environment management of MONRE and DONRE such as the "VAST/IET Phase-2 Project" and the "Cau River Basin Water Environment Management Project". Moreover, GOJ continued its ODA to improve the urban environment in HNI, HCMC, Hai Phong City, Dong Nai Province, and Binh Duong Province through loan projects.

**Table 12-4: Major Project List of Japanese ODA in Environmental Management Sector from JFY2006 to 2010**

Project Title	Type & Year(JFY)	C/P & Location	Objectives & Targets	Note
3. The Project for Enhancing Capacity of Vietnamese Academy of Science and Technology in Water Environment y (Phase-2)	-T/A -2007-2012	-VAST/IET -Branch office in DNG & HCMC	1)CD on water environment technology 2)Technical manual & guideline 3)Advanced analysis equip for lab	-
4. The Study on Water Environment Management in Vietnam	-Dev't Study -2008-2009	-VEA/MONRE -DONRE of Thai Nguyen & Bac Kan prov.	1)Environment management M/P in Cau river basin 2)CD on water environment management 3)Guideline, manual, and handbook	-

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision  
(Source: JICA Study Team)

(5) In the 9th 5-year Plan (2011-2015)

The goals of the 9th 5-year Plan were a) finishing and improving the effectiveness and efficiency of policies, law of natural resources and environmental protection in order to ensure the sustainable development, b) seriously conducting EIA preparation, appraisal, approval, check, and supervision process for socioeconomic development strategies, master plans, policies, programs, projects, c) seriously handling environmental pollution facilities especially those located in economic zones, industrial zones and craft villages, and d) accelerating social participation in environmental protection.

In line with the policy in the 9th 5-year Plan, GOV continued its regulative enforcement activities of pollution source control stating that 85% of all serious environment pollution facilities should be addressed by 2015. The highlight thing in environmental management during this period was the National Strategy on Environment Protection until 2020, Vision to 2030 (Decision No.1216/QD-TTg) which targeted the followings;

- 1) Ratio of water area (pond, lake, canal, river) in urban and residential areas to be reformed and recovered is increased 30% in 2015, and 70% in 2020 compared with 2010,
- 2) Ratio of urban households provided with clean water to be 95% in 2015, 100% in 2020, and
- 3) Ratio of rural households which provided sanitary water to be 85% in 2015, 95% in 2020.

However, conventional environmental management activities would be unable to keep up with the existing heavy pollution caused by rapid economic growth, and could be somewhat inappropriate to deal with actual environmental degradation in Vietnam. It means that a new comprehensive environmental management approach being mixture not only regulative measure but also information and economic measures is currently required in Vietnam.

In fact, GOV inaugurated the Approval of the National Green Growth Strategy (Decision No. 1393/2012/QD-TTg) which explicitly stated that the “Green Growth” is to be a key pillar in sustainable

development, poverty reduction, in improving the well-being of the people, in increased investment in development, in reducing greenhouse gas emissions, and in stimulating national economic growth. The following policies are clarified;

a) Objectives

- 1) To achieve a low carbon economy
- 2) To enrich national capital
  - Economic restructuring and institutional improvement
  - Research and Development (R/D) and advanced technologies
  - Improving living standards and creating environmental friendly lifestyle

b) Task

- 1) Reduce greenhouse gas emission and use clean and renewable energy
- 2) Greening production
- 3) Greening lifestyle and Promoting sustainable consumption

c) Solutions

- 1) Communication, awareness, and encouragement
- 2) Saving energy in all sectors
- 3) Changing fuel structure
- 4) New and renewable energy
- 5) Reduce greenhouse gas emission
- 6) Review and revise Master Plan (M/P)
- 7) Economically and efficient use of natural resources
- 8) Development of green economy sector
- 9) Sustainable infrastructure
- 10) Cleaner Production
- 11) Sustainable urbanization
- 12) New rural model with environmental friendly lifestyle
- 13) Sustainable consumption
- 14) Mobilizing resources
- 15) Human resource development
- 16) Science and technology development
- 17) International cooperation

Taking this situation into account, JICA decided to conduct additional T/A projects to strengthen the enforcement capacity of MONRE and DONRE, namely the Project for Strengthening Capacity of Water Environment Management in Vietnam (JFY2010 - 2013) targeting VEA/MONRE and 5 DONREs in HNI, Hai Phong, TT-Hue, HCMC, and Ba Ria-Vun Tau Province, and the Project for Environmental Protection in Halong Bay in Quang Ninh province (JFY2009-2012). Besides, CIDA also started the Vietnam Provincial Environmental Governance (VPEG) Project during 2008 - 2013 targeting 8 DONREs, namely Hanoi, Da Nang city, Back Ninh, Hai Doung, Binh Duong, Long An, Quang Ngai, and Soc Trang Provinces.



**Table 12-5: Major Project List of Japan's ODA in Environmental Management Sector from JFY2011 to 2013**

Project Title	Type & Year (JFY)	C/P & Location	Objectives & Targets	Note
5. The Project for Strengthening Capacity of Water Environmental Management in Vietnam	-T/A -2010-2013	-VEA/MONRE -DONRE of Hanoi, Hai Phong, TT-Hue, HCMC, & Ba Ria Vun Tau prov.	1)CD on policy making in VEA/MONRE and water environment management in DONREs 2)Technical manual, guideline, and handbook 3)Analysis equip for lab	-Hybrid type T/A
6. The Project on Sustainable Environmental Management of Halong Bay	-T/A -2009-2012	-World Heritage -Quang Ninh prov. -PPC & DONRE	1)CD on environment management 2)Land use and tourism development 3)Guideline for sustainable environment management of Halong bay	-World Heritage Site

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision

(Source: JICA Study Team)

#### (6) Recent Trend and Approach of Major Donors in Environment Management Sector

The donor's assistance policy in environment management is summarized in Table 12-6. Most donors have almost similar assistance policies to Vietnam, which focus on policy making, capacity development (CD), equipment, and facility construction.

**Table 12-6: Assistance Policy and Direction of Major Donors in the Environment Management Sector**

Donor	Basic Policy	Actual Direction
1) ADB	1) Integrated water environment management 2) Environmental sustainability through biodiversity and cleaner production 3) Improvement of environmental quality for local communities	a) River basin management and sub- river basin management in Nue-Day river b) Assistance in developing laws and regulations for policy on biodiversity c) Strengthening environmental hygiene in cities d) Improvement of livelihood for local people and poverty alleviation
2) CIDA	1) Support sustainable development by strengthening the state management capacity on environmental protection	a) Development of legal policies, plans, and coordination mechanism on pollution control and management b) Enhancement of management capacity such as monitoring, pollution source inventory, and public awareness raising c) Strengthening the provincial capacity of DONRE on industrial pollution management
3) DANIDA	1) Environmental protection to ensure sustainable livelihood and improvement of living conditions for the poor local people	a) Pollution control in poor densely populated areas b) Sustainable environmental development in poor urban areas c) Cleaner production in industry d) Sustainable livelihoods through environmental protection in and around marine product processing areas e) Capacity development support for environmental planning and management
4) GOJ/JICA	1) Strengthening of administrative and institutional enforcement capability of target C/P organizations 2) Providing necessary equipment for monitoring and analysis	a) Strengthening of capacity on law and policy development b) Enhance capacity in enforcement such as monitoring, inspection, pollution source inventory in both central and local levels c) Building environmental information and data management system d) Enhancing better coordination mechanism between central and local agencies

<b>Donor</b>	<b>Basic Policy</b>	<b>Actual Direction</b>
5) SIDA	1) Integrated management on natural resources and environment	a) Strengthening of capacity development in legal policy system, institution, and human resource in central level b) Pollution control and rehabilitation, chemical safety, EIA system, land use planning, land registration, estate market development, and capacity development on awareness raising in provincial level
6) UNDP	1) Development of policy and strategy, and action plan preparation 2) Promotion of local capacity and awareness of biodiversity protection	a) Environmental management for a sustainable development by protecting biodiversity, landscape, and ecology b) Environmental management for health protection and biodiversity protection c) Integrate environmental management into education, investment planning, and decision making process d) Treatment and remedy in dioxin hot spot areas and persistent organic pollutants (POPs) stock piles
7) WB	1) Environmental protection for a sustainable development 2) Enhancement of institutional platform, infrastructure, and human resource development 3) Targeting industrial pollution control by 2-step loan	a) Strengthen environmental policy, monitoring and enforcement b) Review legal framework and enforcement in industrial wastewater c) Construction of industrial wastewater treatment plants in 4 industrial cities d) Support water safety and environmental hygiene in both urban and rural areas

(Source: JICA Study Team)

### 12.2.2 Climate Change (CC)

(1) From the 5th 5-year Plan (1991-1995) to the 8th 5-year Plan (2006-2010)

The Climate Change (CC) sector was a new aspect of state management for Vietnam, and it was led by the United Nations Framework Convention on Climate Change (UNFCCC) through the Convention of Parties (COP) meetings for almost 20 years.

In Vietnam, the secretary functions for UNFCCC and COP had been conducted by offices and not by a designated department of MONRE and other ministries. In 2005, GOV nominated MONRE as the responsible implementation ministry of the Kyoto Protocol (KP) in UNFCCC (Directive No.35/2005/CT-TTg), and in 2008, established the Department of Meteorology and Hydrology for Climate Change (DMHCC) in MONRE as a specific and regular state management organization related to CC issues. This could be the first step to tackle CC issues in Vietnam with international donors.

(2) In the 9th 5-year Plan (2011-2015)

The 9th 5-year Plan does not mention the CC sector directly, but implies to other sectors requiring policies based on special mechanisms to support localities and rice-growing farmers in order to protect national food security, especially from the impacts of climate changes and rise in sea water levels in the delta provinces and the Mekong delta in particular. As result, DMHCC in MONRE has taken on a substantial role on CC in Vietnam so far. Taking a chance of establishment of DMHCC, the donor group members, namely JICA, the Agency for French Development (AFD), CIDA, Economic Development Cooperation Fund (EDCF) Korea, Australian Agency for International Development (AusAID), and WB, agreed to

support Vietnam together under the Program for Supporting Countermeasures against Climate Change from 2010.

In order to prepare long and mid-term plans against CC both in mitigation and adaptation, collecting accurate and reliable data and information on greenhouse gas (GHG) emissions is essential. Currently in Vietnam, however, there is no specific data collection and monitoring system on GHG emission sources. Therefore, JICA has conducted T/A for CD of DMHCC to prepare an inventory of GHG emission sources and its database (DB) from JFY2010.

Moreover, the National Green Growth Strategy (Decision No. 1393/2012/QD-TTg) was promulgated in 2012 as described in Chapter 12.2.1, and it explicitly stated a task of reduction of greenhouse gas emissions and the use of clean and renewable energy. Thus, this National Green Growth Strategy must be directly connected the direction on Climate Change sector. A list of Japanese ODA projects during this period is summarized in Table 12-7.

**Table 12-7: Major Project List of Japan's ODA in Climate Change Sector from JFY2011 to 2013**

Project Title	Type & Year (JFY)	C/P & Location	Objectives & Targets	Note
1. The Study on Potential Forests and Land related to Climate Change	-Dev't Study -2009-2011	-MARD	1)Identification of potential forest areas for absorption and reduction of CO2	-
2. The Project on Support Program to Respond to Climate Change	-Loan -2010-2014	-MONR E	1)Support overall framework on climate change 2)Donor coordination	-on-going in 2013
3. The Project for Capacity Building for National Greenhouse Gas Inventory in Vietnam	-T/A -2010-2014	-MONR E	1)GHG emission source inventory DB 2)Guideline and manual	-on-going in 2013

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision  
(Source: JICA Study Team)

### (3) Recent Trend and Approach of Major Donors in Climate Change Sector

The donor's assistance policy in climate change is summarized in Table 12-8. Most donors are commonly assisting GOV based on its policies in climate change similar to environment management sector.

**Table 12-8: Assistance Policy and Direction of Major Donors in the Climate Change Sector**

Donor	Basic Policy	Actual Direction
1) ADB	1) Support efforts to comply with National Target Program to Respond to Climate Change (NTP-RCC) 2) Increase local resilience to the impact of climate change (CC)	a) Study and development on CC impact and adaptation in certain area, and sector b) Focusing on identification of future condition, development of measures against CC, and improvement of information sharing system
2) AFD	1) Integrated CC and greenhouse gas (GHG) reduction into design of development policies	a) Development of public policies in energy saving and recycling, forestry, waste management, disaster prevention, and agriculture b) Promotion of Clean Development Mechanism (CDM)
3) AusAID	1) Low-carbon growth options including improved energy efficiency. 2) Reduction of future human,	a) Enhancement of community resilience with local government and NGOs to strengthen communities' ability to respond and adapt CC including climate-related disasters b) Enabling adaptation planning in national and provincial

Donor	Basic Policy	Actual Direction
	economic and environmental losses associated with CC	levels c) Development of low-carbon approach such as energy efficiency and cleaner technology promotion
4) CIDA	1) Addressing priority issues on the National Target Program to Respond to Climate Change (NTP-RCC)	a) Mitigation through GHG absorption and emissions control b) Building adaptive capacity to deal with harmful impacts c) Enhancement of measures for cross-cutting issues concerning to CC
5) DANIDA	1) Support with aligned to Vietnamese policies and strategies on environmental protection, CC, and energy efficiency	a) Direct support to NTP –RCC such as development of scenarios, impacts, solutions, actions plans, building capacity at central and local level, and awareness raising of local communities b) Direct support to the Vietnam Energy Efficiency Program such as legal framework, integration with national education system, public awareness raising, and development of energy efficient model enterprises to apply and disseminate
6) GOJ/JICA	1) Strengthen institutional environment for responding to CC 2) GHG emission control and reduction	a) Support the Project on Support Program to Respond to Climate Change (SP-RCC) as a policy forum between Vietnam and other donors b) Development of specific measure and promotion of activities for mitigation c) National Green House Gas (GHG) inventory preparation
7) UNDP	1) Supports Vietnam’s commitments under the United Nations Framework Convention on Climate Change (UNFCCC ) 2) Direct support comply with the GOV’s policies and strategies on CC 3) Green economy and sustainable development	a) Strengthening policy, framework, mechanism, coordination, measures against CC and its risks b) Improvement of mechanism, knowledge, capacity, and coordination for sustainable development including the integrated and multi-sector approach for green development
8) WB	1) Promotion of CC recovering 2) Lower carbon intensified development	a) Improvement of resilience of water resources for adaptation b) Energy efficiency potential in industrial sectors for mitigation c) Strengthening cross-cutting capacity to formulate, prioritize, and implement CC actions including financing framework

(Source: JICA Study Team)

### 12.2.3 Solid Waste Management

(1) From the 5th 5-year Plan (1991-1995) to the 6th 5-year Plan (1996-2000)

Dealing with solid wastes is one of systems which is part of the customs and economic conditions of a society. Also in Vietnam, there has been its own solid waste management system from generation, collection, transportation, picking-up valuables, and open dumping mostly in densely populated urban areas, though it must be a traditional way involving primitive problems on environmental sanitation both in effectiveness and efficiency. In modern society, however, more appropriate and convenient solid waste management system is required in conjunction with socio-economic development and per capita GDP growth, mainly due to changes in the quality and quantity of solid wastes, and public awareness on sanitation and safety. In Vietnam, actual collection, transportation, and dumping activities have been carried out by the municipalities and agencies such as URENCO and INDEVCO under the local government (DOSTE/DONRE) and the central government (MOSTE/MONRE) as a public services, though it was

mostly insufficient dependent on sporadic and occasional needs without any clear mid and long-term policies and strategies.

The first innovation step could be seen in the Decision No. 152/ 1999/QĐ-TTg National Strategy for Solid Waste Management in Industrial and Urban Areas until 2020. Its major content is as follows;

1) Short-term targets

- All localities shall finish the formulation of a master plan on solid waste management,
- Separate hazardous waste from the sources, initially applying source separation for municipal solid wastes,
- Collect, transport and treat 75-90% of generated solid wastes,
- Thorough treatment of hazardous medical solid waste by advanced technologies, and hazardous industrial solid waste by suitable technologies.

2) Long-term targets

- Collect, transport and treat 80-95% of generated solid waste,
- Thoroughly collected and treated hazardous medical solid waste by advanced technologies,
- Apply the methods for reuse and recover solid wastes giving the priority to establish two treatment centers, and of hazardous industrial solid waste in two focal economic points in the north and the south.

Approach of the Japanese ODA in the solid waste sector was similar to the approach adopted by GOV. The first step was the “Hanoi (HNI) City Environmental Protection Master Plan Development Study” (1998-1999), and this study formulated new a grant aid project and a 3R T/A project. In 202, GOJ supported URENCO under the HNI City People’s Committee (PC) providing 70 collection vehicles and monitoring equipment through a grant aid project, however there was no clear program and vision for the future.

(2) In the 7th 5-year Plan (2001-2005)

The 7th 5-year Plan explicitly stated the focal points on environment and solid waste sector such as a) harmonizing between socioeconomic development and reasonable use of natural resources, b) environmental protection and rehabilitation focused on resolving environmental pollution in industrial, residential zones, and craft villages, c) improving effective management on environmental protection, and d) preventing actions causing natural resource destruction.

In the context of the 7th 5-year Plan, the second innovation step could be seen in the Decision No. 153/2004/QĐ-TTg which stated a future vision on solid waste management such as realization of recycle society, in line with the official announcement of a strategic orientation for sustainable development as the Vietnam Agenda 21, and the Decision No.1216/2004/ QĐ-TTg, which enacted a national strategy on environment protection until 2020, and vision up to 2030. These have set the following numerical targets;

- 1) Ratio of municipal solid wastes to be collected in 2015: 90%, in 2020: 95%
- 2) Ratio of rural solid wastes to be collected in 2015: 60%, in 2020: 75%

- 3) Ratio of solid wastes to be recycled, reused or for energy recovery in 2015: 55%, in 2020: 85%
- 4) Ratio of hazardous wastes to be collected, treated in accordance with environment standards in 2015: 75%, in 2020: 85%
- 5) Ratio of medical wastes to be collected, treated in accordance with environment standards in 2015: 80%, in 2020: 100%
- 6) Produce and use of packages which are difficult to be decomposed in 2015: decreased 10%, by 2020 decreased 30% by 2010
- 7) Ratio of landfills which meet the environment standards in 2015: 50%, in 2020: 100%

The Law on Environmental Protection (Law No.52/2005/QH11) covering the solid waste management sector was legally promulgated. A list of Japanese ODA projects during this period is summarized in Table 12-9.

**Table 12-9: Major Project List of Japanese ODA in Solid Waste Management Sector from JFY2001 to 2005**

Project Title	Type & Year (JFY)	C/P & Location	Objectives & Targets	Note
1.The Study on Sanitation Improvement Plan for Hai Phong City	-Dev't Study -1999-2001	-Hai Phong city -PPC, DOC, DONRE	1)M/P & F/S 2)Improvement of urban drainage, sewerage , and solid waste management 3)I/P for ODA loan projects targeting urban drainage and sewerage (package-1) and solid waste management (package-2)	-Loan projects are on-going in 2013
2. The Project on Improvement of Solid Waste Management in Hanoi City	-Grant -2002	-HNI city DONRE -URENCO	1)B/D & C/S 2)Improvement of solid waste management 3)Monitoring equip and vehicle procurement for collection	-

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision  
(Source: JICA Study Team)

### (3) In the 8th 5-year Plan (2006-2010)

After enacting the Law on Environmental Protection (LEP), GOV started to state the solid waste sector in the 5-year Plan, but shortly like “80 - 90% of solid wastes, 100% of medical wastes are collected and treated to meet the environmental standards”. Then, GOV promulgated a) the Decree No. 59/2007/ND-CP concerning to the basic and substantial items and responsibilities on solid waste management as a by-law of the LEP in 2007, b) the Decision No. 1440/ 2008/QD-TTg for plan of waste treatment facilities in three focal economic zones the north, the central, and the south until 2020, and c) the Decision No.2149/2009/QD-TTg stating national strategy on integrated solid waste management up to 2025 and vision until 2050 including treatment, equipment, facility, and 3R (reduce, reuse, and recycle). This could be said the third innovation step in Vietnam.

In fact, the Decision No.2149/2009/QD-TTg stated that “the targets are divided into 3 periods 2015, 2020

and 2025. The targets up to 2015 are given below; and targets up to 2020 and 2025 should be based on those targets and set higher” and “the strategy sets 10 priority programs to be implemented until 2025 with specified authorities to be in charge”.

- 1) 85% of the total solid wastes from households in urban area will be collected and treated in an environmentally manner, of which 60% will be recycled, reused, recovered energy or produced organic fertilizer,
- 2) 50% of the total solid wastes of constructions sites from cities will be collected of which 30% will be reused or recycled,
- 3) 30% of the sludge from cities of grade 2 upward and 10% of the remaining ones will be collected and treated in an environmentally manner,
- 4) Reducing 40% of the plastic bags used at supermarkets and commercial centers against that of 2010.
- 5) 50% of cities, which have their own recycling facilities, shall have waste separation at source at households,
- 6) 80% of the total generated non-hazardous industrial waste will be collected and treated in an environmentally manner, of which 70% will be reused and recycled,
- 7) 60% of the total hazardous waste generated at industrial parks will be treated in an environmentally manner,
- 8) 85% of the hazardous and 70% of the non-hazardous solid waste from health sector will be collected and treated in an environmentally manner,
- 9) 40% of the solid waste generated from rural areas and 50% from craft villages will be collected and treated in an environmentally manner,
- 10) 100% landfills that causing severe environment pollution listed in the Decision 64/2003/QD-TTg dated 22 April 2003 by the Prime Minister will be handled.

Responding to the remarkable commitment by GOV, GOJ decided to support Vietnam by implementation of T/A for CD on 3R initiative in HNI City from 2006 to 2009, followed by T/A project from 2013, and a loan project for urban environmental improvement in Hai Phong City including a solid waste management component from 2008. A list of Japanese ODA projects during this period is summarized in Table 12-10.

**Table 12-10: Major Project List of Japanese ODA in Solid Waste Management Sector from JFY2006 to 2010**

Project Title	Type & Year (JFY)	C/P & Location	Objectives & Targets	Note
3. The Project for Implementation Support for 3R Initiative in Hanoi City	-T/A -2006-2009	-URENCO in Hanoi city	1)CD of 3R activities 2)3R planning, pilot activity, compost, public awareness	-
4. The Study on Improvement Plan of Medical Wastewater and Solid Waste Management	-Dev't Study -2010-2011	-Whole Vietnam	1)Cooperation preparatory study 2)Improvement of medical wastewater and solid waste treatment system	-

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision

(Source: JICA Study Team)

(4) In the 9th 5-year Plan (2011-2015)

It should be noted that the National Green Growth Strategy (Decision No. 1393/2012/QD-TTg) was promulgated in 2012 as described in Chapter 13.2.1, and this must be directly connected to the direction taken by the solid waste management sector especially for the 3R initiative.

(5) Recent Trend and Approach of Major Donors in Solid Waste Management Sector

The donor's assistance policy in solid waste management is summarized in Table 12-11. Although each donor targets different sub-sectors, most donors are assisting GOV by viewpoint of hard and soft aspects.

**Table 12-11: Assistance Policy and Direction of Major Donors in Solid Waste Management Sector**

Donor	Basic Policy	Actual Direction
1) GOJ/JICA	1) Sustainable solid waste management both in hard and soft aspects	a) 3R promotion b) Solid waste management in line with urban environmental improvement loan projects
2) KOICA	1) Assistance for the GOV's National Strategy on Environmental Protection to 2030: 85% of solid waste is recycled.	a) Technology development to recycle electronic waste and retrieval of materials b) Construction of technology centre for waste recycling aiming at joint survey and research
3) UNDP	1) Realization of Stockholm Congress for Persistent Organic Pollutants (POPs)	a) Improvement of capacity to eliminate POP pesticide stockpiles, manage import, and use of POP pesticides b) Control of dioxin in hot spots
4) WB	1) Solid waste management for a better environmental hygiene	a) Development of legal framework and enforcement activities for PCB management b) Construction of solid treatment facilities in major cities such as Da Nang, Hai Phong, and Ha Long

(Source: JICA Study Team)

### 12.3 Impacts and Contribution of the Japanese ODA

Impacts and contribution of the Japanese ODA in environmental management, climate change, and solid waste management for GOV are described in this Chapter including general existing conditions of the target sectors in Vietnam.

#### 12.3.1 Environmental Management

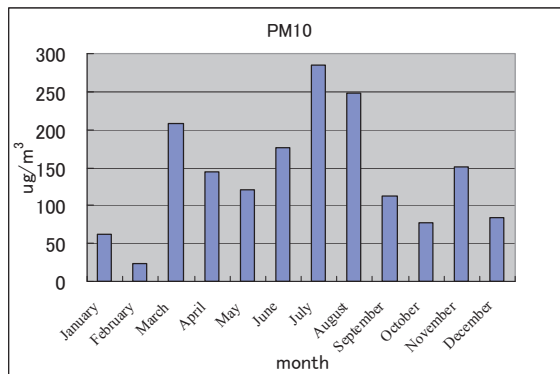
(1) General Conditions

1) Air Quality

Based on the existing monitoring data, concentration of PM10 is three times higher than environmental standard, and the concentration of benzene is five to six times higher. Other substances generally meet the standard, and the air quality of Hanoi city is considered to be not so serious.



Annual Standard of PM10: →

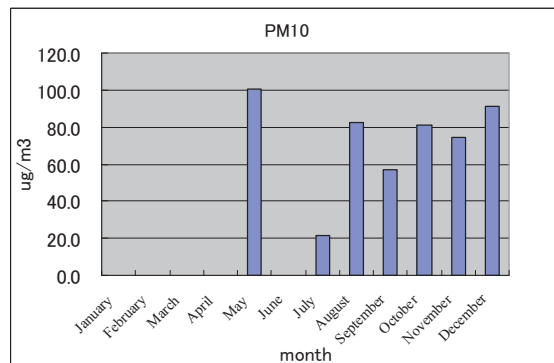


(Source: Hanoi City DONRE, 2011)

**Figure12-1: Monthly Average of PM10 (Gia Lam, Hanoi, 2010)**

According to the “State of Environment Report 2005 - 2009” by Ho Chi Minh City (HCMC ) DONRE, TSP, PM10 and benzene pollution exceed the environmental standard (QCVN 05 and 06). TSP monitored from 2005 to 2009 at the air monitoring station changes from 0.38 to 0.76 mg/ m<sup>3</sup> on an average, exceeding QCVN from 1.3 to 2.6 times. Benzene monitored for five years (from 2005 to 2009) fluctuated from 18.02 µg/m<sup>3</sup> to 57.91 µg/m<sup>3</sup>, and 67% of the monitored data did not meet QCVN (QCVN 06: 2009/BTNMT: benzene in 1 hour average: 22µg/ m<sup>3</sup>; benzene in 1 year average: 10µg/ m<sup>3</sup>). According to recent research in June 2010 by the University of Science HCMC, daily averages of benzene vary from 50 to 55 µg/m<sup>3</sup>. These values show approximately double the 1 hour standard and approximately five times the yearly average standard.

Annual Standard of PM10: →



(Source: State of Environment Report 2005 – 2009, Ho Chi Minh City DONRE, 2010)

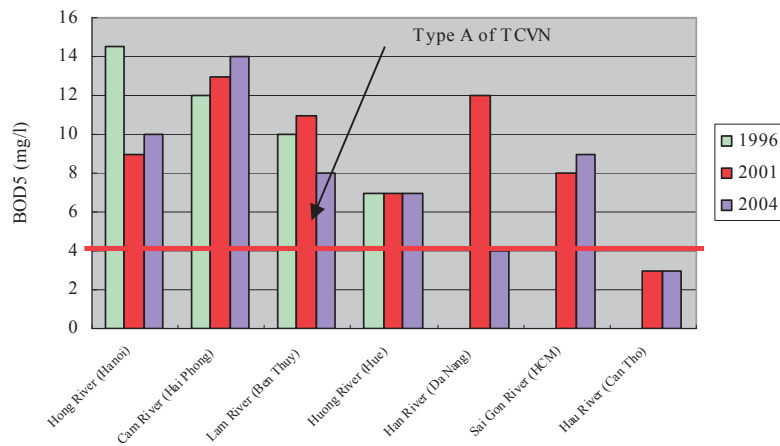
**Figure 12-2: Monthly Average of PM10 (Binh Tan District, HCMC, 2008)**

## 2) Water Environment

Vietnam has been suffering from significant levels of generated environmental loads resulting from diverse human activities. Vietnam’s economy has grown rapidly in the last two decades; the GDP has increased steadily by 5-7 % per year and the annual GDP per capita almost doubled from 1990s to 2000s. However, its industrial sector is in the initial stages of development, with production still dominated by small-scale units utilizing technologically simpler processes with more waste and adverse environmental impacts. Industrial wastewater is a serious pollution issue in many cities. In addition, the urban population increased rapidly and usually outstripped the development of environment infrastructure.

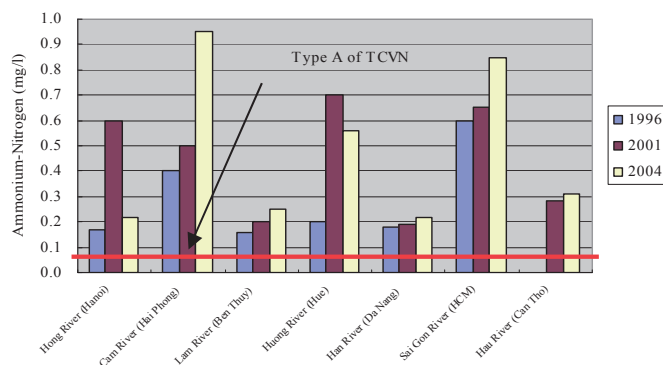
a) River Water Quality

Monitored results show that water quality of most of the main rivers of Vietnam remains good in upstream areas, while in downstream areas pollution is increasing due to the waste discharge from urban and industrial areas. The pollution levels of rivers are especially high during the dry season, when water volume flows into the areas decrease. Water quality monitoring along some points of the major rivers shows that the concentration of BOD<sub>5</sub> as shown in Figure 12-3, and nitrogen-NH<sub>4</sub><sup>+</sup> (ammonium-nitrogen) has exceeded permitted standards of the type A (BOD=4 mg/l, NH<sub>4</sub>-N=0.1 mg/l) by 1.5 to 3 times, as shown in Figure 12-4. The levels of total suspended solids recorded in rivers, lakes and main canal systems has exceeded permitted national standards for water sources of the type A (TSS=20 mg/l) by 1.5 - 2.5 times. There are signs of pollution by heavy metals, coliforms, pesticide chemicals. Coliform group numbers in some large rivers have also exceeded permitted standards for water sources of the type A (coliform=5,000 MPN/100ml) by 1.5 - 6 times, as shown in Figure 12-5. However, this phenomenon is only a localized problem at the moment.



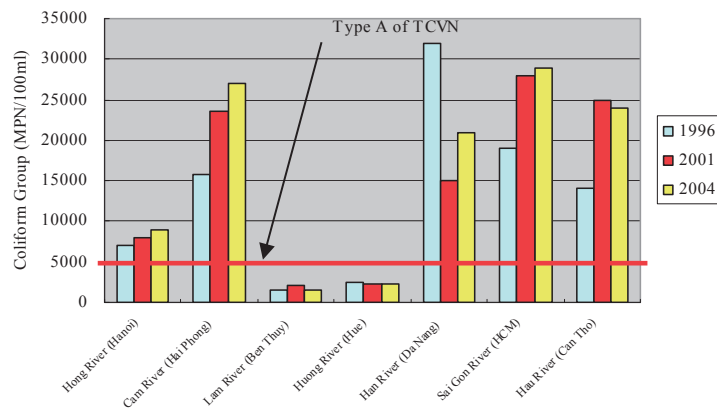
(Source: Monitoring data by VEPA (MONRE).)

**Figure 12-3: Water Quality (BOD<sub>5</sub>) in Urban Center Areas of Vietnam**



(Source: Monitoring data by VEPA (MONRE))

**Figure 12-4: Water Quality (Ammonium Nitrogen, N-NH<sub>4</sub><sup>+</sup>) in Urban Center Areas of Vietnam**



(Source: Monitoring data by VEPA (MONRE))

**Figure12-5: Water Quality (Coliform Group Number) in Urban Center Areas of Vietnam**

#### b) Water Quality of Inner Water Bodies

The systems of lakes, ponds, canals and small rivers in the inner areas of major cities like Hanoi City, Ho Chi Minh City, Hai Phong City, and Hue City receive and transport wastewater from industrial and residential areas. Currently, the systems are seriously polluted at levels 5 – 10 times higher than permitted national standards for surface water in category B. Most of the lakes in the inner city suffer from eutrophication. Mutative eutrophication and organic re-contamination occur in many lakes. Design and construction of treatment facilities for urban wastewater are underway in large cities like Ha Noi City, Ho Chi Minh City, Da Nang City, and Ha Long City. Other smaller cities and towns are starting to develop their own wastewater treatment projects mainly funded by international organizations.

#### (2) Impacts and Contribution of Japan's ODA

##### 1) Air Quality

The major impacts and contribution of the Japanese ODA in the environmental management (air quality) sector are summarized in Table 12-12. Key tasks of the environmental management (air quality) sector could be a) Support Law on Environmental Protection (LEP) to be revised in 2014, b) Air quality protection and management, and c) Capacity Development (CD) and Research and Development (R&D). The impacts and contribution of the Japanese ODA are described below.

##### a) Support for Revision of Law on Environmental Protection (LEP)

The current LEP will be revised in 2014, and it could be a good opportunity for closer high level policy dialogue between GOV and GOJ. Although this task has been mainly conducted by the JICA experts dispatched to MONRE as policy advisors, actual results and effects are not so clear, and GOV also may have some reservations because of this. On the other hand, other donors such as WB and ADB are favored in this task, and they have conducted special support through technical and financial assistance. Actually, GOJ may be far behind other donors, with minimal contribution and impact for GOV.

In view of this situation, JICA will start a new T/A project of the “Project for Institutional Development of Air Quality Management in Vietnam” from JFY2013 aiming at a) supporting LEP revision on air quality management, b) preparing a road map, and c) identifying future cooperation projects. This project will be expected to contribute and have an impact for GOV.

#### b) Air Quality Protection and Management

The Japanese ODA in this task has been conducted sporadically rather than systematically. For example, the cooperation automatic monitoring station and display by JICA experts dispatched to MONRE, pin-point cooperation related to the East Asia Acid Rain Monitoring Network by the Ministry of Environment (MOE) in Japan. Although there are substantial ODA needs on air pollution control and management, these activities were not carried out based on a long and/or mid-term cooperation program. It resulted in a shortage human resources and lack of operation and maintenance (O/M) budget by the Vietnamese side and ended due to inadequate sustainability. Consequently, the project’s impacts and contribution could be limited.

#### c) Capacity Development (CD) and Research and Development (R&D)

Mainly due to the lack of an integrated approach to air pollution control and management, and inconsistent support by GOJ, the effects and impacts of the Japanese ODA in this field could be limited to some extent. It is desirable that T/A projects are implemented based on a bureaucratic mandate in Vietnam, especially between the Pollution Control Department (PCD)/ MONRE and DONRE/ PPC, which ensures sustainable human resources, equipment, and budget to cover O/M costs.

### 2) Water Environment

The major impacts and contribution of the Japanese ODA in the environmental management (water environment) sector is summarized in Table 12-12. Key tasks in the environmental management (water environment) sector could be a) Support Law on Environmental Protection (LEP) to be revised in 2014, b) Water environment protection and management, c) Capacity Development (CD) and Research and Development (R&D), and d) Sewerage and wastewater treatment. The impacts and contribution of the Japanese ODA are described below.

#### a) Support for Revision of Law on Environmental Protection (LEP)

The situation in the water environment sector is nearly the same as the air quality. JICA has tried to contribute to policy making and enforcement in MONRE including legal and institutional assistance through the T/A project “Project for Strengthening Capacity of Water Environmental Management in Vietnam (JFY2010-2013)”, but the actual results revealed very limited contribution to MONRE. This constraint would be commonly seen in the Japanese ODA in other sectors.

## b) Water Environment Management and Protection

JICA has conducted substantial assistances in this task based on the urban and water environment improvement program. Its policy and direction is fairly systematic compared with the air quality sector. The core aspects are a) preparation of environment management M/P in specific areas such as Ha Long Bay, and b) capacity development on strengthening administrative enforcement capability at both central and provincial levels as well as technical institutions such as VAST/IET. Therefore, GOV has greatly appreciated the Japanese ODA and actual outputs produced by these T/A projects, and its impacts could be evaluated very high. One of the important points is how to involve the Provincial People's Committee (PPC) as a decision maker in environmental enforcement from the perspective of provincial socio-economic development.

## c) Capacity Development (CD) and Research and Development (R&D)

As mentioned above, JICA has placed high priority on this task and has carried out many T/A projects including the Science and Technology Research Partnership for Sustainable Development (SATREPS) Project. Therefore, the impact of the Japanese ODA could be evaluated very high. It should be noted that most T/A projects consist of awareness raising, public relations, and environmental education components, and these ensure that the outputs are more effective and useful.

## d) Sewerage and Wastewater Treatment

This task has been mainly achieved by the JICA urban environment improvement development study and loan projects in specific cities coupled with urban drainage and solid waste components. Thus, the contribution and impact of the Japanese ODA to GOV could be evaluated very high. Minimal collaboration with MONRE targeting industrial waste water treatment and management would be one of the constraints because the targets of these projects are to assist the roles and mandates of the Ministry of Construction (MOC) at the central level and the Department of Construction (DOC) at the provincial level. Details are described in the sewerage sector.

**Table 12-12: Impacts and Contribution of the Japanese ODA in Environmental Management Sector**

Key Tasks	Effects and Impacts of Japanese ODA	Contribution
<b>&lt;Air Quality&gt;</b>		
(1) Support for Revision of Law on Environmental Protection (LEP)	1) High ODA needs but dominant by other donors such as WB and ADB 2) Pin-point cooperation related to the East Asia Acid Rain Monitoring Network by the Ministry of Environment (MOE) in Japan	1) Little contribution and impact to MONRE 2) Weak point of ODA by the Japanese government especially upstream aspects on policy, regulation, and institution
(2) Air Quality Protection and Management	1) Substantial ODA needs due to uncontrolled air pollution management 2) Sporadic cooperation by JICA expert such as automatic monitoring station and display 3) Lack of budget and O/M activity of the Vietnamese side 4) Less priority field compared with others such as	1) Little contribution and impact due to no systematic cooperation by ODA projects so far 2) Partially contribution only for air quality monitoring 3) Preparation of mid and long-term road map for air pollution control

Key Tasks	Effects and Impacts of Japanese ODA	Contribution
	water environment and solid wastes	
(3) Capacity Development (CD) and Research and Development (R&D)	1) Lack of consistent support by ODA because of no clear assistance program 2) Barden of expensive equipment and O/M cost 3) Bureaucratic mandate in Vietnam, especially between the Pollution Control Dept. (PCD)/ MONRE and DONRE/ PPC	1) Limited impact targeting only for air quality monitoring and analysis 2) Lack of integrated approach and program for air pollution control and management
<b>&lt;Water Environment&gt;</b>		
(1) Support for LEP Revision	1) High needs but behind of other donors 2) Not effective and efficient by JICA direct T/A to MONRE mainly due to gap of needs, outputs, and time schedule 3) Less expectation by MONRE to ODA on legal and policy issues	1) Limited contribution and impact to MONRE through JICA experts and CD projects due to insufficient capability and result 2) Common weak point of ODA by GOJ in this task
(2) Water Environment Protection and Management	1) A lot of experiences of substantial and actual contribution to MONRE, DONRE, and institutions 2) Effective and practical contribution to MONRE, DONRE, and VAST/IET by ODA projects 3) Rather weak influence to MONRE both in policy and administrative matters 4) Proper involvement of Provincial People's Committee (PPC) 5) Not consisting policy on project formulation and selection of river basin water environment management projects	1) Strong and substantial impacts have been observed to MONRE and DONRE through M/P study and T/A for CD. 2) Only JICA has conducted regular environmental projects in Halong Bay World Heritage area including a grass-root project, and its results have been highly appreciated by Quang Ninh (QN) province and MONRE. In fact, most projects and schemes proposed by JICA's M/P study (1998-1999) have implemented by QN province. 3) The Halong Bay projects are famous among donors including UNESCO and become a model for other donors such as VCEP/ CIDA.
(3) Capacity Development (CD) and R&D	1) High contribution by continuous support by ODA especially on monitoring, pollution source inventory (PSI), and inspection, measures 2) Bureaucratic mandate in Vietnam, especially among Departments in MONRE, and between MONRE and DONRE/ PPC	1) High impact by CD projects targeting broad stakeholders by JICA T/A project 2) Great contribution and impact to other donors especially VPEG/ CIDA. 3) Very effective by conducting Environmental Education (EE) and Public Relations (PR)
(4) Sewerage and Wastewater Treatment	1) High contribution by water environment improvement projects in major cities mostly focusing on urban drainage, sewerage, and solid waste management 2) Little collaboration between MONRE targeting industrial waste water and the Ministry of Construction (MOC) targeting urban waste water	1) Top priority sector of ODA needs with very high impact 2) Details to be described by the Sewerage sector

(Source: JICA Study Team)

### 12.3.2 Climate Change

#### (1) General Conditions

According to the Vietnam's Second National Communication to the United Nations Framework Convention on Climate Change (UNFCCC) in 2010, total greenhouse gas (GHG) emissions in 2000 was 150.9 million ton of CO<sub>2</sub> equivalent (tCO<sub>2</sub>-eq). The agriculture sector was 65.1 mil tCO<sub>2</sub>-eq, and the energy sector was 52.8 mil tCO<sub>2</sub>-eq, which were the largest emission sources as shown in Table 12-13.

**Table 12-13: GHG Emissions in Vietnam in 2000**

(Unit: 1,000 t)

Sector/ Item	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> -eq	%
Energy	45,900	309	1	52,773	35.0
Industrial Processes	10,006	0	0	10,006	6.6
Agriculture	0	2,384	48	65,091	43.1
Land Use, Land Use Change, and Forestry (LULUCF)	11,860	140	1	15,105	10.0
Waste	0	331	3	7,925	5.3
Total	67,766	3,164	54	150,900	100.0

(Source: Vietnam's Second National Communication to the UNFCCC (2010))

In the medium economic development scenario, of the total emissions from the three principal emitting sectors, namely, energy, agriculture, and land use, land use change and forestry (LULUCF), are estimated to reach 169.2 mil tCO<sub>2</sub>-eq in 2010, 300.4 million tCO<sub>2</sub>-eq in 2020, and 515.8 mil tCO<sub>2</sub>-eq in 2030. The details are summarized in Table 12-14.

**Table 12-14: Future Estimation of GHG Emissions in Vietnam**(Unit: mil tCO<sub>2</sub>-eq)

Sector/ Year	2010	2020	2030
Energy	113.1	251.0	470.8
Industrial Processes	na	na	na
Agriculture	65.8	69.5	72.9
Land Use, Land Use Change, and Forestry (LULUCF)	-9.7	-20.1	-27.9
Waste	na	na	na
Total	169.2	300.4	515.8

(Source: Vietnam's Second National Communication to the UNFCCC (2010))

**(2) Impacts and Contributions of Japan's ODA**

The major impacts and contribution by the Japanese ODA in the climate change sector is summarized in Table 12-15. Key tasks in the climate change sector could be a) Support Activities related to the International Treaty and Kyoto Protocol (KP), and b) Mitigation and Adaptation. The impacts and contribution by the Japanese ODA are described below according to each task.

**a) Support Activities related to the International Treaty and Kyoto Protocol (KP)**

This task has been supported by GOJ mostly through policy dialogue in ministry level and donor coordination, but currently there is no specific support program customized for GOV. From 2010, GOJ started actual support in basic data preparation, planning, implementing, and financing of CC actions, and dispatching JICA experts, and this is highly appreciated by GOV. Further policy dialogue is required based on the Vietnamese new policy such as the Green Economy and Green Growth Strategy (Decision No.1393/2012/ QD-TTg).

**b) Mitigation and Adaptation**

Some elements related to mitigation and adaptation in CC are included in the existing Japanese ODA projects such as power energy, mass transportation, forestry, and disaster prevention. However, nearly all

actual activities are in the preparatory stage, and they will be implemented in future. Currently, it must be stressed that the shortage of experiences and capable officers in charge would be substantial bottleneck in Vietnam.

**Table 12-15: Impacts and Contribution of the Japanese ODA in Climate Change Sector**

Key Tasks	Effects and Impacts of Japanese ODA	Contribution
(1) International Treaty and Kyoto Protocol (KP) Support Activity	1) Assisting GOV's actions related to the international treaty through policy dialogue in ministry level and donor coordination 2) Supporting new organizations in charge by CC program and GHG emission inventory DB project 3) Uncertainty on customized program preparation	1) Actual support by ODA program implementation by dispatching JICA experts was highly appreciated by GOV 2) Further policy dialogue is required based on the Vietnamese new policy such as Green Economy and Green Growth Strategy (Decision No.1393/2012/ QD-TTg)
(2) Mitigation and Adaptation	1) Some elements related to CC in existing ODA projects such as power energy, mass transportation, forestry, and disaster prevention 2) Several schemes have been promoted by the Global Environmental Fund (GEF) and special fund by MOE and MITI 3) No clear ODA program on CC due to rather new field	1) No clear impact has been observed currently due to quite new task 2) Shortage of experiences and capable officers in the Vietnamese organizations in charge

(Source: JICA Study Team)

### 12.3.3 Solid Waste Management

#### (1) General Conditions

In 2009, the population was approximately 85.7 mil people, making Vietnam the 14th most densely inhabited country in the world, which in turn imposes a constant and long lasting pressure on the country's natural resources. The urbanization rate in Vietnam continues growing, and it is estimated that in 2015, the population in urban areas will be about 31 million people (accounts for 34% of the total population), and about 40 mil people (40% of the total population) in 2025.

The Decree 59/2007/ND-CP stated that waste management in Vietnam is divided into ordinary and hazardous solid waste. Under the management system in Vietnam, solid waste is divided into three types: municipal solid waste, industrial waste, and medical waste. According to statistics of the Ministry of Natural Resources and Environment (MONRE), Vietnam produces over 15 mil tons of waste each year from various sources. More than 80 % (12.8 mil tons/yr) is from municipal sources, including households, restaurants, markets, and businesses, and industries generate over 2.6 mil tons of waste (17%) each year. About 160,000 tons/yr (1%) of Vietnam's waste is considered hazardous including hazardous healthcare waste; toxic or flammable waste from industrial processes; and, pesticide from agriculture. These figures are summarized in Table 12-16 and Table 12-17.



**Table 12-16: Solid Waste Management Conditions in Vietnam**

(1) Municipal solid waste generation (ton/year)	
a) National	12,800,000
b) Urban areas	6,400,000
c) Rural areas	6,400,000
(2) Hazardous waste generation by industries (ton/year)	128,400
(3) Non hazardous waste generation by industries (ton/year)	2,510,000
(4) Hazardous medical waste generation (ton/year)	21,000
(5) Municipal waste generation (kg/person/day)	
a) National	0.4
b) Urban areas	0.7
c) Rural areas	0.3
(6) Collection of waste (% of waste generated)	
a) Urban areas	71%
b) Rural areas	<20%
c) Among urban poor	10-20%
(7) Number of solid waste disposal facilities	
a) Intermediate treatment plant (incl. compost)	12
b) Dumps and poor operated landfills	74
c) Sanitary landfills	17
(8) Capacity for hazardous medical waste treatment (% of total)	50%

(Source: World Bank (2004), arranged by JICA Study Team)

**Table 12-17: Waste Generation Amount in Vietnam**

Category	Generation Source	Waste Type	Amount (1,000 ton/year)		
			Urban	Rural	Total
Municipal SW	Residential, commercial, markets	kitchen waste, plastic, paper, glass, etc.	6,400	6,400	12,800
Industrial waste (non-hazard)	Industries	metal, wood, etc.	1,740	770	2,510
Industrial waste (hazard)	Industries	fuel oil, waste sludge, organic chemicals	126	2.4	128
Medical waste (hazard)	Hospitals	tissue, blood, needle etc.	-	-	21.5
Total (exclude agriculture waste)			8,266	7,172	15,459
Agriculture waste	Cultivation, livestock	plant matter	na.	64,560	64,560

(Source: World Bank (2004))

Waste amount in Vietnam is forecasted as shown in Table 12-18. It is estimated that municipal and industrial waste will drastically increase in the next 10 to 15 years.

**Table 12-18: Waste Amount Forecast in Vietnam**

(Unit: mil ton)

Year/Type	Municipal waste	Industrial waste	Medical waste	Waste from rural waste	Waste from craft villages	Total
2015	22.2	9.6	0.2	9.8	1.8	43.6
2020	35.2	20.8	0.3	8.8	2.5	67.6
2025	51.7	27.8	0.3	7.6	3.6	91.0

(Source: National Strategy on Integrated Solid Waste Management up to 2025 and Vision to 2050)

## (2) Impacts and Contributions of Japan's ODA

The major impacts and contribution of the Japanese ODA on solid waste sector is summarized in Table 12-19. Key tasks of the climate change sector could be a) Solid Waste Management, and b) 3R (reduce,

reuse, and recycle) Promotion. The impacts and contribution of the Japanese ODA are described in each task below.

a) Solid Waste Management

This task has been conducted based on the urban environment improvement program of JICA with clear vision. Most projects have been formulated by the JICA M/P study in specific cities, and implemented in line with the urban environmental improvement program. Although weak linkage between the soft component and equip/facility supply could be seen in the Japanese ODA, and low level planning and implementation capacity, and weak financial background are major constraints in Vietnam, the ODA projects are expected to have a fairly high impact because most C/P organization and stakeholders have provided strong ownership, which has been sustained after the projects.

It should be noted that MONRE is the legally responsible ministry for both domestic and industrial solid waste management in Vietnam under the Law on Environmental Protection (LEP). However, actual domestic solid waste management projects in the Japanese ODA have been implemented by the state own companies such as URENCO under the initiative of the Ministry of Construction (MOC). This was because the majority of loan projects were formulated through the urban environment improvement M/P projects that were integrated with urban drainage and sewerage components, and MOC normally has more sophisticated capabilities to implement such project than MONRE. Therefore, further policy dialogue between MONRE and GOJ would be required in future to achieve better cooperation in solid waste management including industrial and hazardous waste.

b) 3R (reduce, reuse, and recycle) Promotion

The 3R Initiative Project in Hanoi City must be the core project to disseminate and achieve a future recycle-society in Vietnam. Moreover, the Regional 3R Forum in Asia has conducted by MONRE, MOE in Japan, and UNCRD as organizers, and UNIDO, UNEP, UNDP, IGES, and JICA as supporters was held in Hanoi in 2012. Therefore, the ODA projects are expected to have a high impact coupled with hard and soft components.

**Table 12-19: Impacts and Contribution of the Japanese ODA in Solid Waste Management Sector**

Key Tasks	Effects and Impacts of Japanese ODA	Contribution
(1) Solid Waste Management	1) ODA projects have been conducted in clear vision and program of JICA and these have contributed very much 2) Providing equipment to the Urban Environment Limited Company (URENCO) in HNI city with some soft component 3) Most projects have been formulated by the JICA M/P study in specific cities, and implemented in line with the urban environmental improvement program of JICA 4) Rather weak linkage between soft component and equip/facility supply	1) High impact of ODA projects is expected because most C/P organization and stakeholders have engaged eagerly with strong ownership and have shown their sustainability after the projects 2) Low level planning and implementation capacity, and weak financial background are major constraints in Vietnam 3) Coordination between JICA project and the others formulated by MITI and local government in Japan is required.

Key Tasks	Effects and Impacts of Japanese ODA	Contribution
	5) There could be some constraints on actual involvement of MONRE.	
(2) 3R (reduce, reuse, and recycle)Promotion	1) The 3R Initiative Project in Hanoi City must be the core project for dissemination to other areas and realization of future recycle-society in Vietnam 2) The Regional 3R Forum in Asia has been conducted by MONRE, MOE in Japan, and UNCRD as organizers, and UNIDO, UNEP, UNDP, IGES, and JICA as supporters, in Hanoi 2012..	1) High impact of ODA projects is expected because most C/P organization and stakeholders have engaged eagerly with strong ownership and have shown their sustainability after the projects, rather same as the task of solid waste management 2) Clear vision and measures of GOV after 3R introduction to be prepared

(Source: JICA Study Team)

#### 12.3.4 Good Practice of the Japanese ODA

The following project could be proposed as examples that may induce result in good practices and outcomes

##### 1) The Project on Sustainable Environmental Management of Halong Bay (2010-2013)

- Direct cooperation to protect Halong Bay World Heritage Area
- Remarkable outcomes coupled with that of the M/P study in 1998-1999
- Comprehensive approach of JICA's T/A project, grass root project, and Japan Overseas Cooperation Volunteers (JOCV)

**Column 12-1: The Project on Sustainable Environmental Management of Halong Bay**  
**(JFY2009-2012)**

The Project purpose is to improve the capacity of natural resources and environmental management to achieve sustainable tourism in Halong area toward the overall goal of environmental conservation of the Halong Bay. To accomplish the Project Purpose, the following support was provided for the counterpart organizations, mainly the Department of Natural Resources and Environment (DONRE) of Quang Ninh Province, in collaboration with relevant organizations:

- 1) Strengthening monitoring, inspection, and administrative enforcement and guidance,
- 2) Implementing land use measures while keeping the balance between the environment and development,
- 3) Strengthening policy planning for sustainable tourism in Halong area, and
- 4) Implementing activities in environmental education and public relations (PR).



Photo-1  
Participatory water quality monitoring using sechci plate demonstrating to tourists



Photo-2  
Mangrove forest eco-tourism for protection and environmental education



Photo-3  
One day car-free event at the international street in line with Eco-fair in Halong



Photo-4  
Mobile environmental education (Mobile-EE) in many communes at evening. More than 1,500 of children, pupils, and parents are participated.



Photo-5  
Participation and fostering active volunteer groups (123 person)



Photo-6  
Picture contests for our common heritage



Photo-7  
Eco-fair in 2012 to be annual event



Photo-8  
What we can do for next generation?

Key points on environmental education are;

- a) Integrated joint activity in environmental education by participating departments of PPC, organizations, volunteers, and economic entities in Quang Ninh province holding events and other shared opportunities,  
za
- b) Simple and concise tools and contents for easy participation by citizens and economic entities in tourism,
- c) Breakthrough for new environmental education activities in collaboration with PPC, citizens, academic organizations, and economic entities in tourism, and
- d) Establishment of the Halong Bay Environmental Education Association (HLEEA) under PPC to develop further activities and to ensure sustainability including the necessary budget.

## **12.4 Features of the Future Japanese ODA**

According to the Assistance Plan for Vietnam prepared by GOJ in July 2009, the environmental management sector including air quality, water quality, urban environment, water supply, drainage, wastewater treatment, solid waste management, 3R, forest, natural environment, and bio-diversity is explicitly stated as one of the priority sectors in the Japanese ODA, and the climate change sector is also highlighted as a focal area. Therefore, GOJ will continue its assistance activities to GOV based on this assistance policy. Based on the data, information, and issues collected in the Study, the focal points of future Japanese ODA in environmental management, climate change, and solid waste sectors are described for each sector, and the results are summarized in Table 12-20.

### **12.4.1 Environmental Management (Air Quality)**

#### **(1) Support for Revision of Law on Environmental Protection (LEP)**

This is a very urgent and important task for GOJ because a) the current LEP will be revised in 2014, b) it is a good opportunity to deepen policy dialogue on the legal and institutional aspects of air quality based on the Japanese experiences, c) the requirements of the mid and long-term road map for GOV on air quality management, and d) close correlation between global warming and climate change with energy saving and efficiency, GHG reduction, function of forest to absorb CO<sub>2</sub>, and a low carbon society, of which all are emphasized in the GOV's green economy and green growth strategy (Decision No. 1393/2012/QD-TTg). In view this situation, JICA will soon start new T/A project directly concerning this task in 2013, and this project will contribute GOV in this sector.

#### **(2) Air Quality Protection and Management**

This task is closely related to the task of Support for Revision of Law on Environmental Protection (LEP) mentioned above in the context of the mid and long-term road map on air quality management. In fact, the actual administrative activities in this task are wide ranging and covers not only air quality monitoring and gas emission treatment on site, but also fuel type and quality, vehicle engine improvement, energy saving

and efficiency, greening around road side area, traffic control, production process improvement of factories, and others. It will take long period of time to achieve clean air through socio-economic related countermeasures, and it will reveal the importance of the long term road map to protect human health even in ODA projects. Moreover, fairly intensified assistance will be required including R&D and financial support.

### (3) Capacity Development (CD) and Research and Development (R&D)

This is a very familiar task for GOJ and it has had a high impact on GOV and C/P organizations so far. Therefore, it is recommended that further T/A projects be implemented which clarify the integrated ODA program with concrete targets and goals, and periodic review of ODA achievements and needs. Because of the current legal and institutional circumstances of the administration system in Vietnam, it must be stressed that PPC is inevitable in the actual implementation of T/A projects as a responsible decision-making organizations to enforce administrative activities.

#### **12.4.2 Environmental Management (Water Environment)**

##### (1) Support for Revision of the Law on Environmental Protection (LEP)

As in the case of air quality, this task is also important for actually planning and implementing ODA projects. New initiatives and methodologies will be required for this task through mutual discussions between GOV and GOJ that reflect the experiences and lessons learnt from past assistance schemes and projects.

##### (2) Water Environment Management and Protection

GOJ has implemented many studies and projects in this area, and GOV has generally appreciated these assistances thus far. Although its importance will not change, GOV and C/P organizations will require additional components such as actual and/or trial implementation of proposed measures in line with the project, and output preparation to be used directly throughout the provinces.

##### (3) Capacity Development (CD) and Research and Development (R&D)

Also, GOJ has achieved very high performance, outputs, and impact in this task. One of the key factors for these successful results is the involvement of PPC in the project as mentioned in the air quality sector. In future, more extensive and wide ranging activities in the other sectors, more practical outcomes to be customized in Vietnam, and more symbolic and prototype model T/A projects that will be disseminated throughout Vietnam, will be required for C/P organizations.

##### (4) Sewerage and Wastewater Treatment

This task will be achieved in stages in conjunction with actual loan projects under the urban environment improvement program of JICA. The next step will be to target medium-size cities according to their characteristics such as historical background, monument locations, and tourism spots. Because they target

urban wastewater, MOC/DOC is the responsible organization in Vietnam, but collaboration with MONRE/DONRE which is responsible for industrial wastewater will be required because of the inflow of industrial wastewater to the current and newly constructed sewerage system.

### **12.5.3 Climate Change**

#### **(1) Support Activities related to the International Treaty and Kyoto Protocol (KP)**

GOJ should focus on this task taking into account the very limited and eligible staff members in GOV and future cooperative relations between GOV and GOJ in wide-ranging socioeconomic aspects to achieve a mutual win-win situation against common thread. Although major parts will depend on the progress of COP in UN, such a specific approach for GOV including donor coordination will be surely required for future mutual prosperity and coexistence.

#### **(2) Mitigation and Adaptation**

This task should be implemented in line with support activities related to the International Treaty and Kyoto Protocol (KP) mentioned above under the clear ODA program and donor coordination. Needless to say, it is very important to obtain and prepare basic and precise data and information for conducting effective and timely measures in Vietnam. Moreover, it should be managed together with the policy and strategies of other sectors as well as the green growth strategy, because actual activities in this task are closely implicated with other sectors such as energy saving and efficiency, mass transportation, and forestry.

### **12.5.4 Solid Waste Management**

#### **(1) Solid Waste Management**

GOV has put high priority on solid waste management as it relates to the daily life and health of the people, promoting clean and beautiful tourism spots, and activating industrialization. Therefore, its ODA needs will increase in future. Key factors are a) maintaining a good balance in hard and soft assistance, b) dealing with industrial (hazardous) wastes properly, and c) raising public awareness against NINBY (not in my back yard). GOJ will continue to support GOV through loan projects in urban environment improvement in major cities mainly targeting normal wastes by MOC/DOC as the implementation agency. Currently, it is natural to focus on the actual project implementation capacity of MOC/DOC, but in future MONRE/DONRE should also be highlighted as the responsible agency, in accordance with current state mandate for solid waste management including industrial (hazardous) wastes.

Another point is the industrial waste management including hazardous waste, should be dealt by enterprises as part of the producer's responsibility. Mainly due to their limited capacity, the industrial waste management cannot be properly managed by MONRE/DONRE, and it would not be able to separate industrial from domestic waste. This should be the focus of future ODA projects that deal with issues related to the rapid economic growth in the industry sector in Vietnam.

JICA is required to respond speedy and to conduct quick implementation of the ODA projects based on

frequent policy dialogue with GOV, as well as to coordinate project activities conducted by other Japanese agencies such as the Ministry of Environment (MOE), Ministry of International Trade and Industry (MITI), and prefectural governments in Japan.

(2) 3R (reduce, reuse, and recycle) Promotion

This is a global task and its ODA needs will also increase. It should be noted that 3R requires a total waste management system in society from promoting separate collection, recycling collected wastes to dealing with waste-derived goods and products. GOJ should consider this point in actual projects that promote 3R.

**Table 12-20: Focal Points in Future Japanese ODA in Environmental Management, Climate Change, and Solid Waste Sectors**

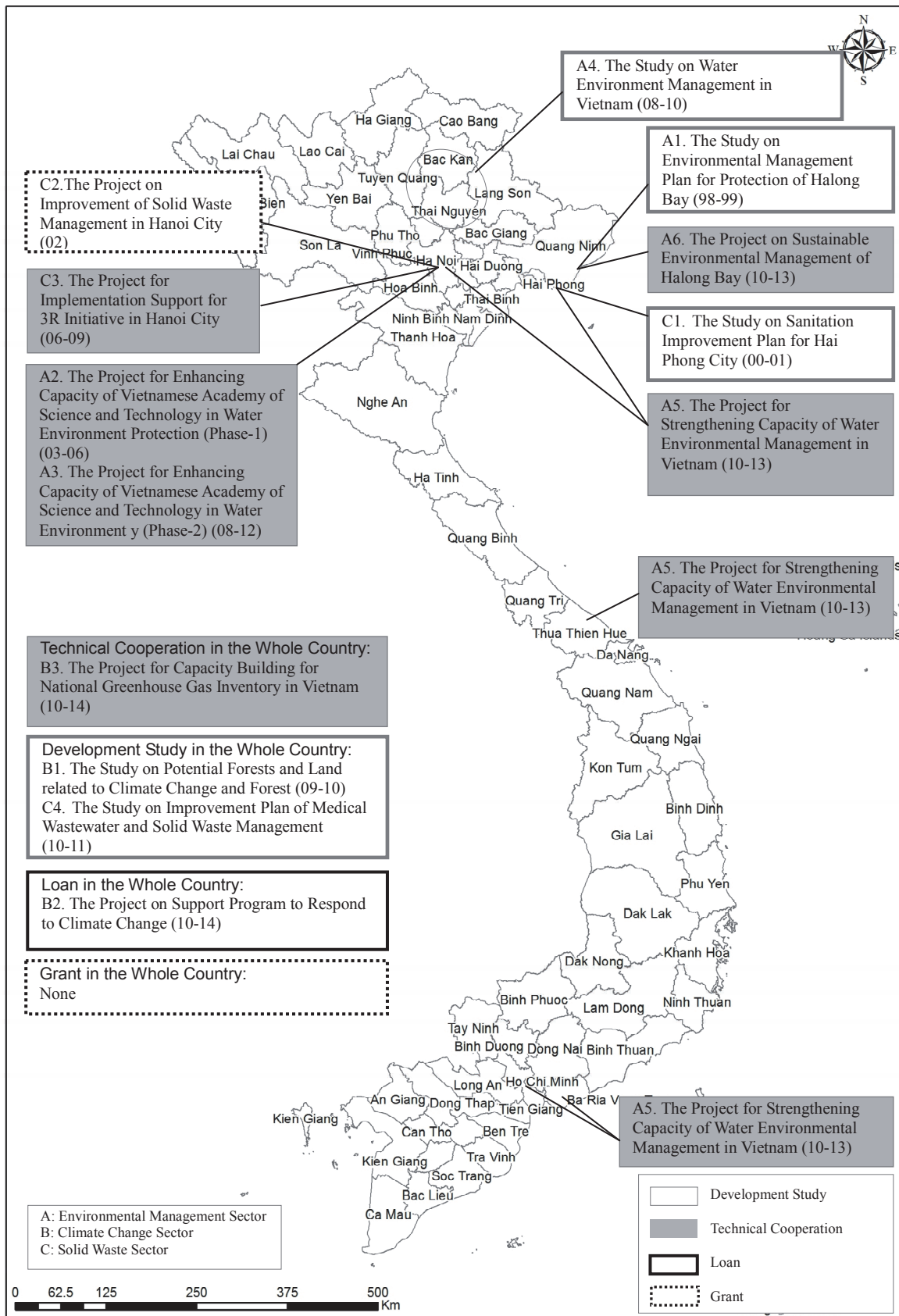
Key Tasks	Future Direction of Japanese ODA	Focal Points	Remark
<b>&lt;Environmental Management Sector: Air Quality&gt;</b>			
(1) Support for Law on Environmental Protection (LEP) Revision	1) Dispatching eligible JICA expert and/or in-house consultant 2) Strengthening JICA's coordination capacity and leadership among donors 3) Support for preparation of by-law and regulations	1) To conduct T/A for the Law on Environmental Protection (LEP) revision on air sector of MONRE (on-going) 2) To set and revise environmental and emission standards 3) To support Vietnam Environment Protection Fund (VEPF)	-JICA expert in MONRE -Collaboration with other donors
(2) Air Quality Protection and Management	1) M/P preparation for air quality management in major cities 2) Institutional set-up of pollution control managers including Research and Development (R&D) 3) Implementation of control measures against point and non-point emission sources	1) To conduct T/A for M/P preparation and CD in DONRE of PPC 2) To support VEPF by 2-step loan 3) To combine Cleaner Production (CP) and production process improvement 4) To provide technology and loan for treatment facilities especially for thermal power plant	-Collaboration with other donors and WB project
(3) Capacity Development (CD) and Research and Development (R&D)	1) Substantial support for air pollution control in DONRE 2) Academic and scientific support to research institutes such as the Science and Technology Research Partnership for Sustainable Development (SATREPS) project	1) To conduct T/A of DONRE in major cities considering revised LEP 2) To implement data management and sharing between MONRE and DONRE 3) To develop actual and practical administrative tools for management and control 4) To conduct T/A for CD of the Center for Environmental Monitoring (CEM) and VAST/IET in MONRE	-Coordination with other donors -Involvement of PPC
<b>&lt;Environmental Management Sector: Water Environment&gt;</b>			
(1) Support for LEP Revision	1) Dispatching eligible JICA expert and/or in-house consultant who can lead regulations and policy matters 2) Review and revision of current rules, regulations, and institutions including inspection, environmental and emission standards, fines, sanctions, and funding system	1) To conduct institutional set-up to foster pollution control managers for factories, and plant/ facility industry 2) To reestablish relations between MONRE and DONRE especially fields of policy and data management including information disclosure	-JICA expert in MONRE
(2) Water Environment Protection and Management	1) Preparation of mid and long-term road map for water pollution control and its implementation coordinating with other donors such as WB, ADB,	1) To conduct actual and trial implementation of measures combining CP and production process improvement 2) To prepare practical M/P and F/S	-Collaboration with other donors and



Key Tasks	Future Direction of Japanese ODA	Focal Points	Remark
	CIDA, DANIDA. 2) Preparation of M/P on water environmental improvement in priority cities and areas including river basins 3) T/A for CD in selected DONRE of PPC by introducing combined pollution control approaches 4) Introduction of self-monitoring and the Performance Rating of Enterprises (PRE) with information disclosure	targeting closed and semi-closed water bodies 3) To introduce best practice model such as the Performance Rating of Enterprises (PRE) with information approach 4) To support VEPF by 2-step loan with preferable incentives and conditions	WB project
(3) Capacity Development (CD) and R&D	1) T/A for CD in selected DONRE of PPC by introducing mixture and/or combined pollution control approaches to foster a top-runner for self-reliable dissemination 2) Academic and scientific support to research institutions such as SATREPS	1) To implement CD project including several pilot schemes for demonstration purposes 2) To conduct CD of VAST/IET in MONRE with advanced technology for trainer's training and pollution control managers for factories	-Involvement of PPC
(4) Sewerage and Wastewater Treatment	1) Promotion of water environment improvement in urban areas collaborating with MOC 2) Usage of the Foreign Direct Investment (FDI) in Industrial zones (IZ) and economic zones (EZ) 3) Activation and investment for plant/ facility industry 4) Introduction of the Public and Private partnership (PPP) for actual projects	1) To provide loan for sewage treatment facilities packaging urban environment improvement in priority cities and areas 2) To establish collaboration system between MONRE/DONRE and MOC/DOC both in central and provincial	-Subject to the Sewerage sector
<b>&lt;Climate Change Sector&gt;</b>			
(1) International Treaty and Kyoto Protocol (KP) Support Activity	1) Continuation of support and communication with the Vietnamese organizations based on the provisional support program 2) Donor coordination and leadership	1) To function as an in-house consultant through JICA expert 2) To discuss advantageous points of the Japanese CC policy such as emission trade and carbon offset 3) To raise knowledge and skills of Vietnamese officers related to CC through T/A project and training in Japan	-JICA expert to MONRE -Donor coordination
(2) Mitigation and Adaptation	1) Preparation of overall support program on climate change (CC) 2) Involvement mitigation and adaptation measures in the existing ODA sector 3) Focusing on the Japanese advanced technology in saving, renewable, and bio energy 4) Promotion of actual projects to contribute CO2 absorption directly	1) To prepare action plan of the overall support program 2) To formulate a scheme promoting Japanese emission trade and carbon offset 3) To support obtaining basic data and information and preparing its data base (DB) for policy making 4) To promote ODA projects in existing sectors to contribute mitigation and adaptation 5) To implement reforestation, REDD+, and AR-CDM related projects 6) To prepare vulnerability zoning and mapping	-Public and Private Partnership (PPP) introduction
<b>&lt;Solid Waste Sector&gt;</b>			
(1) Solid Waste	1) Putting higher priority to the incidental scheme in loan project, the	1) To put priority on equip/ facility plan, institution, and regulation	-Subject to the Urban

<b>Key Tasks</b>	<b>Future Direction of Japanese ODA</b>	<b>Focal Points</b>	<b>Remark</b>
Management	soft component of grant project, and T/A project for ensuring more intensive linkage 2) Preparation of a specified program focusing on solid waste management 3) Consideration of privatization movement and green growth strategy in solid waste management sector 4)M/P and basic plan preparation in major cities to formulate new projects	2)To introduce regional waste disposal plan 3) To conduct R&D for industrial waste (hazardous waste) treatment technology and system such as the Pollutant Release and Transfer Register (PRTR) system 4) To foster industrial waste (hazardous waste) treatment industry for its proper management	Development sector
(2) 3R (reduce, reuse, and recycle)Promotion	1) Implementation of T/A projects for CD of 3R activities 2) Preparation of a specified program focusing on 3R in Vietnam 3) Preparation of basic tools for promotion of 3R based on the outputs of the 3R Initiative Project in Hanoi City	1) To put priority on source separated collection and separated refuse facility 2) To construct combined yard treating both urban and industrial waste (hazardous waste) 3) To foster solid waste treatment industry for actual implementation of 3R	-JICA expert to MONRE

(Source: JICA Study Team)



**Figure 12-6: Project Sites in the Environmental Management, Climate Change, and Solid Waste Management Sector in Vietnam**



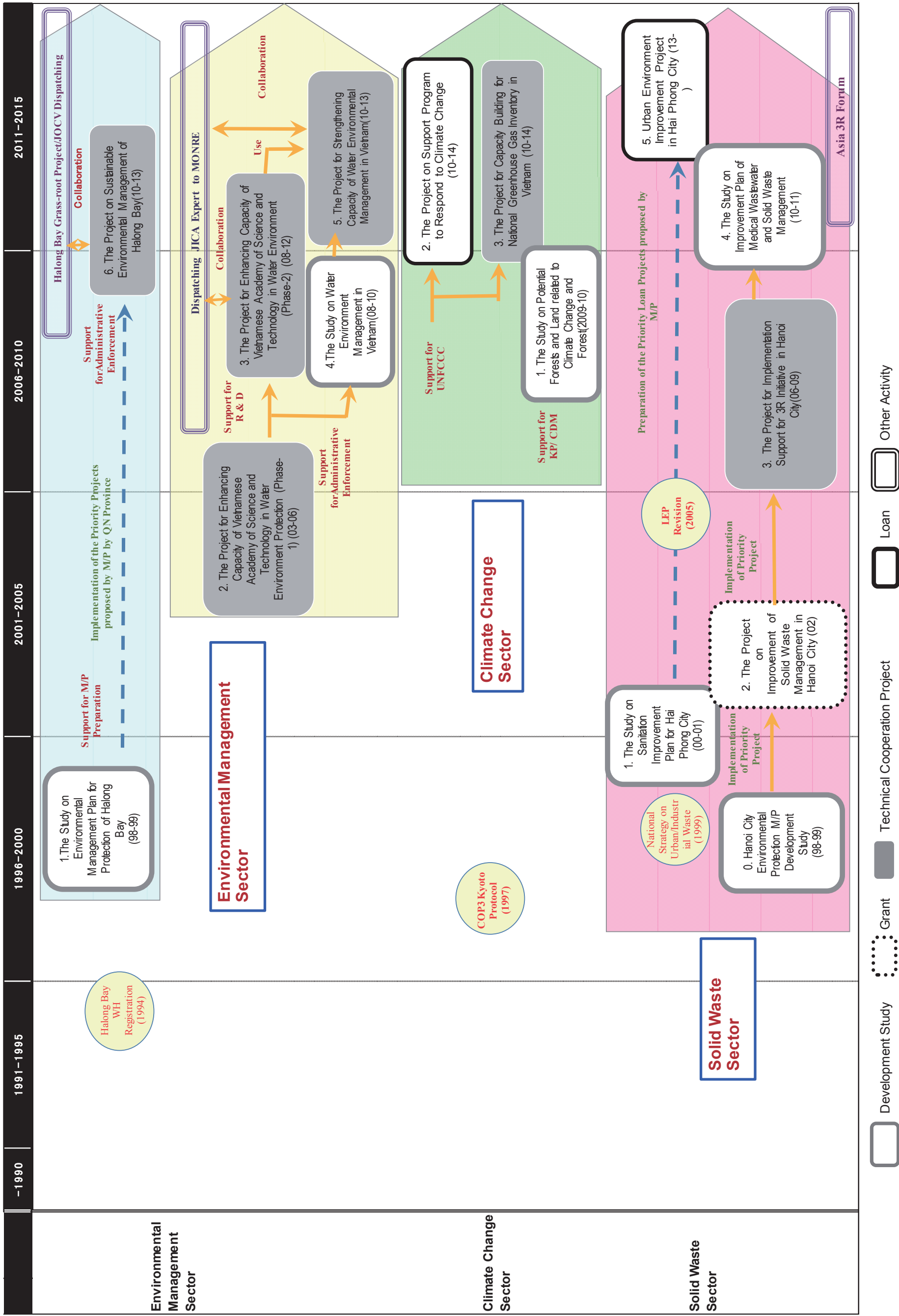


Figure 12-7: JICA Country Strategies and Projects in the Environmental Management, Climate Change, and Solid Waste Management Sector in Vietnam



## **CHAPTER 13: FOREST, NATURAL ENVIRONMENT AND DISASTER PREVENTION**

### **13.1 20-year Partnership at a Glance in Forest, Natural Environment and Disaster Prevention**

The 20-year partnership for the growth and development in the area of the Forest, Natural Environment, and Disaster Prevention in Vietnam can be summarized according to the historical background and priority development issues, as in Table 13-1. In this chapter, forest sector and natural environment sector were separately described due to quite large differences on history, number of projects, target, etc. between these two sectors.

#### **(1) Forest**

This sector has the longest assistance history and it was initiated by the clear policy of GOV through the National Reforestation Program 1993-2000 (Program No. 327, 1992), the 5 mil ha National Reforestation Program (5MHRP) 1998-2010 (Program No.661, 1997), revision of the Law on Forest Protection and Development (Law No. 29/2004/QH11), and the National Forestry Development Strategy 2006-2020 (Decision No.18/2007/ QD-TTg). Based on this strong commitment, a lot of forest related projects have been assisted by GOJ as well as other donors. The focal point of Japanese ODA has been shifted from single purpose reforestation projects to the comprehensive forest management projects including regional infrastructure development and livelihood improvement of local people.

#### **(2) Natural Environment**

In Vietnam, this sector has been governed in line with the policy of forest sector, and its specific policy and action is prepared for the measures related to the international treaty, such as the Biodiversity Action Plan (Decision No.845/1995/QD-TTg) responding the Convention on Biodiversity (CBD) in UN, and the National Direction and Plan for Protection of Wetland (Decree No. 109/2003/ND-CP) responding the Ramsar Convention. Based on the request of GOV, GOJ has supported the projects on biodiversity data base preparation and national park management.

#### **(3) Disaster Prevention**

Key events of GOV in this sector were the National Strategy for Natural Disaster Prevention, Response, and Mitigation to 2020 (Decision No.172/2007/ QD-TTg) and the inauguration of Law on Disaster Prevention in 2013 (Law No.33/2013/ QH13). Currently, this sector has been

highlighted and would be put on a main stream in the world due to the earthquake disaster in Japan and the prevention of climate change. Thus, GOJ has supported GOV through T/A projects focusing on disaster prevention cycle and studies on satellite information.

**Table 13-1: Summary of Partnership for Forestry, Natural Environment and Disaster Prevention**

Item	5th 5-year Plan (1991-1995)	6th 5-year Plan (1996-2000)	7th 5-year Plan (2001-2005)	8th 5-year Plan (2006-2010)	9th 5-year Plan (2011-2015)
1) Background Topics	<p>&lt;Forest&gt; -Devastated by VN war -1995: COP1 in Berlin, Berlin mandate</p> <p>&lt;Natural Environment&gt; -1992: Convention on Biological Diversity (CBD) -1993: Phong Nha Ke Bang national park UNESCO World Heritage registration</p> <p>&lt;Disaster Prevention&gt; -1995: Earthquake damage in the Hansin-Awaji region of Japan</p>	<p>&lt;Forest&gt; -1997: COP3 in Kyoto Protocol (KP) = Joint Implementation (JI), Clean Development Mechanism (CDM), and Emission Trade (ET)</p> <p>&lt;Natural Environment&gt; -2000: CBD/Ex COP1, Cartagena Protocol in Montreal</p> <p>&lt;Disaster Prevention&gt; -Law No.8/1998/QH10: Law on Water Resources</p>	<p>&lt;Forest&gt; -2001: COP7 in Marrakech, Low Development Countries Fund (LDCF), Special Climate Change Fund (SCCF), and Adaptation Fund (AF) under Global Environment Fund (GEF) -2005: COP10 in Montreal, Land use and Forestry (REDD)</p> <p>&lt;Natural Environment&gt; -2004: CBD/COP7 in Kuala Lumpur</p> <p>&lt;Disaster Prevention&gt; -no specific topics</p>	<p>&lt;Forest&gt; -2006: COP12 in Nairobi -2008: COP14 in Poznani, Mitigation and Adaptation for Developing Countries (REDD+) -2010: COP16 in Cancun, Cancun Agreement (REDD+5 actions)</p> <p>&lt;Natural Environment&gt; -2010: CBD/COP10 in Nagoya, Satoyama Initiative</p> <p>&lt;Disaster Prevention&gt; -no specific topics</p>	<p>&lt;Forest&gt; -2011: COP17 in Durban -2012: COP18 in Qatar -2013: COP19 in Warsaw -Japan Credit Mechanism (JCM)</p> <p>&lt;Natural Environment&gt; -2012: CBD/COP11 in Hyderabad</p> <p>&lt;Disaster Prevention&gt; -Law No.17/2012/QH13: Revised Law on Water Resources -2012: Earthquake damage in the North-eastern region of Japan</p>
2) Sector Condition	<p>&lt;Forest&gt; -forest coverage: 43.7% in 1943, but 27.2% in 1990 and 28.1% in 1995 -starting reforestation</p> <p>&lt;Natural Environment&gt; -1995: Biodiversity guideline by WRI, IUCN, and UNEP</p> <p>&lt;Disaster Prevention&gt; -receiving grant aid from WB, UNDP, and NGOs mostly focusing on evacuation</p>	<p>&lt;Forest&gt; -continuing reforestation based on the national program -activating assistance projects by donors</p> <p>&lt;Natural Environment&gt; -no data and information</p> <p>&lt;Disaster Prevention&gt; -1999: Flood damage in the Central region -receiving grant aid from WB, UNDP, and NGOs focusing on evacuation and restoration</p>	<p>&lt;Forest&gt; -forest coverage: 35.8% in 2002, 37.0% in 2005 -promotion of 5 mil ha reforestation program</p> <p>&lt;Natural Environment&gt; -no data and information</p> <p>&lt;Disaster Prevention&gt; -continuation of grant aid by WB, UNDP, and NGOs focusing on community based disaster prevention</p>	<p>&lt;Forest&gt; -forest coverage: 38.0%(= 12.7 mil ha) in 2006, 38.2% in 2007, 38.7% in 2008, 39.1% in 2009, 39.5% in 2010</p> <p>&lt;Natural Environment&gt; -no data and information</p> <p>&lt;Disaster Prevention&gt; -2010: Flood damage in Ha Ting and Quang Binh provinces -continuation of grant aid by WB, UNDP, and NGOs</p>	<p>&lt;Forest&gt; -forest coverage: 42-43% by 2015, and 47% by 2020 (planned)</p> <p>&lt;Natural Environment&gt; -no data and information</p> <p>&lt;Disaster Prevention&gt; -continuation of grant aid by WB, UNDP, and NGOs</p>



Item	5th 5-year Plan (1991-1995)	6th 5-year Plan (1996-2000)	7th 5-year Plan (2001-2005)	8th 5-year Plan (2006-2010)	9th 5-year Plan (2011-2015)
3) Priority Policy and Task	<p>&lt;Forest&gt; -1992: Program No. 327: National Reforestation Program 1993-2000</p> <p>&lt;Natural Environment&gt; -Decision No. 845/1995/QĐ-TTg: Biodiversity action plan</p> <p>&lt;Disaster Prevention&gt; -Order No.9/1993/CTN: Flood Prevention and Storm Control by the President of Vietnam -traditional community based self-defense by local people</p>	<p>&lt;Forest&gt; -Law No. 10/1998/QH10: Law on Land -1997: Program No.661: 5 mil ha National Reforestation Program (5MHRP) 1998-2010</p> <p>&lt;Natural Environment&gt; -no specific policy</p> <p>&lt;Disaster Prevention&gt; -Order No.27/2000/PL-UBTVG10: Standing Committee of National Assembly revising Order No.9 -traditional community based self-defense by local people</p>	<p>&lt;Forest&gt; -Law No. 29/2004/QH11: Law on Forest Protection and Development (revision)</p> <p>&lt;Natural Environment &gt; -Decree No.109/2003/ND-CP: National direction and plan for protection of wetland -Circular No. 18/2004/TT-BTNMT: Guiding the implementation of the Government's Decree No. 109/2003/ND-CP on Conservation and sustainable development of wetlands</p> <p>&lt;Disaster Prevention&gt; -community based self-defense by local people</p>	<p>&lt;Forest&gt; -Decision No.18/2007/QĐ-TTg: National Forestry Development Strategy 2006-2020 -Decision No.114/2008/QĐ-BNN: Establishing Vietnam Forest Protection and Development Fund -Decision No.73/2010/QĐ-TTg: Regulation on investment and construction of forestry works</p> <p>&lt;Natural Environment &gt; -Decree No.32/2006/ND-CP: on management of endangered precise, and rare fauna and flora -Decision No 79./2007/QĐ- TTg: Approving the national action plan on biodiversity 2010 to 2020 for implementation of the conservation on biological diversity and the Cartagena Protocol on Bio-safety -Law No.20/2008/QH12: Law on Biodiversity</p> <p>&lt;Disaster Prevention&gt; -Law No 79/2006/QH-VN: Law on Dike -Decision No.172/2007/QĐ-TTg: National Strategy for Natural Disaster Prevention, Response, and Mitigation to 2020 -establishment of the Disaster Management Center in MARD</p>	<p>&lt;Forest&gt; -Decree No. 99 /2010/ND-CP: Policy for Payment for Forest Environmental Services -Decision No. 57/2012/QĐ-TTg: on Approval of the Forest Protection and Development Plan for the period 2011-2020 -Decision No.1216/2012/QĐ-TTg : National strategy for environment protection until2020, vision to 2030 - Resolution No.10/NQ-CP: on promulgating the action plan of the Government on implementation of national strategy on development of socio-economic in 2011-2020 and orientation and task for the state development in 5 years of 2011-2015</p> <p>&lt;Natural Environment &gt; -Decree No.65/2010/ND-CP: Detailing and guiding a number articles of Law on Biodiversity -Decision No. 1250/2013/QĐ-TTg: Approving National Strategy of biodiversity to 2020, vision to 2030</p> <p>&lt;Disaster Prevention&gt; -Law No.33/2013/QH13: Law on Disaster Prevention and Management</p>
4) Direction of Japanese ODA	<p>&lt;Forest&gt; -dispatching JICA experts and grant for equip of reforestation (central highland)</p> <p>&lt;Natural Environment &gt; -no specific action</p> <p>&lt;Disaster Prevention&gt; -six emergency</p>	<p>&lt;Forest&gt; -grant for equip of reforestation (north west) -T/A for reforestation in acid sulfate soil in Me Kong Delta</p> <p>&lt;Natural Environment&gt; -no specific action</p> <p>&lt;Disaster Prevention&gt;</p>	<p>&lt;Forest&gt; -M/P and grant project for reforestation in coastal area -T/A for CD of natural forest restoration</p> <p>&lt;Natural Environment &gt; -no specific action</p> <p>&lt;Disaster Prevention&gt;</p>	<p>&lt;Forest&gt; -promotion of AR-CDM -T/A for sustainable forest management</p> <p>&lt;Natural Environment &gt; -T/A for CD of national park management</p> <p>&lt;Disaster Prevention&gt; -T/A for strengthening disaster prevention</p>	<p>&lt;Forest&gt; -Sector Project Loan (SPL) for protection forest management -T/A for sustainable forest management -promotion of REDD+</p> <p>&lt;Natural Environment&gt; -T/A for establishing national biodiversity DB</p> <p>&lt;Disaster Prevention&gt; -development study on</p>

Item	5th 5-year Plan (1991-1995)	6th 5-year Plan (1996-2000)	7th 5-year Plan (2001-2005)	8th 5-year Plan (2006-2010)	9th 5-year Plan (2011-2015)
	grant aid projects in total from 1978- 1989	-one emergency grant aid project in1997	Prevention> -no specific action	capacity in the central region (TT-Hue, Quang Nam, and Quang Ngay provinces) <Phase-1> -grass-root project focusing on community based disaster prevention	control measures against natural disaster and climate change by using satellite information -T/A for strengthening disaster prevention capacity In the central region (HNI city, TT-Hue, Nghe An, Ha Tinh, Quang Binh, provinces) <Phase-2>
5)Focal Point of ODA	<Forest> -C/P assistance by JICA experts and project preparation -initiation of assistance for reforestation  <Natural Environment > -none  <Disaster Prevention> -rescuer and restoration caused by typhoon	<Forest> -Area expansion of assistance for reforestation (north west & Me Kong delta)  <Natural Environment> -none  <Disaster Prevention> restoration caused by typhoon	<Forest> -plan preparation and implementation for forest management and coastal disaster prevention  <Natural Environment > -none  <Disaster Prevention> -none	<Forest> -implementation of sustainable forest management and community forestry  <Natural Environment > -assistance based on ODA needs  <Disaster Prevention> -academic and technical approach considering disaster prevention cycle	<Forest> -implementation of large scale loan project -mitigation and adaptation against global warming  <Natural Environment > -biodiversity protection  <Disaster Prevention> -academic and technical approach considering disaster prevention cycle -CD both central and regional institutional capacity

(Source: Prepared by the Study Team)

## 13.2 Historical Review of Target Sector Development

The target sector development and the Japanese ODA including major ODA projects is reviewed from the 5<sup>th</sup> to the 9<sup>th</sup> SEDP. The forest sector has the longest history of the Japanese ODA, and actual projects are varies of grant, T/A, loan, and others such as grass root projects and JOCV. However, the natural environment sector is two T/A projects only. The disaster prevention sector is rather new among the Japanese ODA, though GOJ conducted many emergency assistance grant projects so far. Actually, one development study and one T/A project have been implemented.

### 13.2.1 Forest

(1) In the 5th 5-year Plan (1991-1995)

In Vietnam, nearly 25 million people rely on the forest and its products for their economic livelihood, and the forest plays a functional role in environmental conservation, river basin and coastal area protection, soil and water reservation, and mitigation of global warming. The forest has played an important roles in Vietnam. However, the forest area had decreased rapidly due to

illegal and uncontrolled logging, and poor forest management especially during the Vietnam War. The outcome was forest coverage ratio from 43.7% in 1943 and to 27.2% in 1990.

Prior to the actions mentioned above, the Ministry of Forestry (MOF) at that time, prepared the Tropical Forest Action Plan (TFAP) during 1988-1991 receiving assistance from the United Nation Food and Agriculture Organization (FAO). In order to rectify this situation, GOV prepared and implemented the Program No. 327 of the National Reforestation Plan 1993-2000 in 1992 with the aim of a) Promotion of reforestation in bare land, development of forest functions such as environment, biodiversity protection, sustainable timber production, and more than 43% forest coverage, b) Log production for the wood product industry, and c) Job creation, income increase, and poverty alleviation of local people.

During this period, MOF, which was merged into the Ministry of Agriculture and Regional Development (MARD) in 1995, conducted a reforestation project in 20 provinces using granted fund by the World Food Program in 1992-1998 (PAM 4304: 33.0 mil US\$), and a social forestry development project (SFDP) in Song La and Lai Chau provinces in 1993-2004 funded by KfW (10.3 mil EUR). The GOJ dispatched the first of two JICA short-term experts in 1991 for implementing a preparatory study in order to start ODA projects of the forest sector. Based on this study results, GOJ dispatched the first of JICA long-term expert to MOF at that time, and in parallel, conducted a grant project of Improvement of Equipment for Reforestation in Central Highland in 1992. Moreover, the FAO Regional Project, the Strengthening Re-afforestation Programmes in Asia (STRAP), using the Japanese trust fund was carried out in 1996, as well as the bilateral assistance projects. Therefore, GOJ had consistently supported GOV from the initial stage of forest area increase. It means that a strategic combination of JICA experts and assistance projects has resulted in good synergy effects and has achieved strong impacts to the forest sector of GOV. This must be a specific and remarkable good practice of the Japanese ODA in the forest sector.

**Table 13-2: Major Project List of Japanese ODA in Forest Sector from JFY1991 to 1995**

Project Title	Type & Year (JFY)	C/P & Location	Objectives & Targets	Note
1. The Project for Improvement of Equipment for Reforestation in Central Highland	-Grant -1992	-Ministry of Forestry (MOF) -Dak Lak prov.	1)Basic Design (B/D) & Construction & Supervision (C/S) 2)Equip, vehicle, and processing machine procurement for reforestation	-

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision  
(Source: JICA Study Team)

(2) In the 6th 5-year Plan (1996-2000)

Succeeding to the Program No. 327, GOV established the Program No.661 in 1997 to accelerate reforestation in Vietnam, and a 5 million ha National Reforestation Plan (5MHRP) that targeted 3 million ha for new reforestation, 1 million ha for natural reproduction, and 1 million ha for horticulture and wood craft during 1998-2010.

Responding to the strong commitment of GOV, GOJ provided grant assistance for reforestation equipment in the North-western area of Vietnam in 1995-1996 to support the program No. 327 and the 5MHRP mentioned above. In addition, JICA conducted a T/A project the “Afforestation Technology Development Project on Acid Sulphate Soil in the Me Kong Delta”. This was the first direct JICA T/A project in Vietnam. In parallel, other donors also started assistance projects to help GOV implement the following projects.

- 1) Afforestation Project in Lang Son and Bac Gian provinces (KfW1), 1995-2000, Grant: funded by KfW (5.7 mil US\$)
- 2) Mountain Rural Development Program (MRDP), 1996-2002, Grant: funded by Swedish (18.1 mil US\$)
- 3) Reforestation Project in 14 provinces (PAM 5322), 1997-2002, Grant: funded by World Food Program (18.4 mil US\$)
- 4) Afforestation Project (KfW2), 1997-2002, Grant: funded by KfW (9.3 mil US\$)
- 5) Afforestation Project in Bac Giang, Quan Ninh, and Lang Son provinces (KfW3: Phase-1), 1999-2005, Grant: funded by KfW (6.0 mil US\$)
- 6) Forestry Sector Project in Thanh Hoa, Quang Tri, Phu Yen, and Gia Lai provinces, 1997-2005, Loan: funded by ADB (24.5 mil US\$)
- 7) Forestry Protection and Rural Development Project in Thanh Hoa, Quang Tri, Lam Dong, Kon Tum, and Binh Phuc provinces, 1998-2006, Loan: funded by WB (US\$ 22.0 mil)

**Table 13-3: Major Project List of Japanese ODA in Forest Sector from JFY1996 to 2000**

Project Title	Type & Year (JFY)	C/P & Location	Objectives & Targets	Note
2. The Project for Improvement of Equipment for Reforestation in North West Vietnam	-Grant -1995-1996	-Ministry of Agriculture and Rural Development (MARD) -Dien Bien prov.	1)Basic Design (B/D) & Construction & Supervision (C/S) 2)Equip and vehicle procurement for reforestation	-
3. The Project for Afforestation Technology Development Project on Acid Sulphate Soil in the Me Kong Delta	-T/A -1997-2002	-Long An prov.	1)CD on leaching and reforestation technology in acid sulphate soil 2)Technical manual & guideline	-

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision  
(Source: JICA Study Team)

(3) In the 7th 5-year Plan (2001-2005)

The 7th 5-year Plan put priority on protecting and developing the forest, and promoting the implementation of a 5 million ha reforestation program. Thus, the most important event in this period was the revision of the Law on Forest Protection and Development (No. 29/2004/QH11) and preparation of a by-law related to forest management (Decree No.23/2006/ND-CP). This revised law emphasized a) Vesting use right of protection forest to protection forest management offices, economic bodies, people's army, households, and individuals by the government, and b) More than 5,000 ha of river basin protection forest, and/or less than 5,000ha of important river basin and coastal protection forest must be managed by the Protection Forest Management Office.

In view of the firm and stable institutional set up of the Vietnamese forest sector, GOJ expressed leading support for Vietnam by implementing a series of grant projects such as the "Project for Afforestation on the Coastal Sandy Area (PACSA) in the Southern Central Vietnam (Phase-1)" in 2000-2005, two JICA direct T/A projects for a) the "Forest Fire Rehabilitation Project in Ca Mau Province" in JFY2003-2006, and for b) the "Project for Rehabilitation of Natural Forest in Degraded Watershed Area in the North of Vietnam" in JFY2003-2008, a development study the "Villager Support for Sustainable Forest Management on Central Highland" in 2001-2002, and a loan project the "Rural Infrastructure Development and Living Standard Improvement Project III (Sector Project Loan)/Afforestation Sector" in 2003-2008.

Other donors also continued assistance projects to support GOV and implemented the following projects.

- 1) Afforestation Project in Bac Giang, Quan Ninh, and Lang Son provinces (KfW3: Phase-2), 2002-2008, Grant: funded by KfW (3.0 mil US\$)
- 2) Afforestation Project in Thanh Hoa and Nghe An provinces (KfW4), 2002-2008, Grant: funded by KfW (9.4 mil US\$)
- 3) Afforestation Project in Quang Nam, Quang Ngai, Binh Dinh, and Phu Yen provinces (KfW6: Phase-2), 2005-2013, Grant: funded by KfW (112.3 mil US\$)
- 4) Coastal Wetland Protection and Development Project in Tra Vinh, Soc Trang, Bac Lieu, and Ca Mau provinces, 2000-2007, Loan: funded by WB (56.0 mil US\$)
- 5) Forestry Sector Development Project in TT-Hue, Quang Nam, Quang Ngai, and Binh Dinh provinces, 2005-2011, Loan: funded by WB (67.1 mil US\$)

**Table 13-4: Major Project List of Japanese ODA in Forest Sector from JFY2001 to 2005**

Project Title	Type & Year (JFY)	C/P & Location	Objectives & Targets	Note
4. The Project for Afforestation on the Coastal Sandy Area (PACSA) in the Southern Central Vietnam (Phase-1)	-Grant -2000-2004	-DARD of Quang Nam and Phu Yen prov.	1)B/D & C/S 2)Protection of coastal erosion and sand shifting	-
5. The Study on the Villager Support for Sustainable Forest Management on Central Highland	-Dev't Study -2001-2002	-MARD -DARD of Kon Tum prov.	1)M/P preparation and formulation of T/A project	-
6. The Rural Infrastructure Development and Living Standard Improvement Project III (Sector Project Loan )/ Afforestation Sector	-Loan -2002-2008	-DARD of Quang Tri, TT-Hue, Quang Nam, Quang Ngai, Phu Yen prov.	1)Detailed Design (D/D) & C/S 2)Forest management and rural development 3)Community forestry and local people participation	-
7. The Project for Rehabilitation of Natural Forest in Degraded Watershed Area in the North of Vietnam	-T/A -2003-2008	-DARD of Hoa Binh prov. -Protection Forest Management Board	1)CD on reforestation and natural regeneration 2)Community forestry 3)Dissemination and participation of local people	-
8. The Forest Fire Rehabilitation Project	- T/A -2003-2006	-DARD of Ca Mau prov.	1)CD on reforestation and community forestry 2)Dissemination and participation of local people	-
9. The Development Study on Capacity Building for Preparing Feasibility Studies and Implementation Plans for Afforestation Projects in Vietnam (FICAB)	-Dev't Study -2004-2005	-DARD of Thai Nguyen, Son La, Quang Nam, Lam Dong, and Long An prov.	1)Formulation of training package 2)Implementation of technical training	-

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision (Source: JICA Study Team)

(4) In the 8th 5-year Plan (2006-2010)

Due the great effort expended by GOV, the actual forest coverage ratio improved greatly from 27% in 1990 to 39% (=12.7 mil ha) in 2006. It empowered GOV to strengthen forest management and enhance reforestation. Thus, GOV promulgated the 8th 5-year Plan that contained the following priority targets and goals;

- 1) Renovation of forestry sector by integrating of forest protection and production function,
- 2) Reduction of direct forest management by the government,
- 3) Forest coverage must be 43% by 2010, and export promotion of pulp and ply wood,
- 4) Implementation of 5 mil ha multipurpose reforestation, and
- 5) Recognizing the right to use forest land by residents.

In order to achieve the 8th 5-year Plan, GOV prepared the National Forestry Development Strategy 2006-2020 (Decision No.18/2007/QD-TTg) in 2007, which contained the following long term directions and objectives, and targets in detail.

#### I. Long-term Direction

- 1) Sustainable management and use of forest land 16.24 mil ha,
- 2) Forest coverage to be 42-43% in 2010, and 47% in 2020,
- 3) Participation of other sectors and social organizations in forest development
- 4) Increase socio-economic development, environmental protection, biodiversity, and environmental services through forest development,
- 5) Poverty alleviation and livelihood improvement in mountainous and regional areas through forest development, and
- 6) Contribution to national defense and security.

#### II. Objectives and Targets

- 1) Economic term:
  - forest product amount=4-5%/yr, -craft plantation=2.3-2.4 mil ha, -natural forest=4.0 mil ha,
  - sparsely forest=200 mil trees, -log product =20 mil m3/yr, -export of timber =3.2 bil US\$,
  - export of special product =0.8 bil US\$, -environmental services=9.0 bil US\$,
  - sustainable forest management accreditation in 30% of production forest land
- 2) Social term:
  - job creation for 2 mil people, -income generation and poverty alleviation,
  - vesting forest land use right to new owners by 2010,
  - 50% increase of vocational training of minorities, poverty households, and women
- 3) Environmental term:
  - 43% forest coverage by 2010, -management and use of protection forest 5.7 mil ha,
  - special use forest 2.3 mil ha, -reduction of illegal logging,
  - payment for environmental services from 2006,
  - reinvestment in forest management and protection

Besides, establishment of the Vietnam Forest Protection and Development Fund (VNFF) in 2008 (Decision No.114/2008/QD-BNN) should be noted, as this is related to mobiles, receives, obligated contributions, financial assistances and source, appraisals, and distributing and receiving funds for programs and projects.

Based on an official request from GOV, GOJ supported Vietnam by implementing two grant aid projects a) the “Project for Afforestation on the Coastal Sandy Area in the Southern Central

Vietnam (Phase-2) (PASCA-2)” in 2010-2015, and b) the “Project on Community Development of Devastated Land by Forest Fire in Ca Mau Province” in 2010-2015, and two T/A projects c) the “Project on the Villager Support for Sustainable Forest Management in Central Highland Region” in JFY2005-2008, and d) the study on the “Capacity Development for AR-CDM Promotion in the Socialist Republic of Vietnam” in JFY2006-2009.

Other donors provided the following assistance projects to support GOV.

- 1) Afforestation Project in Bac Giang, Quan Ninh, and Lang Son provinces (KfW3: Phase-3), 2007-2013, Grant: funded by KfW (4.0 mil US\$)
- 2) Afforestation Project in Hoa Binh and Son La provinces (KfW7), 2006-2014, Loan: funded by KfW (17.2 mil US\$)
- 3) Forests for Livelihood Improvement in the Central Highlands Sector Project in Kon Tum, Gia Lai, Phu Yen, Dak Lak, Dak Nong, and Lam Dong provinces, 2007-2014, Loan: funded by ADB (91.3 mil US\$)

**Table 13-5: Major Project List of Japanese ODA in Forest Sector from JFY2006 to 2010**

Project Title	Type & Year (JFY)	C/P & Location	Objectives & Targets	Note
10. The Project on the Villager Support for Sustainable Forest Management in Central Highland Region	-T/A -2005-2008	-DARD of Kon Tum prov.	1)CD on reforestation and community forestry 2)Dissemination and participation of local people	-
11. The Study on Capacity Development for AR-CDM Promotion in Vietnam	- Dev't Study -2006-2009	-MARD -DARD and Protection Forest Management Board	1)CD on AR-CDM project formulation 2)Identification of priority AR-CDM project 3)Pilot project in Hoa Binh prov.	-
12. The Study on Potential Forests and Land related to Climate Change and Forest	-Dev't Study -2009-2010	-MARD	1)Identification of potential forest areas for absorption and reduction of CO2	-

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision  
(Source: JICA Study Team)

(5) In the 9th 5-year Plan (2011-2015)

The 9th 5-year Plan emphasized that accelerating the forest economy toward forest protection and development together with renovation in agricultural and forestry farm management, while ensuring a paddy field area of 3,812 million ha, and achieving a forest coverage ratio 42 to 43% by 2015.

Considering GOV's policy and direction for the forest sector, GOJ has provided support for Vietnam by continuing the grant project a) the “Project for Afforestation on the Coastal Sandy



Area in the Southern Central Vietnam (Phase-2) (PASCA-2)” from 2011, and two T/A projects b) the “Afforestation Planning and Implementation Capacity Strengthening Project (FICAB-2)” in JFY2010-2013, and c) the “Project for Sustainable Forest Management in the North-western Watershed Areas (SUSFORM-NOW)” in JFY2010-2015. Besides, a new loan project of the Protection Forests Restoration and Sustainable Management Project in 2013-2021 is under implementation by JICA.

**Table 13-6: Major Project List of Japanese ODA in Forest Sector from JFY2011 to 2013**

Project Title	Type & Year (JFY)	C/P & Location	Objectives & Targets	Note
13. The Project on Community Development of Devastated Land by Forest Fire in Ca Mau province	-Grant -2010-2015	-DARD of Ca Mau prov.	1)B/D & C/S 2)Social infrastructure construction such as rural roads, schools, and public facilities	-
14. The Project for Afforestation on the Coastal Sandy Area in the Southern Central Vietnam (Phase-2) (PASCA-2)	-Grant -2010-2015	-DARD of Quang Nam and Quang Ngai prov.	1)B/D & C/S 2)Protection of coastal erosion and sand shifting	-
15. The Afforestation Planning and Implementation Capacity Strengthening Project (FICAB-2)	-T/A -2010-2013	-MARD	1)CD on reforestation planning and implementation 2)Dissemination and participation of local people	-
16. The Project for Sustainable Forest Management in the North-western Watershed Areas (SUSFORM-NOW)	-T/A -2010-2015	-DARD of Dien Bien prov.	1)CD on sustainable forest management and community forestry 2)Dissemination and participation of local people	-
17. The REDD+ Project in Dien Bien (Planning Phase – Dien Bien REDD+ Pilot Project)	-T/A -2012-2013	-DARD of Dien Bien prov.	1)Implementation of REDD+ activities based on the results of the Study on Potential Forests and Land related to Climate Change and Fores	-
18. The Protection Forest Reforestation and Sustainable Management Project	-Loan -2013-2021	-DARD of Thanh Hoa, Nghe An, Ha Tinh, Quang Binh, Quang Tri, TT-Hue, Quang Ngai, Binh Dinh, Phu Yen, Ninh Thuan, Binh Thuan prov.	1)Forest development and improvement including silviculture infrastructure and forest fire prevention 2)Poverty reduction including livelihood improvement and rural infrastructure	on-going

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision  
(Source: JICA Study Team)

#### (6) Recent Trend and Approach of Major Donors in Forest and Natural Environment Sector

Recent trend of donor assistance to the Vietnamese forest and natural environment sector has

decreased in numbers of ODA projects, and also changed its component from afforestation and reforestation to sustainable forest management, environmental services, forest product processing, dissemination, and research and development (R&D) in line with rural development and living standard improvement. Although the GOV is promoting private investment including the Foreign Direct Investment (FDI), the total investment amount is under low level mainly due to high risk in forest development such as taking fairly long time for economic return. The donor's policy to the forest and natural environment sector assistance is summarized in Table 13-7. At first, other donors had focused on poverty alleviation, but recently most donors put priority on multi functions of forest including climate change as well as that of GOJ.

**Table 13-7: Assistance Policy and Direction of Major Donors in Forest and Natural Environment Sectors**

<b>Donor</b>	<b>Basic Policy</b>	<b>Actual Direction</b>
1) ADB	1) Activation of protection and production activity 2) Participation of local people 3) Sustainable natural resource management to promote poverty alleviation and sustainable economic development	a) Sustainable and scientific based planning b) Strengthening environmental service function c) Participation of local people on planning and implementation of forest development
2) EU	1) Poverty alleviation, sustainable forest management, and conservation of biodiversity	a) Social forestry b) Rural development in remote areas c) Implementation of nature conservation projects
3) GOJ/JICA	1) Support in accordance with the Vietnamese policy and strategy 2) Maximization of multi-functions of forest 3) Improvement of benefit of local people	a) Supporting policy preparation, forest production, compatible between sustainable forest management and local people, biodiversity, and climate change b) Prioritizing in North-western, Central highland, and Central coast areas c) Synergy effect with regional development program and disaster prevention program
4) GTZ	1) Policy on forest and natural environment 2) Natural resource management and protection	a) Sustainable forest management and marketing forest products b) Sustainable management of natural resources and biodiversity protection c) Climate change and coastal ecosystem protection
5) KfW	1) Sustainable natural resource management and protection	a) Targeting production forest for income generation b) Forest restoration and management improvement through investment to local people c) Shifting from rapid growth tree species to domestic ones urging natural regeneration
6) WB	1) Use forest potential for poverty alleviation 2) Economically sustainable forest development 3) Conservation of global values of forest	a) Focusing rural development b) Community forestry c) Preservation of forest with high values d) Biodiversity protection for green corridor

(Source: Study report of the Study on Capacity Development for AR-CDM Promotion in Vietnam (2009) JICA, modified by the JICA Study Team)

### 13.2.2 Natural Environment

(1) From the 5th 5-year Plan (1991-1995) to the 7th 5-year Plan (2001-2005)

In Vietnam, much of the policy and strategies on the natural environment sector such as ecosystem and biodiversity protection, national park and nature conservation area management have been prepared and operated in conjunction with the forest sector, even in recent years. Therefore, sector specific policy and action have not been conducted in this period except for the measures related to the international treaties, such as the Biodiversity Action Plan (Decision No.845/1995/QD-TTg) in response to the UN Convention on Biodiversity (CBD), and the National Direction and Plan for Protection of Wetland (Decree No. 109/2003/ND-CP) in response to the Ramsar Convention. In fact, the sector related activities have been rather small in scale and area, and almost limited in academic purpose of scientists and researchers concerning to universities and research institutions.

(2) From the 8th 5-year Plan (2006-2010) to the 9th 5-year Plan (2011-2015)

During this period, GOV conducted the following notable actions in the natural environment sector.

1) Decision No. 79/2007/QD-TTg: Approving the national action plan on biodiversity up to 2010 and orientations up to 2020 for implementation of the conservation on biological diversity and the Cartagena Protocol on Bio-safety.

Key issues are:

- Restoring 50% degraded upstream forest area
- Achieving 1.2 mil ha of wetland and sea conservation of international and national importance
- Recovering 200,000 ha of wetland forest
- Testing 100% of imported species and genes
- Recognizing 3 national conservation zones as the international heritage and 5 national conservation zones as the ASEAN heritage, 5 wetland zones that meet the requirements of the Ramsar Convention
- Strengthening state management capacity on biodiversity protection and biological safety

2) Law No.20/2008/QH12: Law on Biodiversity

Key issues are:

- GOV unifies the state management of biodiversity protection, and MONRE is the charring agency for biodiversity protection.

- On-site conservation is the main principle.
- It is prohibited to hunt, kill, consume, transport, and market those on the list of endangered, precious, and rare species.
- List of endangered, precious, and rare species is revised every 3 years

3) Decree No. 651/2010/ND-CP: Detailing and guiding a number of articles of the Law on Biodiversity

Key issues are:

- Master Plan of Biodiversity Protection is prepared by MONRE at the national level, by PPC at the provincial level, and by the ministries at the ministerial level.
- PPC manages conservation zones located in the province's territory, MARD manages national conservation zones of inland and on-sea special use forests locating in at least 2 provinces, and MONRE manages the national conservation zone for wetland, limestone mountain, unused land and mixed ecological region with territory in at least 2 provinces.
- Priority species are inventoried every 5 years.
- PPC provides MONRE with the provincial database of genetic information and source, MONRE publicizes the national database of genetic information and source, GOV unifies the state management of biodiversity protection, and MONRE is the responsible agency for biodiversity protection.

4) Decision No. 1250/2013/QĐ-TTg: Approving National Strategy of Biodiversity to 2020, vision to 2030

Key issues are:

a) By 2020:

- Area of inland natural conservation = 9% of total national area; Area of marine conservation = 0.24% of sea area; Forest coverage ratio = 45%; Area of primitive forest = 0.57 mil ha; Area of mangrove forest, sea grass beds, coral reefs = current area; Rehabilitation ratio of degraded natural ecosystem area = 15% of total area; International recognition = 10 Ramsar sites, 10 biosphere reserves, 10 ASEAN heritage gardens
- Improving the endangered, rare and priority species in both quantity and quality
- Inventorying, preserving, and conserving the genetic resources of native, endangered, and rare species

b) By 2030:

- Rehabilitation ratio of degraded natural ecosystem = 25%

Although GOV has prepared successive concrete policies and strategies in the natural

environment sector, actual assistance projects by donors seems do not appear to be increasing including the Japanese ODA. During this period, only two T/A projects, namely a) “The Project for Strengthening Community-based Management Capacity of Bidoup-Nui Ba National Park” in JFY2009-2013, and b) “The Project for Development of National Biodiversity Database (DB) System” in 2011-2015, have been implemented by GOJ.

**Table 13-8: Major Project List of Japanese ODA in Natural Environment Sector from JFY2011 to 2013**

Project Title	Type & Year (JFY)	C/P & Location	Objectives & Targets	Note
1. The Project for Strengthening Community-based Management Capacity of Bidoup-Nui Ba National Park	-T/A -2009-2013	- Bidoup-Nui Ba National Park Management Board	1) Community based eco tourism trial development 2) Dissemination of environmental friendly livelihood improvement activities 3) Development of community management model for sustainability	-on-going in 2013
2. The Project for Development of National Biodiversity Database System	-T/A -2011-2015	-VEA/MONRE -Nam Dinh prov.	1) Establishment of National Biodiversity Database System (NBDS) 2) Pilot NBDS development in Nam Dinh prov. 3) CD on NBDS operation and management	-on-going in 2013

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision  
(Source: JICA Study Team)

### (3) Recent Trend and Approach of Major Donors in Natural Environment Sector

This is described in Chapter 13.2.1 Forest (6) Recent Trend and Approach of Major Donors in Forest and Natural Environment Sector.

#### 13.2.3 Disaster Prevention

##### (1) From the 5th 5-year Plan (1991-1995) to the 7th 5-year Plan (2001-2005)

Vietnam has suffered from natural disasters such as flood and debris flow mainly due to typhoons and torrential rain during the rainy season. For the majority of the Vietnamese people, seasonal and/or yearly such disasters seemed to be just natural phenomena, to be evacuated during the storm, and not to be prevented by any specific measures. Therefore, conventional community based disaster prevention and/or evacuation activities have been shared and conducted among local communities on a traditional know-how basis. As a result, GOV has tended to put the disaster prevention sector on a lower priority ranking compared to economic development sectors due to the relatively low and intangible public needs of the Vietnamese society.

In view of these circumstances, GOV has inaugurated the Flood Prevention and Storm Control by the President of Vietnam (Order No.9/ 1993/ CTN) in 1993 concerning traditional community based self-defense by the local people. The Standing Committee of the National Assembly revised Order No.9/1993/CTN (Order No. 27/2000/PL-UBTVQH) in 2000 related to state exercises on unified management in flood and storm prevention nationwide, and the Prime Minister's decisions on measures to cope with floods and storms in emergencies. These included a very important long-term vision to protect the life and property of the Vietnamese people that included a) Development of information collection system, b) Development of plans, standards, construction and measures on flood prevention, c) Communication about knowledge and experience, d) Laws and regulations on flood and storms prevention for each region, and e) Strengthening the dike system. In the year of the 7th 5-year Plan (2001-2005), GOV stated its policy on disaster prevention to conduct effective natural disaster protection programs especially comprehensive flood prevention in the Me Kong Delta, and to establish the Centre to minimize the damages caused by natural disaster.

Major donors tended to concentrate their assistance on emergency rescue and restoration after disasters from the viewpoint of human rights. Specific local communities were supported by WB, UNDP, and NGOs. GOJ also conducted 7 emergency grant projects against damages by typhoon from 1978 to 1997.

**Table 13-9: Major Project List of Japanese ODA in Disaster Prevention Sector up to JFY2005**

Project Title	Type & Year (JFY)	C/P & Location	Objectives & Targets	Note
1. The Project on Emergency Assistance for Natural Disaster (Flood and Typhoon)	-Grant -1978-1997	-GOV	1)Goods and equipment for remedial and restoration activities 2)7 grant projects in total	-

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision  
(Source: JICA Study Team)

(4) In the 8th 5-year Plan (2006-2010)

During this period, GOV gradually put high priority on disaster prevention to protect the vulnerability of densely populated cities and urban centers, and promulgated the following law and policy.

1) Law No 79/2006/QH-VN: Law on Dike

Key issues are;

- Dike and reservoir system is used to recover from floods and storms, and retention of

floods.

- Flood prevention plans for rivers with dikes are revised every 10 year.
- Detail flood prevention plans are developed by MARD at the national levels, and by PPC at the provincial level.

2) Decision No. 172/2007/QĐ-TTg: On National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020

Key issues are;

- Enhancing the capacity of forecasting disasters, increasing the early warning systems for storms and tropical depression typhoons 72 hours in advance
- Completing the relocation of people living in frequent disaster areas to planned areas
- Training capacity 100% for local staffs in charge of disaster prevention, disseminating knowledge of disaster mitigation to populations living in disaster prone areas
- Collaborating the dike and reservoir system, completing 100% of the storm shelters constructions for boat and ship
- Improving the communication system in fishery

In response to the drastic change in policy and strong commitment of GOV, GOJ just started one T/A a) the “Project for Strengthening Disaster Prevention Capacity in the Central Region (Phase-1) in Quang Nam Province” in 2009-2012, and one development study b) the “Study on Control Measures against Natural Disaster and Climate Change by Using Satellite Information” in 2010-2012. While, other donors have continued to assist conventional community-based disaster prevention projects that addressed specific local needs in equipment and budget.

**Table 13-10: Major Project List of Japanese ODA in Disaster Prevention Sector from JFY2006 to 2010**

Project Title	Type & Year (JFY)	C/P & Location	Objectives & Targets	Note
2. The Project for Strengthening Disaster Prevention Capacity in the Central Region (Phase-1)	-T/A -2009-2012	-DARD in Quang Nam, Quang Ngai, TT-Hue prov.	1)CD on scientific and technical disaster prevention 2)Technical manual & guideline	-

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision  
(Source: JICA Study Team)

(5) In the 9th 5-year Plan (2011-2015)

In the 9th 5-year Plan, GOV emphasized strengthening the coastal dike system, river dike system, pump stations, constructions for salinity prevention and flood discharge, constructions for natural disaster prevention and protection, and storm shelters for ships to reduce damages in

the disaster prevention sector. Although the above was similar to former plans, GOV enacted the following new law on disaster prevention.

1) Law No. 33/2013/QH13: Law on Disaster Prevention

Key issues are;

- Disaster prevention is the responsibility of the State, organizations, and individuals. Organizations and individuals will actively participate in decisions made by the state and support communities.
- Disaster prevention must be integrated into the economic master plan.
- Financial source for disaster prevention comes from the state budget, Disaster Prevention Fund, and the volunteer contribution by individuals and organization.
- Disaster prevention is implemented according to “4 on-site” principles, namely on-site commanding, on-site forces, on-site material, and on-site logistic.

This law stipulates a new approach in disaster prevention from the conventional to a modern and scientific approach in order to tackle future natural disasters and global warming effects based on a natural disaster prevention cycle. Responding to a strong request by GOV, a new T/A the #Project for Strengthening Disaster Prevention Capacity in the Central Region (Phase-2)” is under implementation by JICA from April in 2013.

**Table 13-11: Major Project List of Japanese ODA in Disaster Prevention Sector from JFY2011 to 2013**

Project Title	Type & Year (JFY)	C/P & Location	Objectives & Targets	Note
3. The Study on Control Measures against Natural Disaster and Climate Change by Using Satellite Information	-Cooperation Preparatory Study -2010-2011	-MARD	1)Preparatory study for control measures against natural disaster and climate change	-
4. The Project for Strengthening Disaster Prevention Capacity (Phase-2)	-T/A -2013-2016	-DARD in Quang Binh, Ha Tinh, Nghe An, TT-Hue prov.	1)CD on scientific and technical disaster prevention 2)Technical manual & guideline	-on-going in 2013

Note: C/P: Counterpart, T/A: Technical Assistance, CD: Capacity Development, M/P: Master Plan, F/S: Feasibility Study, B/D: Basic Design, C/S: Construction and Supervision  
(Source: JICA Study Team)

(6) Recent Trend and Approach of Major Donors in Natural Environment Sector

The donor’s policy to the disaster prevention sector assistance is summarized in Tale 13-12. Most donors are focusing on the community based disaster prevention providing grant aid projects in flood prone areas. GOJ also has similar objectives, but puts priority on more scientific and technical approach due introducing disaster prevention cycle which consists of a)



emergency response after events, b) preparation to receive assistances, c) rehabilitation of devastated areas, d) planning of measures, e) damage mitigation such as early warning and telecommunication system and preparation of hazard map combined with hard and soft measures, and evacuation system, and f) preparation of self-defense capacity on control and rescuer.

**Table 13-12: Assistance Policy and Direction of Major Donors on Disaster Prevention Sector**

Donor	Basic Policy	Actual Direction
1) AusAID	1) Improvement of community recovery to natural disasters 2) Strengthening stakeholder involvement in disaster prevention activities and responses	a) Implementation of the national Community Based Disaster Risk Management (CBDRM) program b) Support to disaster risk management institutions by the Central Committee for Flood and Storm Control, and the Disaster Management Centre to strengthen stakeholders participation
2) GOJ/JICA	1) Increase adaptation and recovery by community participation considering disaster prevention cycle	a) Assistance for local people with community house and center b) Strengthening disaster prevention capacity on a daily basis such as community participation and livelihood improvement
3) UNDP	1) Reduction of vulnerability by useful planning and resilience of communities taking into account impacts of climate change	a) Strengthening capacities, structures, institutions to make policy, plan, and regulations b) Building up resilience of communities living in recurrent natural disasters c) Improvement of disaster forecasting and alerting activities
4) WB	1) Reduction of vulnerability 2) Increase efficiency of post-disaster recovery.	a) Capacity development for institutions, local governments and communities on policy making, planning, and technical norm building b) Development of civil works, irrigation infrastructure, and rural road systems c) Establishment of risk management information system d) Enhancement of livelihood of poor households, and strengthening resistant capacity of farmers

(Source: JICA Study Team)

### 13.3 Impacts and Contribution of the Japanese ODA

Impacts and contribution of the Japanese ODA in forest, natural environment, and disaster prevention for GOV are described in this Chapter including general existing conditions of the target sectors in Vietnam.

#### 13.3.1 Forest and Natural Environment

##### (1) General Conditions

About 25 million Vietnamese people live in or near forests and depend on the forest resources. The forest cover in Vietnam decreased until 1990 and then has increased since then mainly due

to afforestation and forest protection effort by GOV. Although the forest area is increasing, the quality of the forests is still poor and has not progressed to an approved quality level. The present ratio of forest area per capita in Vietnam is about 0.15 ha/person, which is very low compared to the average ratio of 0.37 ha/person in Southeast Asian countries, and 0.63 ha/person worldwide. Pursuant to the Prime Minister Decision No. 1267/QD-BNN-KL dated 05/5/2009, Vietnam had a forest area of 13.1 million ha in 2008, comprising the 10.3 million ha of natural forest (78.6%) and 2.8 million ha of plantation forest (21.4%). The ratio of national forest cover was 38.7 %.

Forests are classified into three types, namely; special-use, protection, and production forests. In 2008, Vietnam had 2.1 million ha of special-use forests (15.7%), 4.7 million ha of protection forests (36.1%), and 6.2 million ha of production forests (47.3%). Special-use forests are divided into (a) national parks, (b) natural reserves and flora and fauna habitat reserves, and (c) historical, cultural and environmental relics or landscape protected area. Protection forests are developed to protect watersheds, prevent soil erosion, and mitigate natural disasters. The major purpose of production forests is to supply timber and non-timber forest products (NTFPs), however, they also provide environmental protection.

**Table 13-13: Area by Forest Types in Vietnam in 2013**

Forest Type	Total (1,000ha)	Forest Classification (1,000ha)			Others (1,000ha)
		Special-use	Protection	Production	
Total Forest Area	13,862	2,022	4,675	6,964	200
A. Natural Forest	10,424	1,940	4,023	4,416	45
1. Timber forest	8,492	1,521	3,244	3,695	31
2. Bamboo forest	521	53	140	325	3
3. Mixed forest	649	134	214	295	5
4. Mangrove forest	58	14	41	3	1
5. Rocky mountain forest	704	218	384	98	5
B. Plantation Forest	3,438	82	652	2,548	155
1. Plantation with standing volume	1,874	56	399	1,350	68
2. Plantation without volume	1,136	18	162	887	68
3. Bamboo	81	0	6	75	1
4. Long term tree (Special trees and rubber trees)	274	3	54,	203	13
5. Wetlands trees, alum	73	5	31	33	5

(Source: MARD Decision No. 1739/QD-BNN-KL dated 31/7/2013)

Although, Vietnam had 14.3 million ha of natural forests in 1943, corresponding to 43.7% of the country's land area, the forest area had significantly decreased especially from 1976 to 1990. During this period, about 98,000 ha were contracted annually for logging mainly by state organizations. Other causes of deforestation include, among others the followings.

- a) Conversion of forest land into farm land due to government policy to increase food production,
- b) Devastation by two wars during 1945-1954 and 1961-1975,
- c) Forest fires, and
- d) Illegal logging by individuals and units.

**Table 13-14: Changes in Forest Cover in Vietnam**

Item (1,000ha)	1943	1976	1980	1985	1990	1995	2000	2005	2006	2008	2010	2012
Total forest area	14,300	11,169	10,608	9,892	9,176	9,302	10,916	12,307	12,700	13,117	13,388	13,862
Natural forest	na	11,077	10,016	9,308	8,431	8,253	9,444	10,088	10,410	10,347	10,305	10,424
Planted forest	na	93	422	583	745	1,048	1,471	2,219	2,463	2,770	3,083	3,438
Forest coverage (%)	43.7%	33.7%	32.0%	29.9%	27.2%	28.1%	33.0%	37.0%	38.0%	38.7%	39.5%	39.5%

(Source: Forest Rehabilitation in Vietnam: Histories, realities and future (2006), MARD Minister's)

Note: na= not available

Decision No. 2503/QD-BNN-KL dated 27/8/2007 on Forest status in 2006

MARD Minister's Decision No. 1267/QD-BNN-KL dated 05/5/2009 on Forest status in 2008

MARD Minister's Decision No. 1828/QD-BNN-KL dated 11/8/2011 on Forest status in 2010

MARD Minister's Decision No. 1739/QD-BNN-KL dated 31/7/2013 on Forest status in 2012

Since 1990, the forest area has increased mainly as a result of the government's afforestation efforts, notably 327 and 661 programs. Between 1990 and 2008, the natural forest has increased by about 1.9 million ha through the rehabilitation, while planted forest increased by about 2.0 million ha. Despite of the increase, the quality of the rehabilitated natural forest is still low. It was estimated that the poor quality of the natural forest with a forest stock of less than 80 m<sup>3</sup>/ha occupied up to 80% of the natural forest area. Similarly, forest plantations without standing tree volume occupied about 42% of the total planted forest in 2008.

Regarding the natural environment and biodiversity, the research results reveal that Vietnam has a high ecological diversity with 7 natural distribution areas on the continent, 6 marine biodiversity areas and 4 centers of biodiversity. As a result, Vietnam has a high biodiversity of biological resources and climate. The terrestrial ecosystems include 7 main types, of which the most diversified is the forest ecosystems accounting for about 36% of the natural land area with 14 sub-types of forest. There are 39 types of wetland ecosystems, of which 30 are natural wetlands (including 11 coastal wetlands, 19 inland wetlands) and 9 artificial wetlands. The marine and island ecosystems consist of a 3,300 km long coastline and an exclusive economic zone of about 1 million km<sup>2</sup> with more than 3,000 islands and they are diversified into more than 20 types of ecosystems.

In the terrestrial ecosystems, there are more than 15,986 plant species with 10% endemic species, 310 mammal species, 840 bird species, 260 reptile species, 120 amphibian species, and thousands of invertebrate species. In the wetland ecosystems, there are 1,438 species of algae and 794 species of invertebrates. In the marine ecosystem, there are about 11,000 species of animals and plants. Many Vietnamese biological groups have high numbers of relic species

(more than 100 species of birds, 78 species of mammals). Recently, many new species have been discovered and described. It is of interest to the global community that during a very short period of time from 1992 to 1997, Vietnamese scientists in collaboration with the Vietnam World Wildlife Fund (WWF) have discovered out three new large mammals and three new small mammal species. With the proportion of detected species, Vietnam is ranked globally as the 16th highest in biodiversity.

## (2) Impacts and Contributions

The major impacts and contribution of the Japanese ODA in forest and natural environment sectors are summarized in Table 13-15. The current key tasks of the forest and natural environment sector could be a) Forest Management, b) Reforestation, and c) National Park Management and Biodiversity (BD) Protection. The impacts and contribution of the Japanese ODA for each task are described below.

### 1) Forest Management

Notable projects implemented in forest management were a) the integrated forest management projects such as the “Sector Loan Project” that covered agriculture and regional development, and b) the JICA T/A projects combined with technology transfer, community forestry, and restoration waste land by acid sulphate soil and devastated land by forest fire, under the JICA’s natural environment ODA program. It should be noted that the assistance of forest sector was the first step of the Japanese ODA and this has lead assistances of other donors. Moreover, the assistance of forest sector also promoted by-lateral cooperation of the Japanese ODA and activities of other sectors. Thus, these series of the Japanese ODA projects have had a very high impact in the forest sector in Vietnam not only in forestry and reforestation but also in regional infrastructure, community development, and income generation. In contrast, there were few initiatives on policy, legal, and institutional aspects mainly due to the lack of a clear ODA programs describing long-term target and/or criteria for ODA continuation (target forest coverage ratio and poverty ratio) and proper coordinating capability among donor agencies. The lack of an in-depth policy dialogue and weak leadership in donor coordination by GOJ could be pointed out despite the fact that the Japanese ODA has been strictly conducted in accordance with the policy and direction of GOV (mainly MARD). Thus, further mutual discussion on real ODA needs for T/A project with GOV will be required.

### 2) Reforestation

Many grant aid reforestation projects have been conducted by not only GOJ but also by other donors as well. Currently, the projects have changed from single purpose reforestation projects to multi-purpose forest management projects that include components to generate income and build rural infrastructure. Therefore, the impact itself should be high in the early stages, but it would not as high in recent years.

### 3) National Park Management and Biodiversity (BD) Protection

GOJ conducted two projects the “Project for Strengthening Community-based Management Capacity of Bidoup-Nui Ba National Park (JFY2009-2013)” with a training program in Japan, and the “Project for Development of National Biodiversity Database System (JFY2011-2015)” which mainly involved introducing the Information Technology (IT) for DB preparation. Although the numbers of ODA projects are few, it could have effective impacts to GOV because of appropriate selection of project themes and target areas.

**Table 13-15: Impacts and Contribution of the Japanese ODA on Forest and Natural Environment Sectors**

Key Tasks	Effects and Impacts of Japanese ODA	Contribution
(1) Forest Management	<ul style="list-style-type: none"> <li>1) Integrated forest management project in line with the Sector Loan Project widely covering agriculture and regional development</li> <li>2) JICA T/A projects have been conducted for CD combined with technology transfer, community forestry, and restoration waste land by acid sulphate soil and devastated land by forest fire</li> <li>3) Very few initiatives on policy, legal, and institutional aspects mainly due to lack of clear target and/or criteria in ODA programs and proper coordinating capability among donor agencies</li> <li>4) There could be some gaps on ODA needs of T/A project between MARD and JICA.</li> </ul>	<ul style="list-style-type: none"> <li>1) Very high impact to the forest sector not only forestry and reforestation but also regional infrastructure, community development, and income generation</li> <li>2) ODA has been conducted in accordance with clear policy and direction of GOV (MARD), but little policy dialogue and donor coordination leadership because of it</li> <li>3) Mostly targeting protection forest land, not forest production land</li> <li>4) Further discussion on ODA needs of T/A project with GOV (mainly MARD) will be required.</li> </ul>
(2) Reforestation	<ul style="list-style-type: none"> <li>1) Reforestation projects have been formulated by M/P study in the North-west and South-central regions</li> <li>2) Grant projects had functional roles for initial activities under the difficult project implementation conditions in Vietnam</li> <li>3) Not targeting forest management but rather single purpose projects. So, few integration with forest management, low incentives to community, and weak sustainability</li> <li>4) Hard to give incentives for local people during implementation and to keep sustainability after the grant projects</li> </ul>	<ul style="list-style-type: none"> <li>1) Good contribution and impact to the forest sector because of clear target and goal of GOV such as 5mil ha reforestation and 43% of forest coverage</li> <li>2) Grant projects has effective impacts to expand project areas though it usually had pilot-size scale.</li> <li>3) Good contribution and impact to R&amp;D by cooperation with academic approach (SATREPS) focusing on bare land reforestation by <i>Jatropha</i> for bio-fuel production</li> </ul>
(3) National Park Management and Biodiversity (BD) Protection	<ul style="list-style-type: none"> <li>1) Only one project “The Project for Strengthening Community-based Management Capacity of Bidoup-Nui Ba National Park (JFY2009-2013)” with training in Japan has been conducted for national park management.</li> <li>2) “The Project for Development of National Biodiversity Database System (2011-2015)” is targeting mainly to IT introduction for DB preparation.</li> </ul>	<ul style="list-style-type: none"> <li>1) In this sector, the biodiversity protection itself should be responsible for GOV and GOJ should assist to strengthen C/P and organizational capacity of biodiversity protection.</li> <li>2) Thus, it should be said that there could be effective impact even though few ODA projects have been implemented.</li> </ul>

(Source: JICA Study Team)

### 13.3.2 Disaster Prevention

#### (1) General Conditions

In Vietnam, most common natural disasters are flood including debris disaster and tropical cyclones (typhoons), and a few earthquakes and volcanic incidents as shown in Table 13-16.

**Table 13-16: Number of Affected People by Natural Disaster in Vietnam from 1991 to 2012**

Type Year	Flood			Storm		Land Slide	Drought
	General Flood	Flush Flood	Storm Surge/ Coastal Flood	Tropical Cyclone	Local Storm		
1991	295,614	0	0	456,697	20,908	0	0
1992	51,698	0	58,000	79,358	0	0	0
1993	0	15,000	0	36,741	2,016	0	0
1994	382,000	0	0	11,000	0	1,034	0
1995	400,000	0	0	23,051	0	0	0
1996	375,000	0	0	667,091	0	0	0
1997	0	0	0	1,081,177	0	0	3,000,000
1998	32,505	0	0	2,524,737	500	0	3,000,000
1999	2,163,694	115,175	3,504,412	0	0	0	1,400,000
2000	5,025,007	0	0	6,033	8,501	39	0
2001	1,570,445	35,006	3,000	200,639	0	0	0
2002	1,431,816	0	0	0	1,800	0	1,300,000
2003	195,049	0	221,774	5,018	0	0	0
2004	35,000	18	0	500,905	0	0	0
2005	58,593	33,800	0	361,160	6,500	0	410,000
2006	50,020	2,100	0	3,296,285	1,005	0	0
2007	396,042	0	566,130	685,430	0	0	0
2008	620,000	12,504	0	156,649	0	0	0
2009	740,000	0	0	2,977,460	0	1	0
2010	810,008	679,825	0	34,600	0	0	0
2011	1,361,584	0	0	0	63	0	0
2012	17,540	0	0	338,972	0	0	0
<b>Total</b>	<b>16,011,615</b>	<b>893,428</b>	<b>4,353,316</b>	<b>13,443,003</b>	<b>41,293</b>	<b>1,074</b>	<b>9,110,000</b>

(Source: "EM-DAT: The OFDA/CRED International Disaster Database: <http://www.emdat.be/disaster-list>") (download: September 2013)

#### (2) Impacts and Contributions

The major impacts and contribution of the Japanese ODA in disaster prevention sector is summarized in Table 13-17. Needless to say, emergency assistance projects directly contribute to the local people affected by natural disaster. Although the numbers of projects are few, but the majority of the projects seem to be very effective and have had a good impact on key tasks in each sector. This is due to the remarkable performance and output of each ODA project. Based on the current situation, the key tasks in the disaster prevention sector could be a) Policy and Institution for Disaster Prevention, b) Flood Prevention, and c) Debris Disaster Prevention. The impacts and contribution of the Japanese ODA for each task is given below.

##### (1) Policy and Institution in Disaster Prevention

Due to the low priority given by GOV and the local communities to disaster prevention, and the lack of clear Japanese ODA programs and proper coordination among donor agencies, there

have been very few initiatives and impacts on policy, legal, and institutional aspects in disaster prevention, with the exception of emergency grant aid projects by GOJ after actual disasters.

However, after establishing the Disaster Management Center (DMC) in MARD to active enforce disaster prevention in Vietnam and the enactment of a new Disaster Management Law in 2013, there is opportunity to change the policy and direction of the Japanese ODA by placing priority on policy and institutional tasks. Recently, JICA decided to dispatch a JICA expert to the Directorate of Water Resources in MARD in 2013.

### (2) Flood Prevention

GOJ has tackled flood prevention through urban drainage projects in major cities such as Hanoi city and Ho Chi Min City that included risk evaluation and a flood control plan study in Cantho City. High impact has been achieved in the urban region and city centers, but community-based flood disaster prevention activities in flood prone areas have been mostly conducted by other donors.

### (3) Debris Disaster Prevention

There are few substantial Japanese ODA projects in debris disaster prevention. This is one of the components in a basic plan of integrated disaster prevention. In other words, it is has just started by preparing regular M/P and obtaining more technical data and information through SATREPS projects. Moreover, it requires new components such preparing a public education plan against disaster prevention that includes evacuation routes and dissemination rules in the Japanese ODA projects. Therefore, the contribution and impact of the Japanese ODA in debris disaster prevention could currently be very limited.

**Table 13-17: Impacts and Contribution of the Japanese ODA in Disaster Prevention Sector**

Key Tasks	Effect and Impacts of Japanese ODA	Contribution
(1) Policy and Institution for Disaster Prevention	1) Very few initiatives on policy, legal, and institutional aspects mainly due to lack of clear ODA programs and proper coordinating capability among donor agencies so far 2) Mostly supported by emergency grant projects after actual disasters 3) Only one substantial CD project was implemented from 2009 and its 2 <sup>nd</sup> phase is under preparation 4) One development study focusing on satellite information and two grass root projects targeting community disaster prevention in the central region 5) Low priority on disaster prevention of GOV and local people 6) Local people have become accustomed to disasters by flood and debris flow and have taken measures community evacuation by themselves	1) Limited impact to GOV due rather new task for the Japanese ODA 2) In future, high ODA needs to be expected on this task because of establishing the Disaster Management Center (DMC) in MARD for active enforcement of disaster prevention in Vietnam and inaugurating new Disaster Management Law 3) In recent, JICA decided to dispatch JICA expert to the Directorate of Water Resources in MARD as a policy advisor in 2013

Key Tasks	Effect and Impacts of Japanese ODA	Contribution
	7)Other donors have been targeting community disaster prevention though its low priority and requirement 8)Lack of coordination and sharing between MARD and MONRE especially in obtaining basic natural data	
(2)Flood Prevention	1)For this task, urban drainage projects have been conducted in major cities such as HNI and HCMC including risk evaluation 2)Flood control plan study in Cantho city 3)Not the Japanese ODA, but flood damage in Hue city was decreased by dam construction in the upstream area 4)Few ODA projects in local flood prone areas	1)Some impact could be expected because major contribution has been conducted by the grant aid after actual disasters 2)Community based flood disaster prevention activities have been conducted by other donors, but it could be low priority 3)But, GOJ does not put high priority on it 4)Key issues of GOJ are; -supporting new organizations in charge -introducing practical prevention measures with enough scientific and technical explanation -public awareness
(3)Debris Disaster Prevention	1)Preparation of a basic plan against disasters caused by debris flow 2)Implementation of basic study in the central area through SATREPS 3)Preparation of public education plan against disaster prevention including evacuation routes and informing rules by ODA project	1)Limited impact due to few substantial ODA projects so far 2)Scientific and technological approach is highly appreciated by the Vietnamese side 3)Key issues of GOJ are; -quick and reliable forecast and warning information to the local people -rising awareness concerning to debris flow disaster of PPC

(Source: JICA Study Team)

### 13.3.3 Good Practice of the Japanese ODA

The following projects could be proposed as examples which may induce good practices and outcomes.

- 1) Combination of short and long term JICA experts and grant projects (JFY1990-1995)
  - Strong initiative for other donors to promote assistance to the forest sector
  - Outstanding synergy effects through cooperation with JICA experts and grant projects
  - Establishment of useful model for collaboration with JICA experts and other project schemes
- 2) The Rural Infrastructure Development and Living Standard Improvement Project III (Sector Project Loan)/ Afforestation Sector (JFY2002-2008)
  - Direct contribution to the policy and actions of GOV
  - Remarkable outcomes on sustainable forest management
- 3) The Project for Strengthening Community-based Management Capacity of Bidoup-Nui Ba National Park (JFY2009-2013)
  - Contribution on sustainable national park management with local community
  - Creative and remarkable outcomes on a Community Based Eco Tourism



4) The Project for Strengthening Disaster Prevention Capacity in the Central Region (Phase-1) (2009-2012)

- Contribution to the community based disaster prevention introducing its cycle approach
- CD focusing on more scientific and technical knowledge and skill

**Column 13-1: The Project for Strengthening Community-based Management Capacity of**

**Bidoup–Nui Ba National Park (JFY2009-2013)**

The Bidoup-Nui Ba National Park (BNBNP) in Lam Dong province, with an area of 70,038 ha, is located in one of four national biodiversity centers of Vietnam. However, the rapid development of the local economy is causing risks to the natural resources of the park and the buffer-zone areas.

The project aims to strengthen the management capacity of the BNBNP Management Board for sustainable management of the rich natural resources. This will be achieved through development of a collaborative management model between the BNBNP Management Board and the neighboring communities. The main components are as follows.

- 1) To conduct trial activity of the institutional arrangement for operating the two components of the Project namely, the Community Based Eco Tourism (CBET) and the Environmental Friendly Livelihood Options (EFLO),
- 2) To develop and trial implementation a CBET model project in the selected area,
- 3) To develop and prepare for dissemination of EFLO, and
- 4) To identify issues and necessary activities of sustained implementation of collaborative management focusing on CBET and EFLO for the targeted communities.



Photo-1  
Primary forest tree aged  
more than 700 years



Photo-2  
Visitor center for  
Environmental Education



Photo-3  
Cultural minorities “K’Ho”  
and traditional textile

As a good model for dissemination, a lot of remarkable outputs have been achieved, such as a) involvement of cultural minorities with credibility, b) introduction of a revolving fund and

others for sustainable livelihood improvement, c) sustainable primary forest protection collaborating with local communities, and d) step-wise introduction of community-based eco-tourism. These outputs will be disseminated through seminars and workshops throughout Vietnam.

### **13.4 Features of Future Japanese ODA**

According to the Assistance Plan to Vietnam prepared by GOJ in July 2009, the environmental management sector that includes forest, natural environment, and bio-diversity is explicitly stated as one of the priority sectors on the Japanese ODA, and the climate change sector is also highlighted as a focal point. Therefore, GOJ will continue its assistance activities to GOV based on this assistance policy.

#### **13.4.1 Forest and Natural Environment**

The current JICA ODA program for the forest and natural environment sector contains the following key policy, and GOJ will continue to support GOV based on this program.

a) Goal:

- To promote the multi functions of the forests, and maximize the benefits to the local people

b) Major tasks:

- Policy, - Sustainable forest management, - Livelihood improvement,
- Biodiversity, - Climate change

c) Priority area:

- North western region, - Central highland, - Central coastal area

Based on the data, information, and issues collected in the Study, the focal points of future Japanese ODA in the forest and natural environment sectors according to each task and its results are summarized in Table 13.18.

##### **(1) Forest Management**

As mentioned before, the assistance of forest sector has lead assistances of other donors and activities of other sectors, and promoted by-lateral cooperation of the Japanese ODA. Possible crucial points in this task could be a) policy matters mainly targeting forest related departments in MARD, because it will require GOJ's clearer ODA direction and target, and in-depth policy dialogue with C/P organizations which already have their own strategies and goals, b) clarification of benefit distribution rules with the local people, and c) target expansion to forest

production areas in line with the Public and Private Partnership (PPP) promotion. Especially for a), GOV has already prepared a firm target and strategy, and GOJ will be required to prepare alternatives and proposals which will help them to be more precise, useful, and efficient tracking force through in-depth policy dialogue with C/P organizations.

(2) Reforestation

Due to the great efforts of GOV and effective support by donors, the forest coverage ratio has recovered from 27.2% in 1990 to 39.5% in 2010. More effort is required because the national target is 43% in 2015. In this context, the current JICA ODA program should clarify a concrete target coverage ratio for the Japanese ODA, and refer to possibility of policy regime change and shift from reforestation oriented support to a new focus such as climate change and rural development.

(3) National Park Management and Biodiversity (BD) Protection

In this sector, the biodiversity protection itself should be responsible for GOV and GOJ should assist to strengthen C/P and organizational capacity of biodiversity protection. Under this common understanding, GOJ will be expected to further support based on the request of GOV.

**Table 13-18: Focal Points of the Future Japanese ODA in Forest and Natural Environment Sectors**

Key Tasks	Future Direction of Japanese ODA	Focal Points	Remark
(1) Forest Management	1) Preparation of a road map program concerning to forest sector clarifying target and criteria 2) Supporting policy implementation of MARD such as granting use right and benefit distribution rule among local people in protection and production forest land 3) Diversification of activities in order to rise incentives of local communities and land owners, to improve income generation, and to contribute remote area development 4) Formulation of hybrid-type projects to contribute global warming prevention and public awareness 5) Promotion of PPP projects activating production forest land and wood/ timber related industries	1) To conduct policy dialogue for preparation of a road map program 2) To focus on sector loan approach gripping central and regional needs 3) To formulate community forest management projects 4) To promote new projects such as the Reducing Emissions from Deforestation and Forest Degradation and plus (REDD+) and the Afforestation/ Reforestation - Clean Development Mechanism (AR-CDM) 5) To conduct strategic T/A project with performance improvement considering real needs of C/P organizations	-JICA expert to MARD
(2) Reforestation	1) Review of roles and targets of grant projects for adjusting to current DOA needs including cost performance (\$2,000-\$3,000/ha). 2) Conduct reforestation projects in accordance with the road map 3) Formulation of scientific and technical	1) To formulate REDD+ and AR-CDM projects including forest fire protection 2) To dispatch in-house consultant or JICA expert to promote policy level activities and donor coordination 3) To set strategic use and target of the	-JICA expert to MARD -Public and Private Partnership (PPP)

Key Tasks	Future Direction of Japanese ODA	Focal Points	Remark
	projects including R&D component and pilot activities for trial use of outputs	grand project such as mangrove forest protection, and to consider more effective linkage with soft components	introduction
(3) National Park Management and Biodiversity (BD) Protection	1) Data base preparation and net-work management for biodiversity (BD) protection 2) Technical support for participatory protection area management 3) Support income generation and improvement of local communities around protection areas 4) Coordination among concerned organizations especially MONRE and MARD 5) Preparation of national M/P for wetland management including the following items: -review and update survey -setting basic plan for wetland protection -categorization and protection measures -risk evaluation and prioritization -preparation of wetland management plan for priority ones -development of guidelines, manuals, and monitoring plans	1) To support integrated park management of national parks from upstream to coastal area 2) To implement T/A on integrated management in national parks and protection areas especially Bai Tu Long, Cat Tien, and Com Doa national parks 3) To collect basic data and information related to freshwater and blackish water ecology and ecosystem 4) To prepare national M/P for wetland management 5) To review and update information of important 16 marine protection areas, and to support those management	-Donor coordination

(Source: JICA Study Team)

### 13.4.2 Disaster Prevention

Based on the data, information, and issues collected in the Study, focal points in future Japanese ODA in the disaster prevention sector is described for each task, and the results are summarized in Table 13-19.

#### (1) Policy and Institution for Disaster Prevention

The most important event in this area is the promulgation of the Law on Disaster Prevention (Law No. 33/2013/QH13) in 2013, which gives disaster prevention a legal basis and generates new need for by-laws that can be actually applied. This could be a good opportunity for GOJ to take the initiative in policy dialogues with GOV and leadership among others donors based on Japan's serious experiences. This task would also have wide ranging ODA needs in conjunction with the climate change sector. Therefore, GOJ should place high priority on disaster prevention and continue to provide substantial support for GOV through a mid and long-term ODA program based on the disaster prevention cycle approach.

#### (2) Flood Prevention

Its general direction is to be deployed based on disaster prevention measures, but this task should be a local specific for matching its own natural and social characteristics regarding to

disaster prevention. More scientific and technical approach on forecasting, precaution, information transfer, evacuation system, maintenance of life line and infrastructure, reconstruction, and restoration in local areas will be required from viewpoint of more effective protection of life and property of the people living in flood prone areas.

### (3) Debris Disaster Prevention

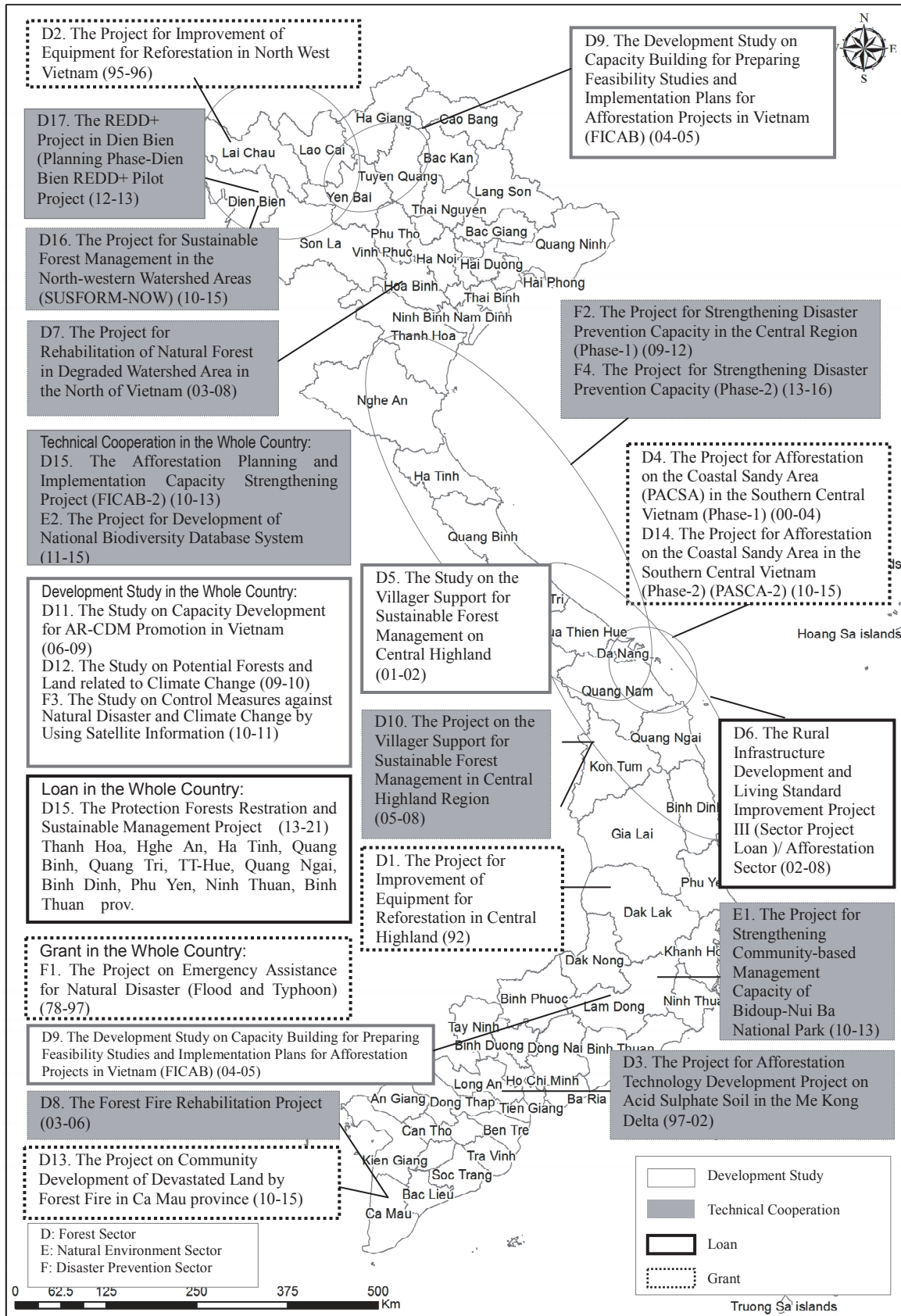
This task will require activities similar to the flood prevention activities mentioned above. Since this is a new task for most stakeholders, public awareness and public relations should be more emphasized in future ODA projects by GOJ.

**Table 13-19: Focal Points of the Future Japanese ODA on Disaster Prevention Sector**

Key Tasks	Future Direction of Japanese ODA	Focal Points	Remark
(1) Policy and Institution for Disaster Prevention	1) Supporting preparation of by-laws, regulations, and actual policies of the new Law on Disaster Prevention including its dissemination to provinces 2) Implementing policy dialogue shifting from relief and restoration to prevention, damage reduction, and donor coordination initiative 3) Promoting an integrated disaster prevention system considering regional specific natural, social, and economic conditions 4) Assisting for preparation of regional and provincial M/P of disaster prevention 5) Strengthening technical and practical disaster prevention capacity of institutions and organizations concerned 6) Improving basic data monitoring and information system for effective and efficient disaster forecast and evacuation	1) To improve policy and planning capacity in the central level reflecting Japanese own experiences 2) To strengthen disaster prevention capacity in provincial level transferring practical measures with clear scientific and technical basis 3) To assist equipment and system for obtaining basic data and information in order to implement practical measures 4) To revise disaster prevention mechanism based on scientific and technical approach	-Policy and leadership of ODA -JICA expert to MARD -Donor coordination
(2) Flood Prevention	1) Preparation of specific ordinance in potential provinces of flood 2) Early flood forecast and warning system against typhoons and flush flood cases 3) Flood and drainage plan in cities and economic zones 4) Prevention plans against ground subsidence and storm surge 5) Dam and reservoir operation rules	1) To conduct flood risk evaluation including hazard map 2) To reflect its output to the specific ordinance of PPC 3) To study potential damages and prevention measures caused by tsunami accompanied with earthquake in Manila trench	-Clear ODA policy -Demarcation with other donors
(3) Debris Disaster Prevention	1) Preparation of specific ordinance in potential provinces of debris disaster 2) Preparation of precise hazard map for countermeasures, land use, evacuation plan, and preventive hard measures 3) Disaster information (observation and monitoring) system improvement including analysis 4) Debris disaster prevention plan and business continuation plan in economically important areas	1) To implement Community Based Disaster Risk Management (CBDRM) including: -evacuation plan, training, knowledge management, and sharing -early forecast and warning system, -CBDRM guideline and its CD	ditto

Key Tasks	Future Direction of Japanese ODA	Focal Points	Remark
	and zones 5) Strengthening community based prevention against debris disaster	-hazard map preparation 2) To reflect its output to the specific ordinance of PPC	

(Source: JICA Study Team)



**Figure 13-1: Project Sites in the Forestry, Natural Environment and Disaster Prevention Sector in Vietnam**





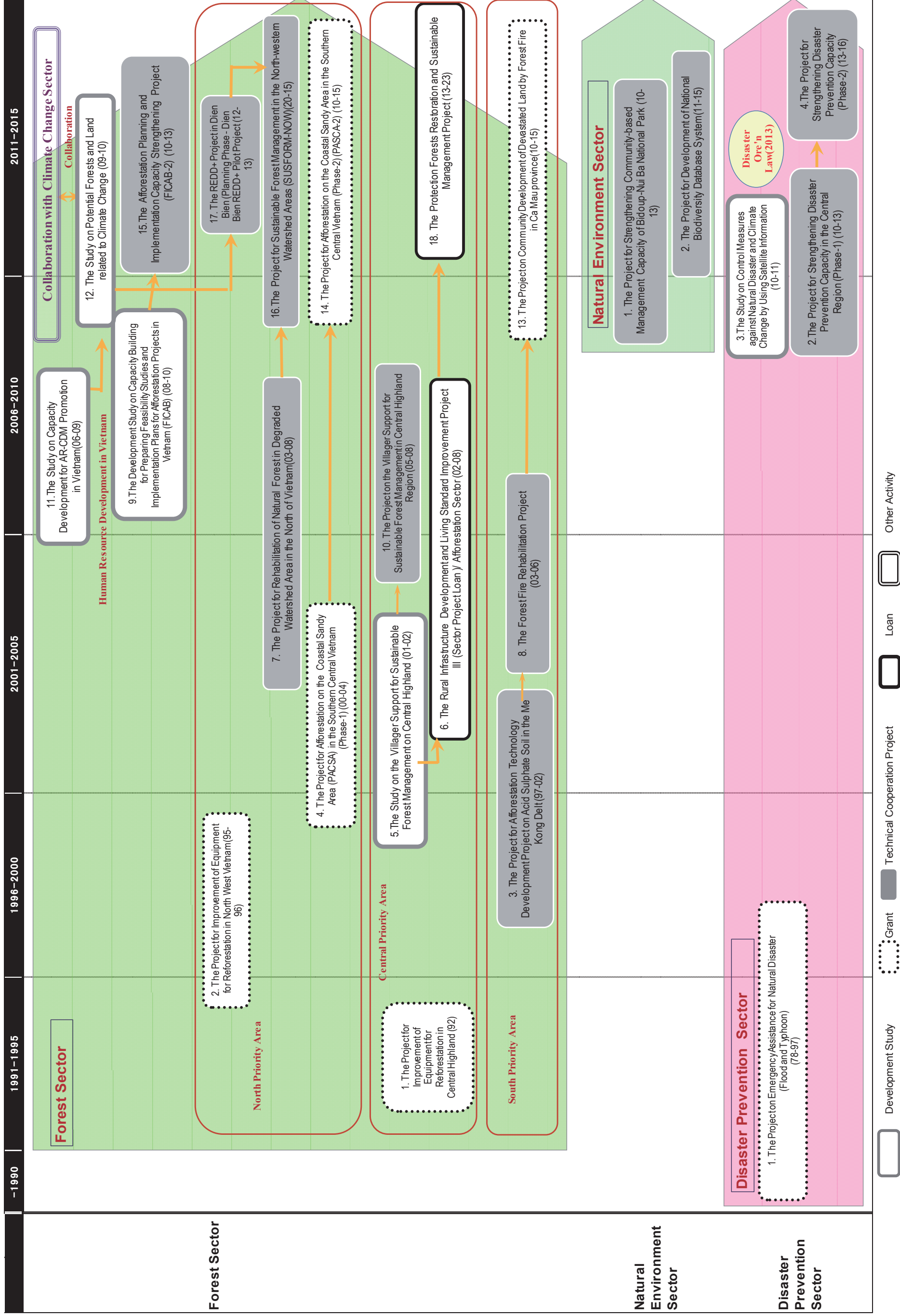


Figure 13-2: JICA Country Strategies and Projects in the Forestry, Natural Environment and Disaster Prevention Sector in Vietnam



## CHAPTER 14: COMPREHENSIVE PROGRAM APPROACH: RURAL AND URBAN DEVELOPMENT

### 14.1 20-year Partnership at a Glance in Rural and Urban Development

This chapter describes comprehensive development approach, so-called “program approach” in rural and urban development and examines the roles and contribution of Japanese ODA to promote it in rural and urban development. This chapter covers various sectors which are analyzed in the preceding chapters, since comprehensive urban development program should cover various sectors such as transport, water supply and sewerage system, and environment as well as urban planning itself.

The 20-year partnership for growth and development in rural and urban development in Vietnam can be summarized according to the historical background and priority development issues shown in the table below.

**Table 14-1: Summary of Partnership for Rural and Urban Development**

	<b>5th SEDP (1991-1995)</b>	<b>6th SEDP (1996-2000)</b>	<b>7th SEDP (2001-2005)</b>	<b>8th SEDP (2006-2010)</b>	<b>9th SEDP (2011-2015)</b>
Background Topics	- Paris Peace Agreements on Cambodia Conflict(1991) - Resumption of Japan’s ODA (1992)	- Restoration of Vietnam-US diplomatic relations (1995) - Formal entry into ASEAN (1995) - Asian Currency Crisis (1997)	- Vietnam-US Bilateral Trade Agreement (2000) - Signing of Japan-Vietnam Investment Agreement; Japan-Vietnam Joint Initiative (2003)	- Formal entry into WTO (2007) - Lehman Crisis(2008)	- Prime Minister Dung visits Japan (2011)
Trend of urbanization	- Start of Rapid Urbanization - Lack of Basic Infrastructure	- Urban Sprawl and Over Densification - Serious urban problem - Expansion of urban-rural disparity	- Continuous urbanization - Progress of large-scale urban development - Expansion of urban-rural disparity	- Strengthen international competitiveness of large cities - Address to regional and racial disparity	- Sustainable urban development - Rural economic development - Cross-border regional development
Urbanization Rate(%)	20.3 (1990)	22.2 (1995)	24.4 (2000)	27.3 (2005)	30.4 (2010)
Poverty Rate (%)	58.1 (1993)	37.4 (1998)	28.9 (2002)	14.5 (2008)	-
Hanoi City Pop.	2,119 (1990)	2,431 (1995)	2,739 (2000)	3,133 (2005)	6,588 (2010)
Ho Chi Minh City Pop.	4,144 (1990)	4,640 (1995)	5,222 (2000)	6,231 (2005)	7,378 (2010)

	<b>5th SEDP (1991-1995)</b>	<b>6th SEDP (1996-2000)</b>	<b>7th SEDP (2001-2005)</b>	<b>8th SEDP (2006-2010)</b>	<b>9th SEDP (2011-2015)</b>
Sector Priorities in SEDP	<ul style="list-style-type: none"> <li>- Major transport infrastructure development to support economic development</li> <li>- Ensure of basic human needs</li> <li>- Poverty alleviation and rural development (infrastructure development)</li> </ul>	<ul style="list-style-type: none"> <li>- Major transport infrastructure development to support economic development</li> <li>- Urban water supply and drainage development</li> <li>- Poverty alleviation and rural development (infrastructure development)</li> </ul>	<ul style="list-style-type: none"> <li>- Completion of basic infrastructure</li> <li>- Strengthened urban competitiveness</li> <li>- Reduction of regional disparity and poverty alleviation (employment creation, infrastructure development)</li> </ul>	<ul style="list-style-type: none"> <li>- Shift to sustainable development</li> <li>- Strengthening of rural economic activities (local industry promotion)</li> </ul>	<ul style="list-style-type: none"> <li>- Globalization of economy</li> <li>- Large-scale infrastructure development</li> <li>- High-quality infrastructure development</li> </ul>
Direction of Japan's ODA	<ul style="list-style-type: none"> <li>- Improvement living conditions and response to serious urban problems</li> <li>- Improvement of living conditions in rural area</li> </ul>		<ul style="list-style-type: none"> <li>- Strengthening of metropolis competitiveness</li> <li>- Improvement of living conditions</li> <li>- Pro-poor infrastructure development</li> </ul>	<ul style="list-style-type: none"> <li>- Comprehensive urban development</li> <li>- Improvement of living conditions</li> <li>- Local industry promotion to improve livelihood and increase competitiveness in rural area</li> <li>- Enhance community participatory development</li> </ul>	
Priority Issues of Japan's ODA	<ul style="list-style-type: none"> <li>- Urban infrastructure development in Hanoi City</li> <li>- Basic infrastructure development in rural area</li> </ul>		<ul style="list-style-type: none"> <li>- Urban development master plan</li> <li>- Pro-poor basic infrastructure development</li> </ul>	<ul style="list-style-type: none"> <li>- Integrated transport and urban development</li> <li>- Local industry promotion</li> <li>- Minority support</li> <li>- Infrastructure development to alleviate disparity</li> </ul>	<ul style="list-style-type: none"> <li>- Capacity development for urban planning</li> <li>- Infrastructure development to alleviate disparity</li> </ul>

(Source: Prepared by the Study Team)

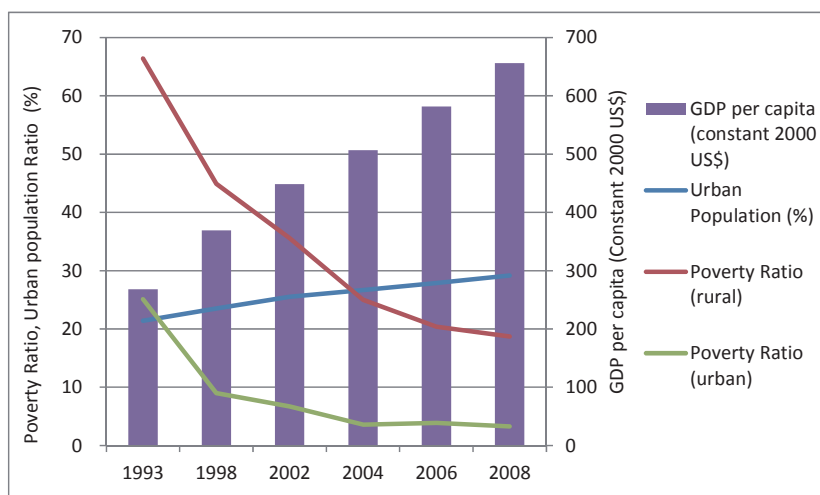
## 14.2 Historical Review of Development and Growth in Rural and Urban Development

### 14.2.1 Overview

While Vietnam experienced economic stagnation after *Doi Moi* in 1986, it has been on the path of long-term economic growth with high a growth rate since the beginning of 1990s. Rapid economic development has accelerated migration into urban areas, which increased the urban population ratio to 24.4 % in 2000 and 30% in 2010 from 20% in 1990. Considering the relatively lower urbanization rate compared to other Asian cities, it is estimated that urbanization in

Vietnam will continue and its urbanization rate will reach to 43% by 2030 and 56% by 2050.

Vietnam has successfully achieved both economic growth and poverty alleviation. Overall poverty rate decreased to 14.5% by 2008 from 58% in 1993; and in the urban areas, it drastically improved to 3.3% in 2008. Meanwhile, such rapid economic growth and drastic urbanization has expanded economic disparity and an infrastructure gap between the urban and rural areas. While GDP per capita in Vietnam was VND 13.4 million as of 2007, there is a large gap among regions. While the southeastern region including HCMC has the highest GRDP at VND 34.2 million and the Red River Delta including Hanoi City has the second highest at VND 14.3 million, the northwestern region has the lowest GRDP at VND 5.7 million. The poverty ratio in the rural areas is still high at 18.7%. That of minorities, which is 12.6% of the total population, is even higher at 60%. Regional and racial disparity is still one of the important issues for urban and rural development in Vietnam.



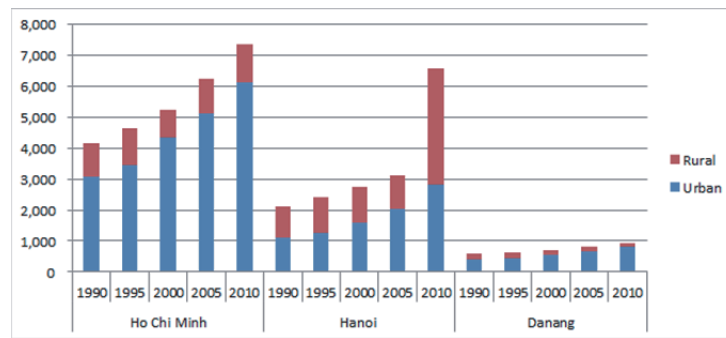
(Source: World Development Indicators)

**Figure 14-1: Historical Trend of Economic Growth and Poverty Reduction**

**Table 14-2: Historical Trend of Economic Growth, Urbanization, and Poverty Rate**

		1993	1998	2002	2004	2006	2008
Per capita GDP (constant 2000 US\$)		268.3	369.2	448.6	506.9	581.6	656.3
Urbanization rate (%)		22.6	23.5	25.5	26.7	27.9	29.1
Poverty rate	National	58.1	37.4	28.9	19.5	16	14.5
	Urban	66.4	44.9	35.6	25	20.4	18.7
	Rural	25.1	9	6.7	3.6	3.9	3.3

(Source: World Development Indicators)



(Note: Hanoi City incorporated with neighboring provinces and expanded its administrative boundary in 2008 (921 km<sup>2</sup> → 3,344km<sup>2</sup>)

(Source: Vietnam Statistical Book)

**Figure 14-2: Population Change in Three Major Metropolis (unit: thousand)**

#### 14.2.2 Beginning of Rapid Urbanization and Subsequent Urban Problems, Rural Development for Poverty Reduction (1992-2000)

##### (1) Rapid urbanization and Expansion of Urban Areas

###### Growing major cities

In the 1990s, urbanization started full-scale in Vietnam, which was especially concentrated in the major cities. Ho Chi Minh City, the largest city in Vietnam, experienced a rapid population increase with an average growth rate of 2.8% in the early 1990s, 2.2% in the late 1990s; and its population reached at 4.6 million in 1995 and exceeded 5 million in 1999. This was true of Hanoi City as well. As the second largest city, rapid urbanization started from the 1990s where population increased with an average growth rate of 3% in the 1990s. Its population reached 2.67 million in 1999 from around 2 million in the 1990s. These two metropolis played an important role as the driving force behind the economic growth in Vietnam as well as strengthening market competitiveness.

###### Expansion of urban areas and over densification in urban centers

The rapid population increase in urban areas has resulted in the expansion of urban areas and high densification in urban centers. Large-scale new urban development in surrounding agricultural area and small- to mid-scale urban development in peri-urban areas have been the major cause of urban expansion. Urban areas in Hanoi City expanded from 57 km<sup>2</sup> in 1983 to 102 km<sup>2</sup> in 2003 (JICA. 2007. HAIDEP). Industrial estates were developed mainly along the major transport corridors connecting major cities and ports or airports, which was followed by surrounding urban development. It resulted in the so-called ribbon-shaped development. Small-scale development and subdivisions in existing urban areas and villages created high-dense urban areas. Some of the

urban districts in Hanoi City have a very high urban density of over 300 person /ha.

## (2) Urban Infrastructure Development and Deteriorated Urban Environment

### Urban infrastructure development

Along with economic growth and infrastructure development, people’s living standards also improved. Access to water improved rapidly from 88% in urban areas and 49% in rural areas in 1990 to 91% and 60% in 1995, and 94% and 71% in 2000, respectively. Likewise, access to improved sanitation in urban and rural areas increased from 63% and 30% in 1990 to 71% and 39% in 1995, and 78% and 49% in 2000, respectively, even though it is still low in the rural areas.

**Table 14-3: Access to Improved Water and Improved Sanitation (urban and rural)**

	1990		1995		2000		2005		2010	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Access to improved water (% of population)	88.0	49.0	91.0	60.0	94.0	71.0	97.0	82.0	99.0	93.0
Access to improved sanitation (% of population)	63.0	30.0	71.0	39.0	78.0	49.0	86.0	59.0	94.0	68.0

(Source: World Development Indicators)

### Deterioration of the urban environment

Meanwhile, rapid population increase caused various urban problems such as traffic congestion, deteriorated water environment, and lack of housing. Especially Ho Chi Minh City and Hanoi City faced serious urban problems with deteriorated living conditions. Depreciated drainage facilities and rapid urbanization caused frequent inundations in the urban centers and peri-urban areas, which deteriorated sanitary conditions and had an adverse impact on people’s health. Disruption of urban activities caused serious damage to the urban economy. Expansion of the urban economy and motorization worsened traffic congestion every year. Traffic congestion in Hanoi City and Ho Chi Minh City were not as serious compared to other mega cities in Southeast Asia, due to compact urban structures (average commuting time was around 18-20 minutes, which is shorter than Manila or Jakarta, which was about 40-50mins). However, traffic congestion in Vietnam had steadily escalated particularly due to the mixed traffic of passenger cars and motorcycles.

Since the Doi Moi policy was introduced, the housing supply policy was demolished and the housing market was commercialized. However, due to the lack of financial resources and technologies, the housing market was unable to supply sufficient housing reserve to meet the increasing housing demand. Living conditions deteriorated in the small and old housing. As of

1999, the per capita floor area was only 7.5 m<sup>2</sup> and 34% of all houses was less than 36m<sup>2</sup>. While large-scale new urban development provided houses for high-end users, low-income housing was not well developed. Unbalanced land and housing supply caused real estate speculation, resulting in the soaring price of land and housing.

### (3) Rural Development toward Poverty Alleviation

#### Poverty alleviation through economic development

Since the *Doi Moi* policy was launched in 1986, Vietnam put its development priorities both on economic growth through a market economy and on rural development toward poverty reduction. In the 6th SEDP, rural development was identified as one of the most important policies issues, which was followed by the Seventh 5-year Development Plan (2001-2005) that aimed to strengthen the rural economy. With the Programme for Socio-Economic Development in Communes Faced with Extreme Difficulties (known as Program 135) that was enforced in 1998, Vietnam promoted infrastructure development particularly in the poor communes.

Due to this effort, Vietnam steadily decreased the number of the poor along with its economic development. The poverty rate in the urban and rural areas had decreased to 95% and 45% in 1998 and 7% and 36% in 2002, which was 25% and 66% in 1993, respectively.

#### Support for ethnic minorities

While economic growth improved the overall poverty rate, poverty in rural areas remained high. This was especially true in the northern mountainous region, and the Mekong Delta and central coastal northern regions where the poverty ratio was very high. The share of the poor population exceeded 70% of the total poor population in Vietnam. The poverty rate in these three regions increased in 1993 to 1998. Regional disparity had expanded in Vietnam. Poverty was also serious among the ethnic minorities that was 13% of the total population. For example, the H'mong Dao had a 100% poverty rate in 1992/93 and 1997/98, where racial disparities had expanded in Vietnam.

### **14.2.3 Development in Major Cities and Continued Poverty Reduction (2000-2005)**

#### (1) Strengthened Urban Competitiveness of Major Cities

##### Strengthened International Competitiveness

In 2000s, world globalization increased financing, technologies, and human resources, which exposed cities in Vietnam to global inter-urban competition. Hanoi City and Ho Chi Minh City or other major cities in Vietnam were required to deal with such globalization trends, become



competitive against other cities in the region, and lead the country's economic development. Furthermore, the spill-over effect of urban economic development via international competition and cooperation was expected to expand to the rural areas nationwide. In this context, major cities, such as Hanoi and Ho Chi Minh City, started to develop infrastructure to strengthen international competitiveness, including completion of the intra-city trunk road network, improved accessibility to the international gateways, infrastructure development to attract the industries in addition to the conventional basic infrastructure development.

#### Reforms of the urban planning administration

While wanting to strengthen international competitiveness, planning administration was still based on the old planned economy, which caused a serious gap between the urban construction plan illustrated by the government and actual urban development in the city. In the large-scale urban development project, public facilities were not well developed and connection with the surrounding existing villages was inadequate. Small and mid-scale development in the urban fringe areas caused urban sprawl. Land subdivisions in existing urban areas created more dense urban areas. Public housing policy did not functioned under the market-based housing supply system, which resulted in the lack of affordable housing for low-income households.

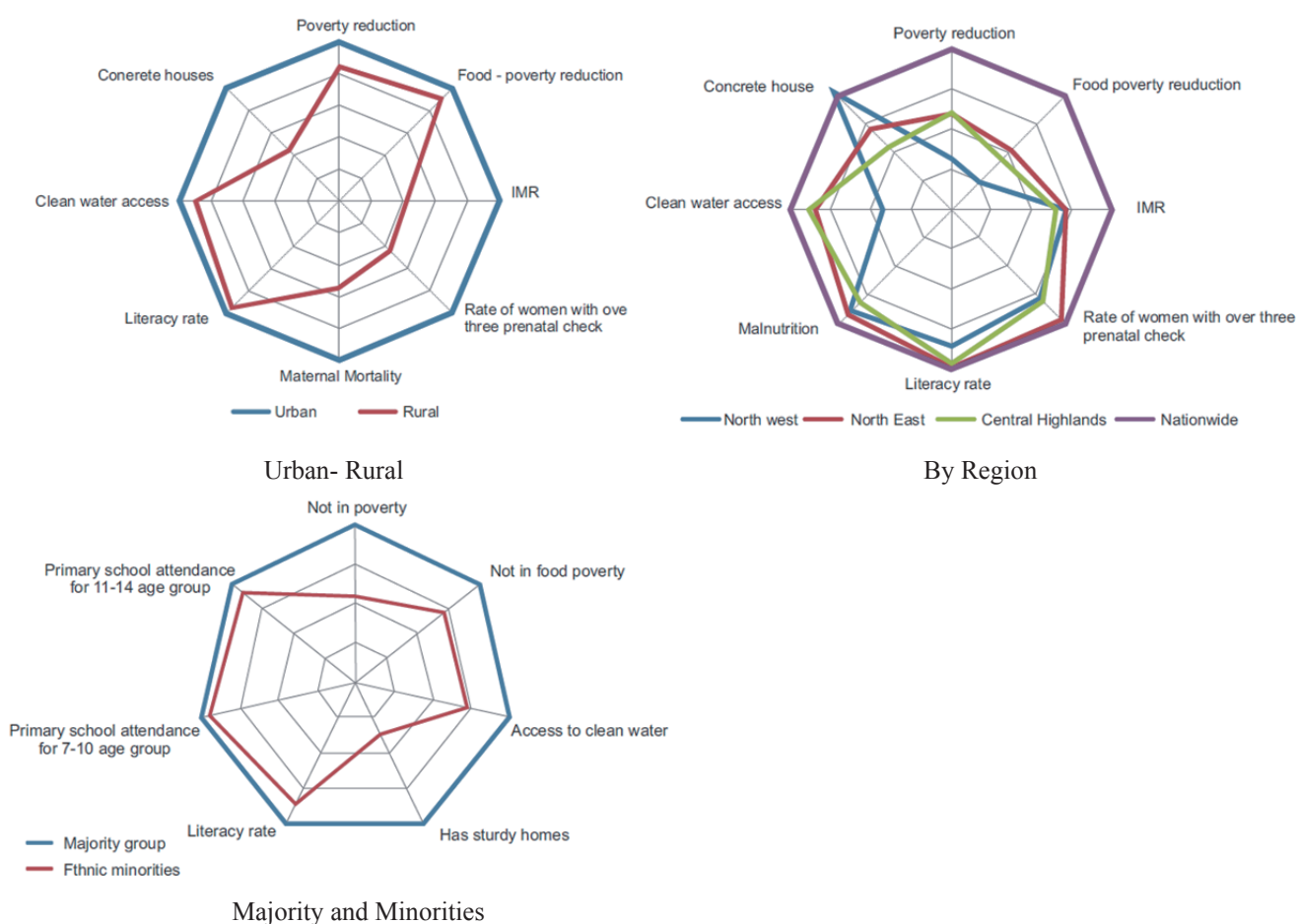
Since GOV recognized the need to establish a modern urban planning and management system to respond to the market economy, a series of laws and decrees related to law, construction, investment, and urban planning were established in the latter 1990s and 2000s. The revised Land Law was established in 2003. The Construction Law in 2003 prescribed Regional Construction Planning, General Planning on Urban Construction, Detailed Planning on Urban Construction, and Rural Population Spot Construction Planning. In 2009, the Urban Planning Law was formulated which separated urban planning from the Construction law. In this way, GOV reformed urban planning and management administration in order to respond to actual urban development, although many issues need to be elaborated. For example, "zone planning" in the Urban Planning Law, which does not specify the area or set any criteria, is not equivalent to the so-called "Zoning" to regulate land use or floor are ratio.

#### (2) Effort to alleviate regional and racial disparities

Although Vietnam achieved both rapid economic development and nationwide poverty reduction in the 1990s, economic disparities among regions and ethnic groups grew. Therefore, the 7th SEDP (2001-2005) set detailed development goals for poverty reduction, job creation, safe water supply and other goals with a basic policy to alleviate regional disparity and reduce poverty. During this period, basic infrastructure development projects were promoted including local road development to ensure access to business opportunities and the market, rural electrification, water

supply development, social services improvement such as education and hospitals. It significantly contributed to improved livelihoods in the rural area, where the poverty rate decreased from 46% in 1998 to 36% in 2002 and 25% in 2004.

However, poor conditions still existed in a few specific areas such as remote places and disaster-damaged regions. The poverty rate for ethnic minorities was still high at 61% as of 2004. In the northwest region where many ethnic minority people live, the poverty rate was high at 59%. Regional and racial disparities still remain in Vietnam. The rich-poor gap nationwide also rose from the 1990s to 2000s. Urban-rural or racial disparities were also observed in the service infrastructure, educational standard, and living conditions.



(Source: MPI, 2010, Millennium Development Goals 2010 National Report)

**Figure 14-3: Disparities in terms of MDGs (as of 2008)**

#### **14.2.4 Sustainable Urban Development and Alleviation of Regional Disparities (after 2005)**

##### (1) Promotion of Sustainable Urban Development

###### Global environmental issues

After joining the WTO in 2007, major cities such as Hanoi and Ho Chi Minh City had to respond further globalization and strengthen international competitiveness. At the same time, in conjunction with increasing international concern on global environmental issues, cities in Vietnam were also required to consider global environmental issues such as global warming, global resource and energy depletion, and food crises. Thus sustainable urban development became new urban development issue. The new 5-year socio-economic development plan prioritized infrastructure development as well as institutional reform and human resources development for sustainable development toward ASEAN economic integration after 2015.

###### Comprehensive urban development

The need for comprehensive urban development covering several urban sectors came to be recognized, unlike urban development in the past, which was done according to each sector. In the 7<sup>th</sup> SEDP (2006-2010), it was pointed out that a long-term vision in formulating master plans or managing investment for infrastructure development was lacking. This has prevented development measures from being adequately revised in the face of changing socio-economic conditions. Particularly “urban planning” was emphasized as an important public investment program, which requires a comprehensive approach in urban development.

In Vietnam, the Urban Planning Law was formulated in 2009, which revised the previous spatial planning system based on the Construction Law. Most of urban spatial planning and land-use plans were previously formulated by the Vietnam Institute of Architecture, Urban and Rural Planning (VIAP, or former National Institute of Urban and Rural Planning), delegated by provincial government. Recently formulation and management of urban planning was going to be decentralized. After Decree No. 37/2010.ND-CP on formulation, evaluation, approval and management of urban planning was formulated in 2010, some of the People’s Committee of provinces or cities directly contracted with private organizations other than VIAP to support formulation of urban spatial plans.

Regional Construction Plan (spatial plan) was formulated for the metropolitan area in order to respond to the urbanization beyond city boundaries. In the Hanoi metropolitan area, the Coordination Committee for Hanoi Metropolitan Regional Planning was established in 2003 and the Hanoi Metropolitan Regional Plan toward 2030 was formulated by the Ministry of

Construction. There are several regional plans in addition to the above MOC-regional plan, which include the Socio-economic Development Plan for the Northern Focal Economic Zone formulated by MPI and the Socio-economic Development Plan in the Red River Delta. Since those regional plans cover different provinces, coordination between these regional plans have not been adequately considered as yet. Along with decentralization, each provincial government has stronger authority within each jurisdiction, which made it difficult to ensure consistency between regional plans and the development plans of the provinces. Regional planning administration needs to be strengthened, since urbanization in the major cities of Vietnam such as Hanoi City and Ho Chi Minh City is expected to go beyond administrative boundaries.

### (2) Regional Industrial Promotion.

In 2005, GDP per capita exceeded US\$500 and the poverty rate improved to 24% nationwide and 6% in urban areas. In contrast, the northern mountainous region and the north central coastal region did not receive the benefits of the country's economic development, of which living environment is lower and more vulnerable against natural disasters. In order to alleviate poverty in these remote areas, it was necessary to increase livelihoods and strengthen economic competitiveness by promoting regional industries and improving accessibility to the market, in addition to developing the basic infrastructure for a better living environment.

The 8th SEDP (2006-2010) promoted the regional crafts industry and agricultural products that utilized local resources, in addition to basic infrastructure development that increased living standards and decreased the poor population in rural areas as important development issues in rural development.

Decision No.66 on Rural Industrial Development was enforced in 2006, which aimed to strengthen administrative support for craft and agriculture, forestry and fisheries products. In 2006, MARD formulated the New Rural Development Program, which set the policy to promote participatory rural development as well potential community resources to support the poorest of the poor in conjunction with Programme 135 for Socio-Economic Development in Communes Faced with Extreme Difficulties.

### (3) Cross-border Regional Development

Along with international regional cooperation such as ASEAN economic integration and GMS development, regional economic corridors and economic zones at the border area were developed, which have enhanced international logistics routes in the region. With new development potential in the trend toward regionalization, Vietnam was required to revise its conventional national development model that focused mainly on the economic growth of metropolitan areas

and to formulate a new regional development strategy that promoted industrial cluster development beyond their boundaries. There are several GMS regional economic corridors in Vietnam, including two North-South corridors, one from Kunming in China via Lao Cai and Hanoi to Hai Phong and another from Nanning in China via Lang Son to Hanoi, the East-West corridor from Da Nang via Lao Bao, Lao PDR to Thailand and Myanmar, and the southern corridor from Bangkok via Phnom Penh to Ho Chi Minh City. Along those corridors, special economic zones and international cross-border logistics routes have been developed.

### **14.3 Japan's ODA in Rural Development and Urban Development Sector**

#### **14.3.1 Overview**

Japan's ODA in rural and urban development started with urban infrastructure development for postwar reconstruction in the major cities such as Hanoi City, and rural infrastructure development.

In the urban areas, the need for comprehensive urban and transport planning grew with the need to resolve various and complex urban problems such as a rapid population increase, urban sprawl, increase in motorcycles and emerging passenger cars, serious traffic congestion, the need for public transportation, deterioration of the water environment, and frequent flooding. For this, JICA conducted the master plan study in major cities, namely "The Study on the Urban Transport Master Plan and Feasibility Study in HCM Metropolitan Area (HOUTRANS)," "The Comprehensive Urban Development Programme in Hanoi Capital City (HAIDEP)," and "The Study on Integrated Development Strategy for Da Nang City and Its Neighboring Area in the Socialist Republic of Vietnam (DaCRISS)." Those studies provided the direction for urban development projects thereafter. Since the 2000s, emphasis has also been placed on implementing plans that promote integrated transport and urban and institutional development in urban planning.

In the rural areas, basic infrastructure development has been conducted continuously mainly in the northern mountainous region, central highlands and the Mekong delta regions with the main objective to alleviate poverty in the region. In the 2000s, an area-specific approach based on local characteristics was applied, which promoted local industry and assistance for ethnic minorities.

#### **14.3.2 Improved Living Conditions along with Urbanization (1992-2000)**

##### **(1) Improved Living Conditions**

In the 1990s, Vietnam was in the stage of postwar reconstruction and one of its most fundamental development issues was to restore depreciated infrastructure and develop basic infrastructure to

improve living conditions both in the urban and rural areas. SEDPs in the 1990s set its objectives on improving the living conditions of the people.

The request by GOV for ODA mainly consisted of infrastructure development that would contribute to north-south integration, reconstruction in the northern region, and internationalization. In response to this request, the Japanese government restarted its ODA both in large-scale infrastructure development and basic infrastructure development to improve living conditions mainly in the capital city of Hanoi. In the National Aid Policy formulated in 1994, the environmental sector was prioritized, which included improvements in the urban environment and living conditions of the populace. A commodity loan was provided for a rehabilitation road and water supply project in 1993, immediately after Japan's ODA was resumed. The "Project for the Improvement of Water Supply Facilities in Gia Lam Area" was also conducted as a grant project in 1993. In 1994, the "Hanoi Drainage Project for Environment Improvement" was started.

## (2) Rural Development Project

As the rapid economic development in the 1990s created growing urban-rural disparities, the Vietnam government prioritized rural development in its national development plan. Particular focus on rural development was placed on three sectors, namely local roads, rural electrification, and water supply.

The Japanese government, with MPI as the main counterpart agency, commenced the "Rural Infrastructure Development and Living Standard Improvement Project / Sector Program Loan (SPL)." SPL included several small-scale infrastructure development projects for roads, electricity and water in the rural area in order to improve the living conditions of the community and to promote the regional rural economy.

## (3) Urban Development and Responding to Urban Problems

In the 1990s, Vietnam experienced rapid economic growth and entered the full-scale urbanization phase. Urban infrastructure development to support economic growth and to solve the emerging urban problems become urgent issues for cities in Vietnam. In order to improve various urban transport problems such as serious traffic congestion, "The Study on Urban Transportation for Hanoi City" was conducted in 1994 and the "Project for Improving Public Transportation in Hanoi" was implemented to improve traffic congestion in Hanoi City.

As for comprehensive urban infrastructure development, "Hanoi Urban Infrastructure Development Project" started in 1996, which was formulated based on "The Study on Master Plan of Industrial Development in the Hanoi Area." It aimed to promote comprehensive regional

development integrated with the Than Long Industrial Estate in the northern part of Hanoi City. With the development of the industrial estate and the surrounding urban area, the project was expected to activate economic activities in Hanoi City and increase export with the increasing industrial products produced by the Industrial Estate, to create job opportunities for neighboring areas, and to alleviate over congestion in the urban center of Hanoi City.

### **14.3.3 Urban Development in Major Cities and Continuous Effort in Poverty Reduction (2000-2005)**

#### **(1) Promotion of Urban Infrastructure Development in Major Cities**

Since the 2000s, as international competitiveness has become one of the major urban development issues, JICA also promoted urban development to strengthen urban competitiveness mainly in the Hanoi metropolitan area and Ho Chi Minh metropolitan area. It includes “Project for Improving Public Transportation in Hanoi” commenced in 1998, “Thanh Tri Bridge Construction Project” and “Nhat Tan Bridge (Vietnam-Japan Friendship Bridge) Construction” to eliminate the traffic bottleneck across the Red River, “The Study on the Urban Transport Master Plan and Feasibility Study in HCM Metropolitan Area (HOUTRANS) (2002-2004)” and “Saigon East-West Highway Construction Project” commenced in 1999 to improve urban transport problems in Ho Chi Minh City. Many projects were conducted to strengthen the urban transport network.

#### **(2) Continuous Effort to Improve Living Conditions**

In parallel with projects to strengthen urban competitiveness, Japan’s ODA continuously conducted projects focused on improving living conditions. It included the “Hanoi Drainage Project for Environment Improvement” commenced in 1994 and the “Ho Chi Minh City Water Environment Improvement Project” commenced in 2001. In 2000, “Study on Environmental Improvement at Hanoi City” was conducted to propose projects in the solid waste management sector, which was followed by “the Project for Urgent Equipment Supply for Waste Management in Hanoi”. In 2006, “Implementation support for 3R Initiative of Hanoi City for Cyclical Society” started, where a comprehensive approach in the solid waste management sector was realized.

In Hai Phong City, one of the secondary cities, the “Hai Phong City Environmental Improvement Project” started in 2004 based on the proposal, “Study on Sanitation Improvement Plan for Haiphong City,” in 2001. Likewise, in Japan’s ODA’s assistance in the urban infrastructure development sector, an approach to formulate a long-term master plan followed by priority projects was established.

### (3) Focus on Support in the Poor Area

While Vietnam succeeded achieving economic development and significant poverty reduction in the 1990s, disparities between the urban and rural areas or ethnic majorities and minorities have expanded. Alleviation of regional disparities and alleviation of poverty in the poor area was a focal issue in the SEDP in the 2000s. In this context, following the “Rehabilitation Loan” in 1994 and “Rural Infrastructure Development & Living Standard Improvement Project (SPL I – III)” started in 1996, a “Small-Scale Pro-Poor Infrastructure Development Project (SPL IV)” started in 2002. While SPL I to III covers the entire country, SPL IV focuses on poor areas. It aimed to improve the livelihood and living conditions of the poor people by developing small-scale infrastructure such as road, electricity, water supply and irrigation, and thereby contributed to poverty reduction.

#### **14.3.4 Comprehensive Urban and Rural Development (2005-)**

##### (1) Comprehensive Urban Development and Integration and Urban and Transport Sector

In order to respond to rapid urbanization, globalization, and global environmental issues, a comprehensive approach is inevitable rather than the conventional approach, which is to take action by sector. JICA also introduced the program approach with long-term and sector-wide perspectives.

The comprehensive approach was first implemented in “The Comprehensive Urban Development Programme in Hanoi Capital City (HAIDEP)” conducted in 2004-2007. HAIDEP integrated several urban sectors, namely urban development, urban transport, water environment and living conditions to formulate a comprehensive urban development program. While there was a lack of coordination among sectors previously, a series of projects within a planned framework was established as a “comprehensive urban development programme”, which included comprehensive analysis of urban issues, sharing an urban future vision, and objectives and strategies, action plan proposals, and implementation mechanism. Past studies and projects conducted by Japanese ODA in urban development in Hanoi City are shown in Figure 12-4.

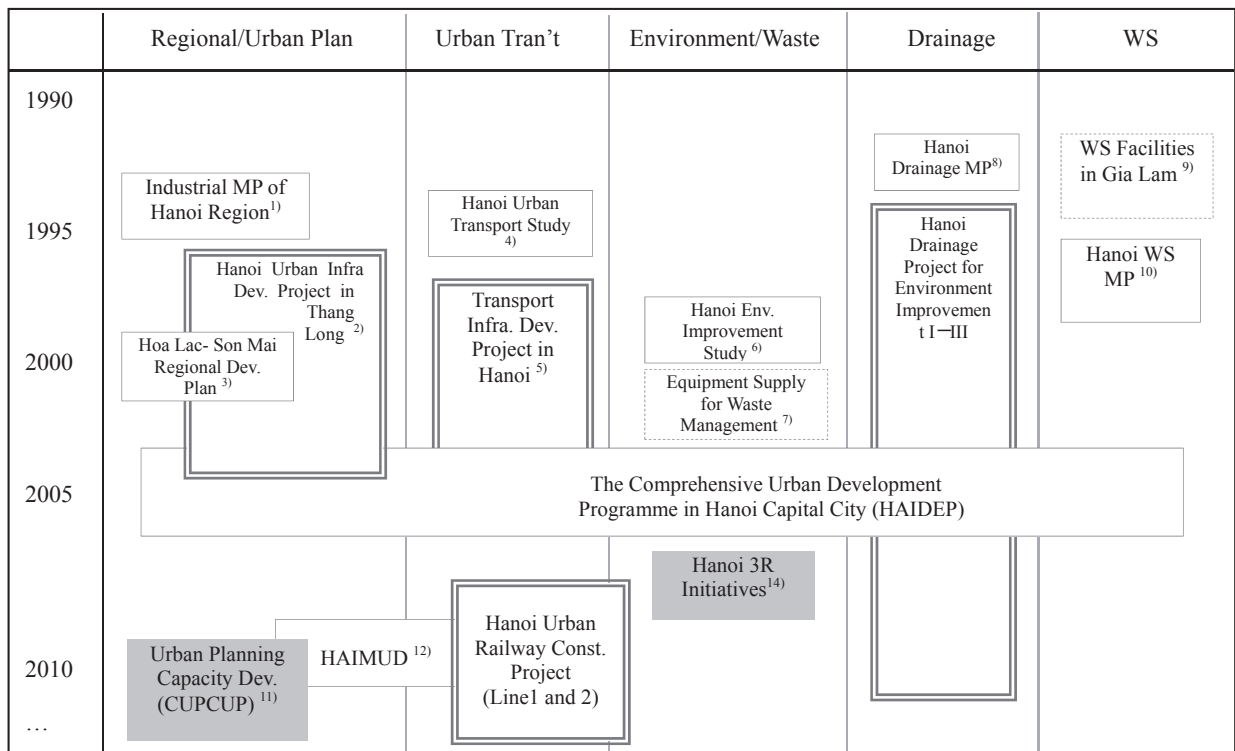
Particularly for the urban transport sector, the urban transport network was clearly identified to formulate urban structure and to prioritize transport projects in the comprehensive urban development program, which was followed by integrated urban development with transport infrastructure in the Japan’s ODA projects later. It included “Hanoi City Ring Road No.3 Construction Project”, the first urban mass rapid transit (UMRT) in Hanoi, “Hanoi City Urban Railway Construction Project (Line1 and Line2)”, and “The Project on Integrated UMRT and Urban Development for Hanoi (HAIMUD).” In this way, the JICA master plan study provided an



important momentum to promote a public transport-oriented urban development policy.

In Ho Chi Minh City, the urban transportation master plan was formulated in the Study on the Urban Transport Master Plan and Feasibility Study in HCM Metropolitan Area (HOUTRANS), which indicated the close interaction of land use and urban transport and, thus, an importance of integrated planning of the transport network and urban development. The HOUTRANS proposal was followed by the Yen-loan construction project of urban railway line 1 and corresponding study to promote transit-oriented development (TOD) at the HCMC Line 1 stations. More specifically it aims to improve accessibility at the stations and thus create the added value of the HCMC Line 1 stations.

In Da Nang City, the biggest city in the central region, “The Study on Integrated Development Strategy for Da Nang City and Its Neighboring Area in the Socialist Republic of Vietnam (DaCRISS)” was conducted in 2008 and 2010, based on which General Plan of Da Nang City was formulated afterward. In order to promote this comprehensive urban development approach in the secondary cities, “The Urban Planning Formulation and Management Capacity Development Project in the Socialist Republic of Vietnam (CUPCUP)” was conducted.



(Note: Official project title;

- 1) Master Plan of Industrial Development in the Hanoi Area
- 2) Hanoi Urban Infrastructure Development Project Phase I: Public Sector Support to Thang Long North Area
- 3) The Study on the Hoa Lac Xuan Mai Areas Urban Development Project (M/P, F/S)
- 4) The Study on Urban Transportation for Hanoi City
- 5) Transport Infrastructure Development Project in Hanoi
- 6) Study on Environmental Improvement at Hanoi City
- 7) The Project for Urgent Equipment Supply for Waste Management in Hanoi
- 8) Urban Drainage and Wastewater Disposal System in Hanoi City
- 9) The Project for the Improvement of Water Supply Facilities in Gia Lam Area, Hanoi City
- 10) The Study on Water Supply Development for Hanoi City
- 11) The Urban Planning Formulation and Management Capacity Development Project in the Socialist Republic of Vietnam (CUPCUP)
- 12) The Project on Integrated UMRT and Urban Development for Hanoi (HAIMUD)
- 13) Hanoi City Urban Railway Construction Project (Line2: Nam Thang Long – Tran Hung Dao Section) and Hanoi City Urban Railway Construction Project (Line1) Phase I-Ngoc Hoi Complex (I)
- 14) Implementation support for 3R INITIATIVE of Hanoi City for Cyclical Society

□ Development Study, □ Technical Assistance, □ Yen-Loan Project, ■ Grant Aid

**Figure 14-4: Past Studies and Projects in Urban Development in Hanoi**

(2) Effort in poverty reduction of Ethnic Minorities.

Elimination of regional disparities and poverty alleviation in the rural area were still identified as a focal development issue in the SEDP in the 2000s. In order to achieve the goal, there was a growing awareness of the need to promote (i) livelihood improvement such as promoting regional industries in the agricultural and non-agricultural fields and improving access to the market and

(ii) capacity development to strengthen economic competitiveness as well as (iii) basic infrastructure development such as road, electricity, water supply. In this context, Japan's ODA conducted several projects to promote rural development.

Previously the National Aid Policy put emphasis on the rural development sector, of which objectives were set in poverty alleviation in the northern mountainous region, central highlands, and the Mekong delta region. However, experiences or lessons learned extracted from the rural development projects in several regions could not be applied to other regions or nationwide, since the living standard and customs of ethnic minorities, who are the main beneficiaries of rural development, and agricultural and craft products were totally different according to region. Therefore, a region-wide approach rather than sector-wide approach, which continued to focus on support in the poor areas, was adopted.

In the northwest region, the master plan and detail policy recommendations for rural development was formulated in the "Master Plan Study on Improvement of Rural Living Conditions in Northwestern Mountainous Region in Vietnam" (2007-2008), which was followed by the "Northwest Region Rural Development Project" (2010-ongoing). In the central region, "The Project on Capacity Development of Participatory Agricultural and Rural Development for Poverty Reduction in the Central Highlands" is being conducted, which applied the participatory approach for ethnic minorities in order to identify with community issues and implement the necessary action to improve their living environment on their own.

Such steady and bottom-up participatory approach, where ethnic minorities with different language and educational background discuss, agree, and implement the necessary action, has been gradually recognized as an effective measure to implement the "New Rural Development Program" of MARD,

### (3) Regional Development to Maximize Local Potential

With an objective to alleviate regional disparity, JICA implemented projects for regional development to utilize local resources. JICA conducted "The Study of Artisan Craft Development for Rural Industrialization in the Socialist Republic of Vietnam" in 2004, which established the first nationwide database on craft villages including socio-economic conditions and distribution of craft villages. It proposed a master plan to promote national artisan craft with a set of strategies related to local industry promotion, including livelihood enhancement, technologies improvement, preservation of ethnic traditions, and others. Following such proposals, the "Project on Capacity Development on Artisan Craft Promotion for Socio-economic Development in Rural Area" was conducted from 2008 to 2011. Several pilot projects to promote local industries with potential were conducted in the four provinces of the northwestern region

(Province of Dien Bien, Hoa Binh, Lai Chau, and Son La), where the share of minorities was high and which was prioritized as a poverty alleviation program in an area with a poverty rate of more than 40%. Long-term capacity development program for women unions and local associations have contributed to enhancing the awareness to preserve local tradition, to promote craft quality and thereby enhance local livelihood and employment.

In 2007, “the Study for Roadside Station Master Plan in the Socialist Republic of Vietnam” was conducted, which proposed the basic concept of a Roadside Station. Following the study, two grass-roots technical assistance projects were conducted related to the roadside station, including “the Regional Development Project starting at the Roadside Station” and “Sustainable Regional Development Projects via Heritage Tourism.”

The sustainable regional development approach was also introduced in the SPL, which has been conducted since the 1990s. The Center for Community Training and Development was established as a pilot project in SPL phase IV. It aimed to support the local people in the project area to know and apply technical progress in production storage and processing of agro-products, and market promotion through increased value-added products, and hence increase the community’s livelihood in the project areas.

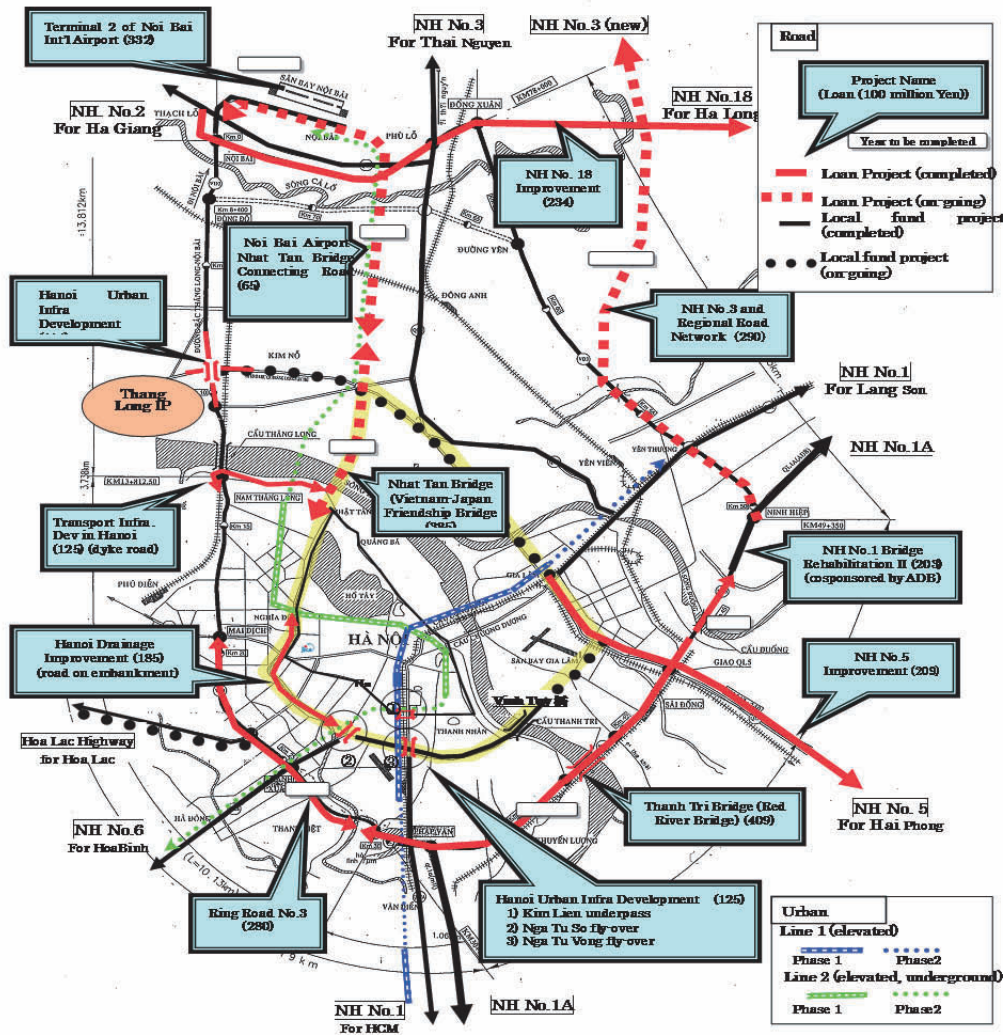
As for the tourism sector, there have been a series of Japanese assistance conducted at the World Heritage site, Hoi An, in the central region. In the 1990s, cultural and historical heritage preservation were supported through the dispatch of short and long-term experts and by private sector and universities. Since 2000, JOCV activities focused on quality tourism sights to balance “culture,” “quality of people’s life,” and “tourism.” After 2005, support for the tourism sector was expanded to comprehensive regional development projects in coordination with urban environmental improvement, as a cross-sectional approach with the tourism sector at its core. An integrated tourism development program with rural development and regional economic promotion was coordinated with other Japanese ODA projects such as road and international airport to promote local product development and sales activities. It has contributed significantly both to poverty alleviation and tourism development in the area. Based on the experiences and lessons learned in Hoi An, traditional rural village tourism development has been promoted at the National Heritage site, Dong Lam village in the northern region, in collaboration with JICA experts, JOCV, and grassroots technical cooperation.

#### **14.4 Contribution of Japan’s ODA to Rural and Urban Development**

Contribution of Japan’s ODA to rural and urban development can be summarized as follows.

#### **14.4.1 Formulation of Competitive and Attractive Cities**

Since the restoration of ODA, JICA has provided continuous support to develop of large cities such as Hanoi City and Ho Chi Minh City. Hanoi City, in particular, has been identified as a priority in Japanese ODA, and a variety of projects have been conducted, which contributed to strengthening the competitiveness of Hanoi City. Location of major ODA projects in Hanoi City are shown in Figure 14-6. Access to the international market has ensured the development of international gateways such as Hai Phong Port Improvement and Noi Bai International Terminal 2 together with regional corridor development such as National Highway No.5 and No. 18. The industrial base was strengthened in Thang Long Industrial Park in the Hanoi Urban Infrastructure Project. It has improved the international competitiveness of Hanoi City and its surrounding regions. Foreign Direct Investment of Hanoi City increased from US\$ 3354 million in 1995 to US\$ 7,340 million in 2000 and US\$ 19,889 million in 2010; and the industrial output of Hanoi City expanded from VND 8.5 trillion in 1995 to VND 17.3 trillion in 2000 and VND 108.8 trillion in 2010.



(Source: JICA, Southeast Asia and Pacific Department)

**Figure 14-5: Location Map of ODA Projects in Hanoi City**

Expansion of major roads and flyover was developed in the “Hanoi Urban Transport Projects” and a series of projects to promote traffic safety improved mobility in Hanoi City. “Hanoi Drainage Improvement Project” and 3R Initiatives Program has improved the sanitary conditions of its citizens. Post-evaluation of the “Hanoi Drainage Improvement Project” found that project beneficiaries appreciated the impact of the project such as reduction of inundation and waterborne diseases. Further, it also provided recreation sites for citizens through improvement of lakes, which enhanced the attractiveness of Hanoi City.

#### 14.4.2 Living Conditions Improvement and Poverty Reduction in Rural Areas

In the rural area, Japan ODA projects provided small-scale infrastructure for people without access to urban services, which improved living conditions with access to water supply and to

schools, improved livelihoods with access to employment and the market, thereby contributing to regional economic development.

It is notable that the “Rural Infrastructure Development and Living Standard Improvement Project” and “Small-Scale Pro – Poor Infrastructure Development Project” or the so-called Sector Program Loan (SPL) have been continuously implemented since 1996 as a small-scale infrastructure package. Based on the criteria established by MPI, provincial governments identified local needs and formulated sub-projects on their own, and implemented them by utilizing local resources. It contributed a lot to improve living conditions and livelihoods in rural the area. Project implementation in each phase of SPL is summarized in Table 14-4.

**Table 14-4: Outline of the Project Implementation of SPL (I – IV)**

	Rural Infrastructure Development and Living Standard Improvement Project			Small-Scale Pro – poor Infrastructure Development Project		
	Phase1 (SPLI)	Phase2 (SPLII)	Phase3 (SPL III)	Phase1 (SPL IV)	Phase2 (SPL V)	Phase3 (SPL VI)
Year	1996-2002	1997-2002	1999-2008	2003-2009	2006-ongoing	2009-ongoing
Provinces	-	-	-	28 provinces	41 provinces 128 District	36 provinces
Road	154 sub-projects (56 provinces) 1,141 km	142 sub-projects (57provinces) 1,056 km	94sub-projects (55 provinces) 967km <sup>1)</sup>	59sub-projects (28 provinces) 809km	68 sub-projects	52 sub-projects 890 km
Electricity	168 sub-projects (54 provinces) D <sup>2)</sup> : 381 km 221,564kVA	191 sub-projects (56 provinces) D <sup>2)</sup> : 632 km 71,952kVA	109 sub-projects (38 provinces) 39,602kVA	31 sub-projects (15 provinces) D <sup>2)</sup> :1702 km 19,060kVA	D <sup>2)</sup> : 119 km 11,241kVA	14 sub-projects
Water supply	13 sub-projects (12 provinces)	No projects	27 subprojects (26 provinces) 85,900m <sup>3</sup> /day	24 subprojects (17 provinces) 48,698m <sup>3</sup> /day		16 sub-projects
Irrigation	No projects	No projects	16 sub-project s (16 provinces) 38,576ha	27 subprojects (14 provinces) 27,410 ha	37 sub-projects	18 sub-projects
Planting	No projects	No projects	Preservation forest : 20,253ha Natural forest:8,054 ha Restoration: 3,843 ha <sup>3)</sup>	No projects	No projects	No projects
Others				NGO coordination fund MIS introduction		Community Training Center (pilot projects)

Note: 1) Rural road: 932km, Urban road: 35km, bridge: 1805m 2) D: Distribution Line, 3) including forest-related infrastructure development and training for forest preservation (Source: Post-evaluation Report for SPL I to IV, Final Report of Study on the Small-Scale Pro – poor Infrastructure Development Project (JICA, 2011))

With its long-term and implementation of various projects, SPL has provided comprehensive impact in improving living conditions and poverty alleviation in rural areas as well as in

individual sub-projects. Individual and comprehensive impact of SPL is as follows.

- Living Environment Improvement: Improved access to hospitals, market, school, education environmental improvement, alleviation of household work (electrification, water supply), sanitary improvement, disaster prevention (landslide, flooding)
- Livelihood improvement: Improved access to the market, transportation of agriculture products, access to job opportunities, enhancement of productivity and variety of livelihood
- Regional economic development: Establishment of local industry, logistics improvement, improved sightseeing resources, increase in land prices.
- Capacity development of the provincial government: Selection of sub-projects, investment preparation, project implementation management, O&M
- Negative impact: Increase in traffic accidents, noise and dust during construction

Since it started in 1996, SPL has changed its scope and criteria with the times. While SPL-I covered only road and electricity, water supply and irrigation were included from SPL-III. Poverty alleviation has been prioritized since SPL-IV. An NGO coordination fund was established in the “Small-Scale Pro – poor Infrastructure Development Project” phase I or SPL-IV in order to create a synergetic effect through NGO coordination. However, it took long to coordinate due to existing regulations related to NGOs in Vietnam. Linkage between sub-projects and NGO projects was not well developed. As a result, the NGO coordination fund was not included in the next phase, SPL-V. In the latest on-going SPL-VI, the comprehensive approach was introduced as a pilot project that targeted community livelihood enhancement as well as infrastructure development. A Community Training Development Center was established to provide technology enhancement for preservation and processing of agri-products and marketing.

Other than SPL, the “Grant Aid Project for Reconstruction of Bridges” was provided in the Northern District, Central District and Mekong Delta area, where more than 120 bridges were reconstructed in the isolated mountainous or delta areas. Those bridges provided access to schools and hospitals for the community of isolated poverty villages and promoted the transportation of agri-products and commodities. It thus contributed to improving living conditions, enhanced livelihood and alleviated poverty in rural areas.



**Column 14-1: Infrastructure Development to realize people’s potential and provides new opportunities for people in Dien Bien Province, Muong Phang Commune**

Dien Bien Province, one of the highest poverty provinces, has received continuous support through the “Rural Infrastructure Development and Living Standard Improvement Project” and “Small-Scale Pro – poor Infrastructure Development Project (SPL I to VI),” and the total investment capital was VND 579.4 billion. The project counterpart, the Project Management Unit of Department of Planning and Investment in Dien Bien Province said, “Continuous support of JICA-JBIC has contributed a lot to achieving hunger eradication and poverty reduction in our province and support for minorities in the mountainous area. In addition, through the process of implementing the projects, our provincial government has learned about investment preparation, selection of sub-projects, and management of projects in the implementation and after investment process.”

A woman, running a small shop along the road constructed under the SPL, said “Previously, the road condition was very poor and traveling was very hard. Especially when it rained heavily, it was really hard for children to walk about 2km to school and old-aged people could not go around due to the poor conditions. After an asphalt-paved road was constructed, more people pass the road to access my shop and my children enjoy going to school. It is easier to transport commodities and I can save transport cost. I am quite satisfied with the improvement in road conditions.



Woman running a small shop along the road



Standard road in the village



Project road after improvement

### 14.4.3 Contribution to Strengthening Urban Planning Governance

One of the Japans' ODA projects in the urban development sector was to strengthen urban planning governance. In the 1990s when Japan restarted its ODA, Vietnam was in the middle of transition from its old planned economy to a market-oriented economy. Urban planning administration was also required to reform the conventional approach under the planned economy and to introduce the modern urban planning approach in the middle of ongoing urbanization and socio-economic development.

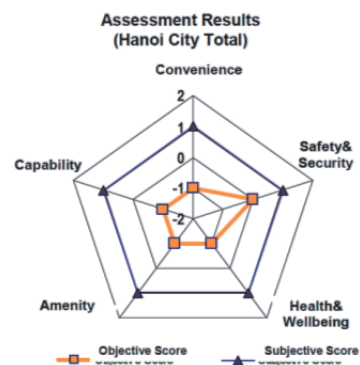
JICA applied the modern and scientific planning approach in the master plan studies such as the "Comprehensive Urban Development Programme in Hanoi Capital City (HAIDEP)" and the "Study on Integrated Development Strategy for Da Nang City and its Neighboring Area (DaCRISS)" and technical assistance in the "Urban Planning Formulation and Management Capacity Development Project (CUPCUP)." In other words, the scientific planning approach included identification of current problems and issues based on field surveys, future vision and strategies, demand analysis within the future socio-economic framework and following the infrastructure development program, and proposals on implementation mechanism, which is different from the conventional approach under the planned economy where the government established the target indicator and planning was under the top-down approach, and implemented everything. The Household Interview Survey (HIS), which was conducted in the abovementioned master plan surveys, was a very effective approach to grasping people's opinions in the city. It has been recognized as a community participation approach in urban planning to formulate consensus between an urban development program and citizens, which improved administrative management in urban planning. (Based on an interview with the person in charge of urban planning at MOC)

**Column 14-2: Household Interview Survey: Comprehensive Urban Development Programme in Hanoi Capital City (HAIDEP)**

In order to analyze urban problems and issues comprehensively, the Household Interview Survey was conducted for 20,000 households in Hanoi City. It covered people's opinions about the current problems and future needs as well as accessibility to urban services, based on a qualitative and quantitative analysis done on living conditions, transport, landscape and others. The result of the analysis reflected the people's opinion about policy formulation and project establishment. Comprehensive analysis was done by sector and region, which is summarized in the database.

This planning process using the Household Interview Survey, which was not applied in the

previous urban planning system under the planned economy in Vietnam, was highly appreciated as a participatory approach by the stakeholders of Hanoi City. The former office of MOC said, “it can be a bridge to connect policy and projects with the people in Hanoi City.”



Conducting the Household Interview Survey, Comprehensive Analysis of Living Conditions

#### 14.4.4 Community Enhancement through Inclusive Participatory Approach

As poverty reduction has been continuously identified as one of the main objectives of the Japanese aid policy since the restoration of Japan’s ODA, it ensures that all Vietnamese people including ethnic minorities can benefit by Japan’s ODA projects. In the rural development sector, the community participatory approach was applied where people in the community identified its needs, prioritized projects and implemented them on their own.

Particularly in areas with ethnic minorities or in poor rural areas, it is important to provide motivation and involve people in the development process in order to make people realize that it is not the government, but the people themselves that establish the plan and implement them. Such a participatory approach was introduced in the “Project on Capacity Development of Participatory Agricultural and Rural Development for Poverty Reduction in the Central Highlands” and the “Project on Capacity Development on Artisan Craft Promotion for Socio-economic Development in Rural Area,” which has enhanced the capacity of beneficiaries (see Column 14-3).

**Column 14-3: Assistance for Ethnic Minorities**

**“The Study of Artisan Craft Development for Rural Industrialization in the Socialist Republic of Vietnam” and “Project on Capacity Development on Artisan Craft Promotion for Socio-economic Development in Rural Area”**

Thua Chua Village and Na Sang 2 Village in Dien Bien Province received JICA’s assistance in the “Project on Capacity Development on Artisan Craft Promotion for Socio-economic Development in Rural Area,” which was followed by the pilot project, “The Study of Artisan Craft Development for Rural Industrialization in the Socialist Republic of Vietnam.”

In Na Sang2 Village, capacity enhancement was provided for the local association, which focused on the traditional handicraft of textile weaving with attractive Lao patterns and design. It provided 10 sewing machines to enable a high-quality finish processing, which was followed by technical enhancement in sewing technologies and training for product development.

In the craft center, which was developed with the support of provincial and district resources, the photo shoot by the village people shows how the village people preserve their traditional crafts. This photo was taken by the minority community and recorded by the Vietnamese Museum of Ethnology, in the “photo voice survey” conducted as a pilot project of “The Study of Artisan Craft Development for Rural Industrialization in the Socialist Republic of Vietnam.” The output of JICA’s project has been passed on to local communities.

Through these activities, the Lao ethnic people have become proud of their traditions. Coordination with local resources such as NGO and the curator of the Museum of Ethnology can ensure the sustainability of the project output, technologies and the market. The Na Sang 2 Village was also selected also as tourism site in Dien Bien Province.



Craft Center with Panel of Photo Voice



Lao Woman with traditional sewing machine



Interview with master artisan of the craft center



Interview with Lao Woman

## **14.5 Features of Japan’s ODA and Lessons Learned from Past Collaboration in Governance**

### **14.5.1 Comprehensive Approach in Urban Development**

In the process of formulating a comprehensive urban development master plan, JICA introduced “the program approach” to address current urban development issues, and formulate and share the development program with the vision and strategies that the projects are based on. With this “program approach,” urban issues are identified across sectors; and projects in various sectors are included in the common urban development master plan, which ensures long-term technical assistance to implement prioritized projects to complement the impact such as capacity development and institutional building. Sharing urban issues and future vision has promoted coordination and cooperation with various stakeholders in the urban development sector during the process of master plan formulation.

The program approach is an advantage of JICA’s assistance, which has provided various types of assistance such as loans, grant aid, development studies, and technical assistance with long-term perspective. It can flexibly respond to rapidly changing development issues and requirements of GOV and conduct necessary human resource development, thus enabling comprehensive assistance in the urban development sector.

### **14.5.2 Modern and Scientific Planning Approach and Assistance for Urban Planning Administration**

JICA consistently applied a modern and scientific approach in the formulation of the urban development master plan, including the formulation of a database based on the results of field surveys and development of plans. Although such an approach is incompatible with the existing planning system in Vietnam, it has been highly appreciated by counterpart members of GOV

and has changed their attitude on urban planning. Based on an interview with a person in charge at the Ministry of Construction and Japanese expert on the urban sector, discussions during the course of JICA's studies have changed the awareness of the people in urban planning at the Ministry of Construction and created a momentum to revise the urban planning system, although it was difficult for JICA's output to be officially approved based on the Vietnamese administrative system. Such continuous cooperation has conformed to the Vietnamese needs to reform the urban planning system in the 2000s, which was followed by the formulation of the Urban Planning Law in 2009 (effected in 2010).

### **14.5.3 From Development of Large Cities and Rural Areas to Secondary City Development**

JICA provided continuous and significant support to large cities, Hanoi city and Ho Chi Minh City, to strengthen urban competitiveness and establish an attractive urban environment. Particularly in Hanoi City and the surrounding northern regions, Japan's ODA included not only urban development projects in urban transportation and water environment through a comprehensive urban development program, but also development of international gateways and regional highways, which contributed greatly to economic development in the northern region as a whole.

In the rural development sector, JICA contributed comprehensively to improving living conditions, enhancing livelihoods and implementing regional development in the rural areas, thus alleviating regional disparity throughout the country via the "Rural Infrastructure Development and Living Standard Improvement Project", "Small-Scale Pro-Poor Infrastructure Development Project," "Capacity Development of Participatory Agricultural and Rural Development for Poverty Reduction," and other projects.

Since Vietnam is expected to undergo further urbanization, mid-scale cities, so-called secondary cities, will play an important role in absorbing an increasing urban population as a core of the regional economy and to achieve balanced development. Recognizing the need to develop major urban areas in the regions, ADB has prioritized secondary cities and conducted urban development projects in a few provincial capitals since the early 2000s.

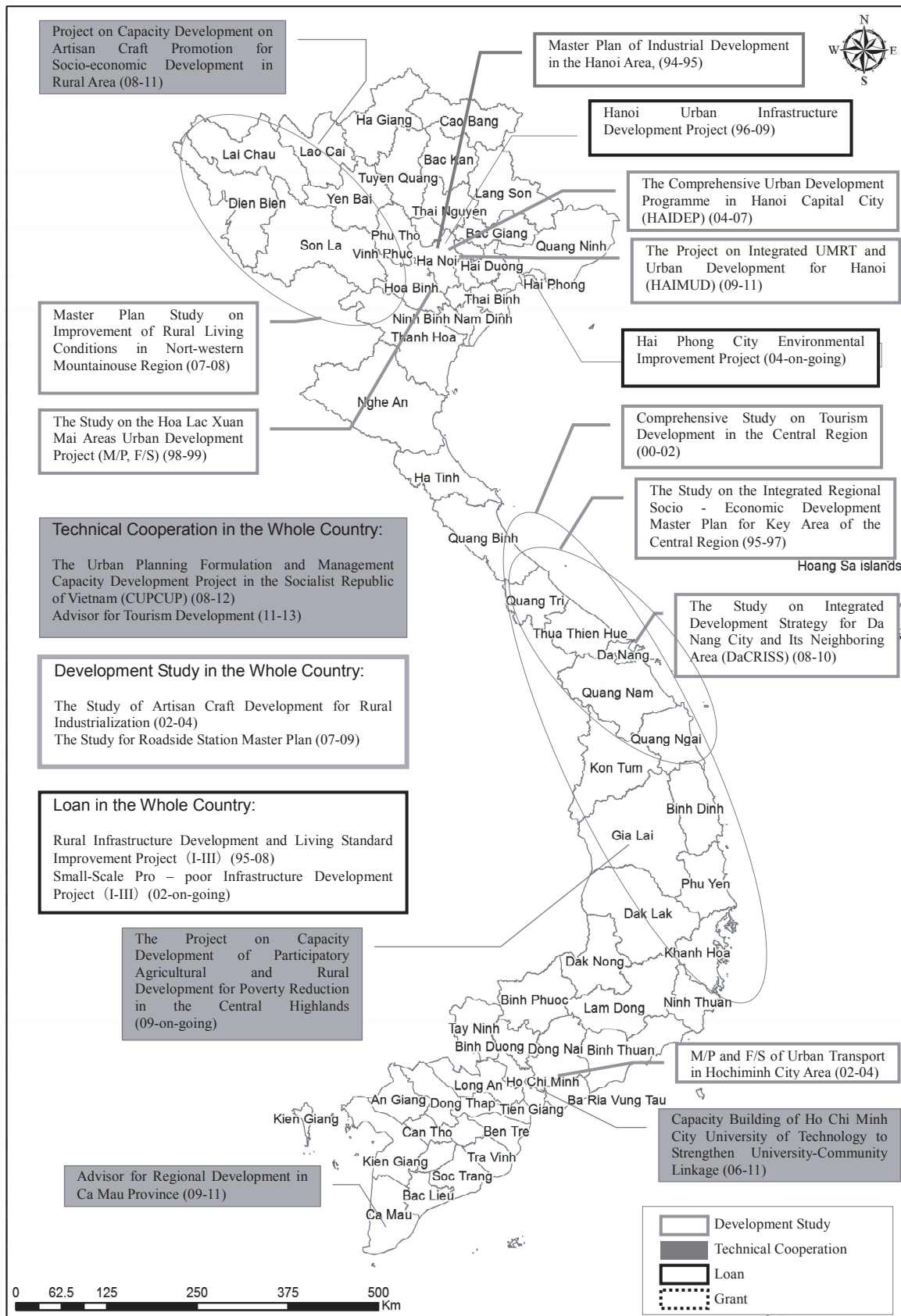
After formulating a comprehensive urban development master plan in Hanoi City, JICA implemented a capacity development project on urban planning formulation and management for the Ministry of Construction. The aim was to develop the capacity of local government officers in provincial capitals in urban planning. JICA is expected to support sustainable urban development of these secondary cities.

#### **14.5.4 Long-term Support for Rural Development**

Since rural development covers a wide range of issues, especially in poverty areas, an individual project cannot complete and achieve the objectives on its own. JICA has continuously provided comprehensive assistance including infrastructure development to respond to local needs and associated support for regional development and technical assistance. It has contributed to sustainable regional socio-economic development.

JICA's support for rural development not only provided reliable Japanese technologies, but also contributed to the capacity development of local governments and local communities on project management and evaluation. Coordination with local consultants, NGOs, and universities that are well connected with local communities and the participatory approach to identify key persons in local communities will allow the mechanism to continue and to expand the project after the completion of JICA's project.

Meanwhile, in order to ensure the effectiveness of rural development and regional development projects, the management capacity of provincial governments to overview the whole region as well as sub-project activities at the local area was targeted. In rural infrastructure development projects, some of the infrastructure such as roads, water supply or irrigation did not function well, although the infrastructure itself was completed. This was because Vietnamese commitment was not properly provided such as the counterpart fund to complete the projects, operation and maintenance, and enforcement of traffic rules. This is mainly due to the lack of financial resources by the provincial government. In view of the number of roads that was constructed and completed, a larger amount of resources is needed for operations and maintenance, particularly in the mountainous and remote areas. Although JICA's budget was mainly provided for construction, operating and maintaining resources can be ensured through JICA technical assistance projects, which will further enhance the effectiveness of a rural development project.



**Figure 14-6: Projects Sites in the Rural and Urban Development Sector in Vietnam**



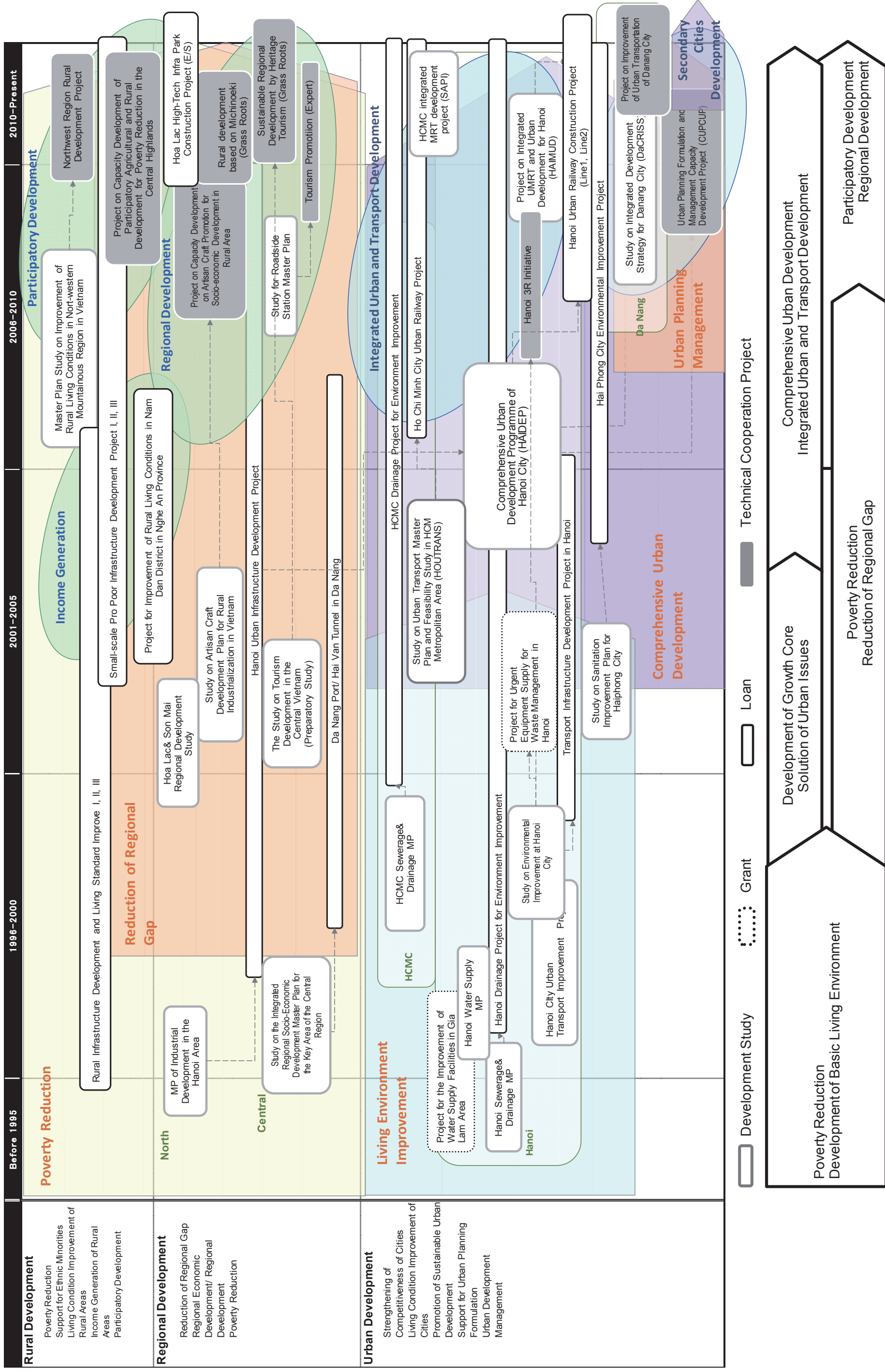


Figure 14-7: JICA Country Strategies and Projects in the Rural and Urban Development Sector in Vietnam



## CHAPTER 15: JICA VOLUNTEERS AND JICA PARTNERSHIP PROGRAM

### 15.1 Outline of the JICA Volunteer Program and JICA Partnership Program

In this chapter, the role and contribution of Japan's ODA are analyzed from the viewpoint of aid schemes, especially the JICA Volunteer Program and JICA Partnership Program, as a different approach from sector-based ODA.

#### 15.1.1 Outline of the JICA Volunteer Program

The JICA Volunteer Program aims at “tackling various problems faced by recipient countries, including poverty and the environment, to make a positive contribution to socioeconomic development through direct contact and exchanges with the people of recipient countries, while respecting the different value systems, lifestyles and cultures of individual countries.” Its major difference from technical cooperation and other schemes lies in the fact that it is “public participation” in ODA by Japanese people who want to be involved in cooperation activities in developing countries by working together with the local people. The Japan Overseas Cooperation Volunteer (JOCV) Program was established in 1965 and the Senior Volunteer (SV) Program was launched in 1990<sup>36</sup>. The assignment period is, in principle, two years for volunteers of both programs.

##### (1) Outline of the JICA Volunteer Program in Vietnam

The dispatch of JOCVs and SVs to Vietnam began in 1995 and 2001, respectively. In the early years, JOCVs were limited to teachers of Japanese language in Hanoi. As the Vietnamese side highly appreciated the sincere commitment of these early volunteers to their work, the subject fields where JOCVs were sent steadily widened.

As of July 7, 2013, the aggregate number of volunteers dispatched to Vietnam is 345 and it is ranked 41st<sup>37</sup> among 88 countries around the world for the JOCV Program and 129 ranked 16th<sup>38</sup>

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<sup>36</sup> The Senior Volunteer Program started in JFY1990 as the Senior Cooperation Experts Program by JICA and MOFA and the name was changed to the present Senior Volunteer Program in JFY1996.

<sup>37</sup> The top three countries in terms of the aggregate number of dispatched JOCVs are Malawi (1,593), the Philippines (1,518) and Kenya (1,491). Countries with a similar ranking to Vietnam are Cambodia, the Solomon Islands and Burkina Faso among others. (Based on reference materials prepared by JICA JOCV Secretariat on 6th June, 2013.)

<sup>38</sup> The top three countries in terms of the aggregate number of dispatched SVs are Thailand (295), Malaysia (253) and Indonesia (247). Countries with a similar ranking to Vietnam are Mongolia, Fiji and Mexico among others. (Based on reference materials prepared by JICA JOCV Secretariat on 6th June, 2013.)

among 72 countries for the SV Program.

The top three fields<sup>39</sup> where JOCVs were dispatched in Vietnam were education and culture (teaching Japanese language, youth activities, environmental education and others). There were 124 volunteers in education and culture, 104 volunteers in health (nurses, midwives, physiotherapists, occupational therapists and others), 66 volunteers in agriculture and fisheries (mainly rural village development assistants). In the case of SVs, the top three fields were education and culture (business management, economic/market surveys, tourism and others) and human resources (teaching Japanese language, vocational training and others). There were 56 volunteers in education and culture, 28 volunteers in commerce and tourism (commerce management, quality control and others) and 16 volunteers in planning and administration (trade, finance, fiscal administration, administrative services and others), indicating specialization in industrial and economic development.

In terms of the aggregate number of JOCVs by region, Hanoi is ranked first with 81 volunteers, followed by HCMC with 50 volunteers, Thua Thien-Hue Province with 24 volunteers, Bac Giang Province with 19 volunteers, Hoa Binh Province with 18 volunteers and Da Nang with 17 volunteers. There has been a careful balancing act to ensure that all six economic sub-regions<sup>40</sup> receive JOCVs. Meanwhile, SVs have been primarily dispatched to such major cities as Hanoi (76), HCMC (32) and Da Nang (17).

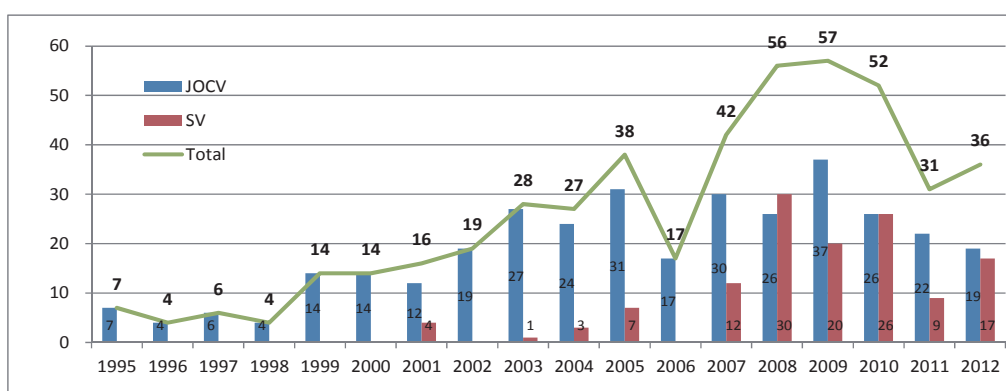
## (2) Trends of the JICA Volunteer Program in Vietnam for the Last 20 Years

As shown in Fig. 15-1, after the first dispatch of seven JICA volunteers in 1995, there was a gradual increase followed by a rapid increase to 38 volunteers in 2005. This rapid increase is attributed to Japan's Country Assistance Program for Vietnam (2004) that clearly identified "the promotion of public participation in ODA through the participation of NGOs, universities, local governments and business organizations" in Japan's ODA process for Vietnam. Although the number of dispatched volunteers was smaller in 2006, it increased to around 40 volunteers in 2007 due to an increase of SVs. After hitting a peak of 57 volunteers in 2009, the number of dispatched volunteers has since declined.

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<sup>39</sup> In this study, the JICA Volunteers are classified by the field based on the occupation determined by JICA.

<sup>40</sup> 6 zonal classification is adopted when region-wise analysis is conducted in this study (Table 1-1).



(Source: Prepared by the Study Team using the materials provided by JICA JOCV Secretariat on 7th July, 2013)

**Figure 15-1: Aggregate Numbers of JOCVs and SVs to Vietnam (1995 to 2012)**

**Table 15-1: Aggregate Number of Dispatched JOCVs by Field and Year (1995 to 2013)**

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Education & Culture	7	4	6	4	6	6	4	8	7	5	12	8	7	7	17	8	2	4	2	124
Health					1	4	3	4	7	9	10	1	16	6	11	8	13	8	3	104
Sports					7	3	5	4	2	5	1	3	3	2			1			36
Civil Engineering & Construction						1		1	2	1	1			2	1	2	1			12
Agriculture & Fisheries								2	9	4	7	5	4	8	8	8	5	6		66
Planning & Administration														1				1	1	3
Grand Total	7	4	6	4	14	14	12	19	27	24	31	17	30	26	37	26	22	19	6	345

(Source: Prepared by the Study Team using the materials provided by JICA JOCV Secretariat on 7th July, 2013)

**Table 15-2: Aggregate Number of Dispatched SVs by Field and Year (2001 to 2013)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Commerce & Tourism	2			3	6		8	9						28
Planning & Administration	1							5	2	5	1	2		16
Public Works	1													1
Human Resources, Education and Culture			1				4	10	11	16	3	11		56
Civil Engineering & Construction								3	3			1		7
Agriculture & Fisheries								1	2		1			4
Health								2		1				3
Processing									2	2	3	1		8
Maintenance Operation										2	1	2		5
Mining & Manufacturing					1									1
Grand Total	4	0	1	3	7	0	12	30	20	26	9	17		129

(Source: Prepared by the Study Team using the materials provided by JICA JOCV Secretariat on 6<sup>th</sup> June, 2013)

The trends in the volunteers dispatched according to field from 1995 to the present were analyzed for the three periods of (1)1995 to 2000, (2) 2001 to 2005, and (3) 2006 to 2012<sup>41</sup> based on Vietnam's Five Year Socio-Economic Development Plans (SEDPs).

1) Dispatch of Primarily Japanese Language Teachers (1995 to 2000)

Only Japanese language teachers were dispatched to Vietnam under the JOCV Program up to 1998. 1999 saw the dispatch of JOCVs in such fields as health (one nutritionist) and sports (seven coaches). In 2000, one JOCV was dispatched in the architecture and civil engineering field. The SEDP 1991-1995 and SEDP 1996-1999 listed "the establishment of a comprehensive health care system" and "the promotion of health through community participation" as priority agendas in the health sector.

2) Gradual Expansion of Assisted Fields through Promotion of "Public Participation" in Japan's ODA to Vietnam (2001 to 2005)

The number of dispatched volunteers rapidly increased between 2001 and 2005 based on a clear identification of "the promotion of public participation in ODA through the participation of NGOs, universities, local governments and public interest corporations" as the approach to implementing Japan's ODA for Vietnam under Japan's Country Assistance Program for Vietnam (2004). In the health field, many more nurses, midwives, physiotherapists and occupational therapists were dispatched. In the architecture and civil engineering field, JOCV architects contributed to preserving the ancient townscape of Hoi An, a World Cultural Heritage Site, from 2003 onwards. In the agriculture, forestry and fisheries field, rural development assistants have been continually dispatched since 2002.

Meanwhile, the dispatch of SVs was primarily directed at the commerce and tourism field. The SEDP 2001-2005 emphasized structural reform of the economy, strengthening competitiveness, integration with the international economy and training of personnel along with human resources development and generating employment creation for poverty reduction. Such perceived direction for the national development of Vietnam likely formed the background for the dispatch of SVs designed initially to assist the Vietnam's economy and industries.

3) Full-Scale Dispatch of SVs and Growing Linkage between the JICA Volunteer Program and Priority Issues in Japan's assistance for Vietnam (2006 to 2012)

From 2006, the number of volunteers dispatched to Vietnam increased. In 2007, the number of dispatched SVs exceeded 30 a year with the addition of human resources/education and culture,

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<sup>41</sup> From the viewpoint of the SEDP, this period is divided into 2006- 2010 and 2011 - 2015.

architecture and civil engineering, agriculture and fisheries, health, processing and maintenance operation fields to the more conventional commerce and tourism fields. Since 2008, the dispatch of JICA volunteers to Vietnam was required to be linked to the priority issues listed in the Japan's Country Assistance Program for Vietnam. In the health field, there were three priority themes: (i) qualitative improvement of nursing (JV were dispatched to Bach Mai Hospital, Cho Ray Hospital, Ninh Binh Provincial Children's and Maternity Hospital and many others), (ii) maternal and child health (JV were dispatched to An Giang Provincial Health Services and Reproductive Health Center and Hoa Binh Provincial Health Services) and (iii) medical rehabilitation service (JV were dispatched to Cho Ray Hospital, An Giang Provincial Hospital and many others). In collaboration with the Technical Cooperation Scheme and the JICA Partnership Program, many volunteers were dispatched to "improve the quality of medical care"

In the agricultural and rural development field, volunteers were dispatched to Hoi An, Duong Lam in Hanoi, Thua Thien-Hue Province and other places in collaboration with the JICA Partnership Program based on the positive experience that the continued dispatch of JOCV architects, who contributed to the preservation of the ancient townscape of Hoi An. In the case of Halong Bay and Hoi An where environmental conservation had become an urgent theme in the face of growing tourism, JOCVs specializing in environmental education were dispatched to meet the local needs in collaboration with technical cooperation as well as JICA Partnership Program in these areas.

For Vietnam which aims at becoming an industrialized country by 2020, it is essential to move to an advanced industrial structure with vigorous supporting industries; and Japanese assistance is required for the development of the private sector and human resources. To meet these needs, SVs specializing in the promotion of supporting industries have been dispatched to Hanoi and HCMC since 2010.

The dispatch of volunteers in collaboration with the private sector, which was formalized in 2012, is a new scheme and a prime example of Vietnam's pioneering role in the JICA Volunteer Program.<sup>42</sup> Under this new scheme, volunteers have been dispatched for environmental education (Hoi An) and community development (Duong Lam in Hanoi).

### **15.1.2 Outline of the JICA Partnership Program**

JICA Partnership Program was first introduced in 2002. The program aims to implement development projects in developing countries planned by Japanese development partners,

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<sup>42</sup> 10 volunteers have so far been dispatched worldwide under this new scheme. An agreement for volunteer dispatch has been concluded with more than 20 countries. In 2011, Vietnam and Cambodia acted as pilot countries for the scheme.

mainly NGOs, local governments and universities, based on their accumulated experiences and technologies in development at the grassroots level.

The selection process for suitable projects emphasizes (i) technical cooperation via persons, (ii) direct contribution to improving the lives and livelihoods of the people of developing countries and (iii) assistance by Japanese organizations to create the opportunity for Japanese people to understand and participate in international cooperation.

There are three types of JICA Partnership Program projects as shown in Table 15-3 depending on the type of implementing Japanese organization and project scale.<sup>43</sup>

**Table 15-3: Three Types of JICA Partnership Program Projects**

Type	Subject Implementing Japanese Organizations	Outline of Subject Projects
Local Government Type	A project proposal is made by a local government (can be implemented by an organization, etc. which collaborates with the proposing local government).	<ul style="list-style-type: none"> <li>• Primarily the dispatch of personnel and the acceptance of trainees.</li> <li>• The project period is three years or less.</li> </ul>
Support Type	Non-profit organizations, such as NGOs, universities and public benefit corporations, which have little experience of international cooperation	<ul style="list-style-type: none"> <li>• The total project cost is 25 million yen or less.</li> <li>• The project period is three years or less.</li> </ul>
Partnership Type	Non-profit organizations, such as NGOs, universities and public benefit corporations, which have rich experience of international cooperation	<ul style="list-style-type: none"> <li>• The total project cost is 100 million yen or less.</li> <li>• The project period is five years or less.</li> </ul>

(Source: JICA website)

(1) Outline of the JICA Partnership Program in Vietnam

Although the JICA Partnership Program was offered to Vietnam for the first time in JFY2003, JICA had previously provided assistance for the cooperation activities of Japanese NGOs, universities and other organizations in Vietnam as part of the ODA under the preceding Community Empowerment Program which was launched in JFY1998. 80 projects have so far been approved and implemented between JFY1998 and the present (72 of which are the JICA Partnership Program).

By implementing Japanese organization, local governments are ranked first with 45 projects, followed by NGOs with 23 projects and universities with 12 projects. By field, the natural

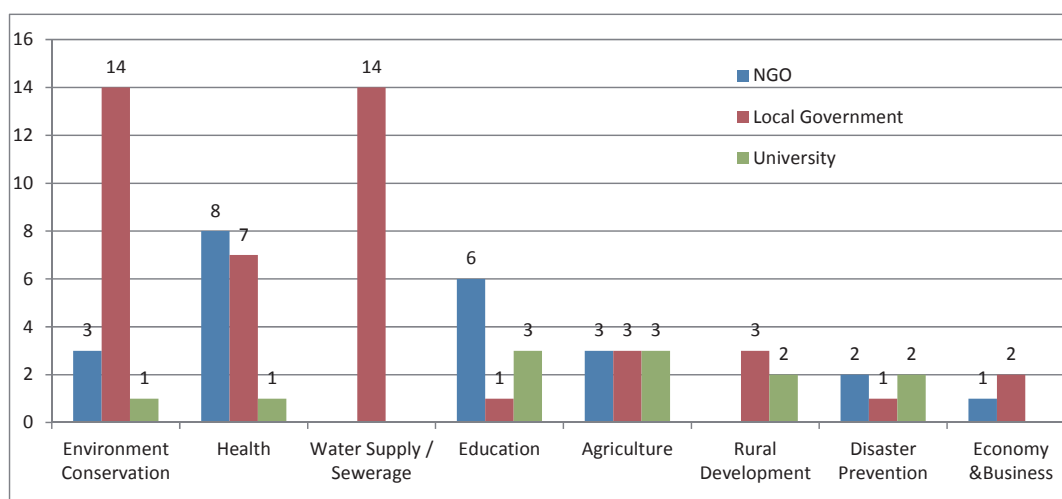
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<sup>43</sup> The JICA Partnership Program was preceded by the Community Empowerment Program launched in JFY1997, the Partnership Program launched in JFY1998 and the Small-Scale Development Partner Program launched in FY 2000. The JICA Partnership Program introduced in FY 2002 integrates all of these programs.



environment is the most popular field with 18 projects, followed by health with 16 projects, water supply and sewerage with 14 projects, education with 10 projects, agriculture with 9 projects, rural development with 5 projects, disaster prevention with 5 projects and economy and business with 3 projects as shown in Table 15-2. All water supply and sewerage projects and 14 out of the 18 natural environment projects have been implemented by local governments. NGOs have a large share of health and education projects. Universities have implemented one to three projects in each field except for the water supply and sewerage field and the economy and business field.

By area, Hanoi is ranked first with 21 projects, followed by HCMC with 12 projects, Thua Thien-Hue Province with 12 projects, Hai Phong with 10 projects, Da Nang with 5 projects and Quang Nam Province with 5 projects, indicating a high concentration of projects in centrally controlled municipalities and key provinces even though the JICA Partnership Program does not have any priority area for assistance in Vietnam. NGOs tend to operate in areas where they have traditionally operated while local governments tend to operate with JICA assistance in those areas with which they have a sister city or friendship city agreement.



(Source: Prepared by the Study Team using information provided by JICA Knowledge and JICA Partnership Program Websites)

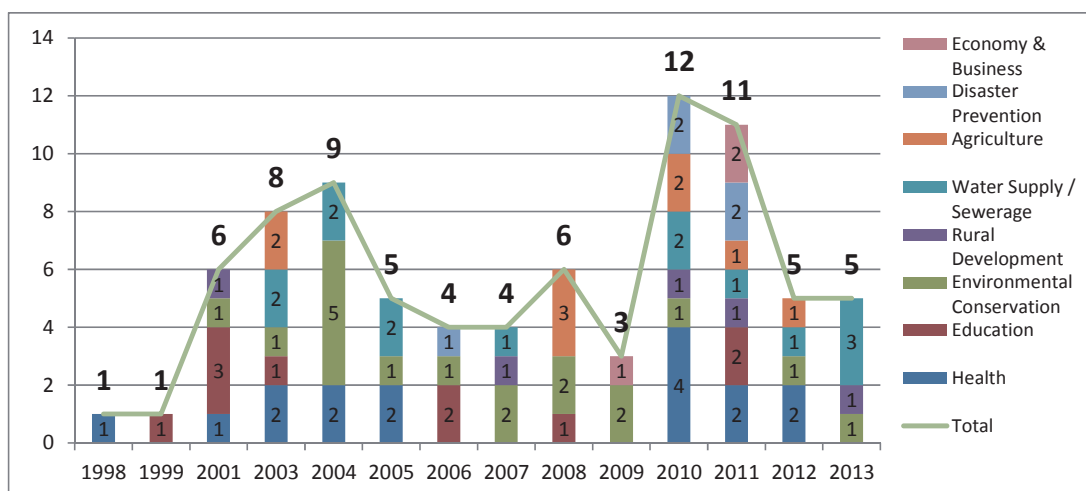
(Note: For the period from JFY1998 to 2001, projects were implemented under the Community Empowerment Program, Partnership Program or Small-Scale Development Partner Program.)

**Figure 15-2: Number of the Projects of JICA Partnership Program in Vietnam (by Field and Implementing Japanese Organization)**

(2) Trends of JICA Partnership Program in Vietnam from JFY1998 to the Present

As described earlier, the JICA Partnership Program for Vietnam started in JFY2003. This section analyzes the trends of such cooperation from JFY1998 when the preceding program was launched to the present. Based on the periodization employed for the five year socio-economic

development plan of Vietnam, the subject period for analysis is divided into (1) from JFY1998 to 2000, (2) from JFY2001 to 2005, (3) from JFY2006 to 2010 and (4) from JFY2011 to the present (see Figure: 15-3).



(Source: Prepared by the Study Team using information provided by JICA Knowledge and JICA Partnership Program Websites)

(Note: For the period from JFY1998 to 2001, projects were implemented under the Community Empowerment Program, Partnership Program or Small-Scale Development Partner Program.)

**Figure 15-3: Chronology of the Projects of JICA Partnership Program for Vietnam (by Field and Year) (JFY1998 – 2013)**

1) Pioneering Period for JICA Partnership Program: Principally Health and Education (JFY1998 to 2000)

In JFY1998, the “Integrated Child Nutrition Project (Save the Children Japan)” was implemented in Tinh Yen Bai Province under the Community Empowerment Program. In JFY1999, the “General Welfare Supporting Project for Children” was implemented in Hue City (Japanese Association Vietnam of Supporting Street Children’s Homes) under the Development Partnership Program.

The SEDP 1996 – 2000 listed health and education among its priority fields and called for “the promotion of health through resident participation” in the health field. In the field of education, the achievement of universal literacy was a major priority. Following the examples of the two projects above, new projects were implemented in such fields as health, education, rural development and the environment to respond to the needs identified in the SEDP.

2) Full-Scale Commencement of JICA Partnership Program: Participation of Local Governments and Expansion of Target Fields (JFY2001 to 2005)

JFY2001 saw the start of the Promotion of Adult Literacy for Sustainable Community Development in the Northern Mountain Region of Vietnam (National Federation of UNESCO Associations in Japan: NFUAJ) in Lai Chau Province and the “Project for Improvement of Preservation and Restoration Technology for Traditional Folk Houses (Showa Women’s University)” in six provinces, including Hue, Quang Nam and Bac Ninh. As part of the latter, a house which was designated as a cultural asset in Hoi An was restored. In the same year, four small-scale development partner projects in the health, education and environment fields were approved.

The JICA Partnership Program began in JFY2003, paving the way for international cooperation by Japanese local governments. In the fields of health and education, the “Integrated Child Development Program in Vietnam (Save the Children Japan)” and the “Project for Promotion of Community Learning Centre in the Northern Mountainous Region (NFUAJ)” were implemented, having succeeded similar previous projects. Meanwhile, the Hyogo Prefectural Government provided assistance for pediatric and neo-natal care in Hanoi. In JFY2005, the Shiga Association of Radiological Technologists began assistance for medical technologies at Cho Ray Hospital.

JFY2003 also saw the start of projects backed by local governments in the agricultural field (2 projects) and the environment field (5 projects). In the water supply and sewerage field for which assistance was dominated by local governments, the Yokohama Waterworks Bureau launched the “Water Supply Business Improvement Project” (HueWACO in JFY2003 and HueWACO and HCMC Water Corporation in JFY2004 through 2005). The Tokyo Metropolitan Government implemented the “Project for the Training of Sewerage Maintenance Engineers in Hanoi.” Many local governments in Japan had a link or network with Vietnamese cities or provinces as sister cities/provinces and JICA began to provide assistance for their international cooperation efforts as part of Japan’s ODA.

The Country Assistance Program for Vietnam (2000), which was formulated based on Vietnam’s needs, listed agriculture, rural development, education, health and the environment as priority fields. In the field of health, the program called for an expansion of the health service based on Primary Health Care (PHC) and strengthening of the core hospital functions in Hanoi. These projects have been selected with emphasis on the initiative of Japanese people while taking the priority issues into consideration.

3) Response to New Themes, Such as Support for the Socially Disadvantaged, Disaster Prevention and the Environment (JFY2006 to 2010)

The health field saw the start of the “Project to Assist Physically Handicapped People through Local Rehabilitation and their Empowerment” (International University of Health and Welfare)

while the education field saw the start of the “Capacity Building Program in the Field of Special Needs Education in Chiba Prefecture and Vietnam” (Chiba Prefectural Government) in JFY2006 with Hanoi National University of Education acting as the counterpart organization. The latter was subsequently inherited by Ritsumeikan University and is still continuing today.

In the field of the environment, a number of cooperation projects have been implemented in many cities and provinces in Vietnam by Japanese local governments since JFY2006. Prior to JFY2006, Japanese assistance for the environment primarily focused on general environmental conservation and environmental issues. After JFY2006, projects featuring concrete problems faced by individual cities began to be formulated. Typical examples are the “Plan and Operation of the Program to Promote Awareness of 3R for Solid Waste” (Naha City Model) for Hoi An (Okinawa Prefecture Government) in JFY2008, “Project to Support for Building a Recycle-Oriented System Involving Local Residents in Halong Bay Area” (Osaka Prefecture University) and “Environmental Improvement Activities Through Cleaner Production in Haiphong City” (Kita-Kyushu Municipal Authority) in JFY2009.

In the field of agriculture, a university began assistance for the Mekong Delta in JFY2008 while local governments continued their assistance for Vietnamese cities. In JFY2006, the disaster prevention field was newly added as Kyoto University launched a project entitled “Enhancing Community Resilience and Livelihood Security to Cope with Natural Disasters in Central Vietnam” (Thua Thien-Hue Province) and the number of projects in this field grew thereafter. In the economy and administration field, one project was approved each year from JFY2008.

The SEDP 2006-2010 strongly called for economic growth and industrial development to make Vietnam depart from being a low income country. It also clearly stipulated the establishment of a social security system. Against this background, there was a strong need in the environment field to concretely deal with environmental problems originating from industrial and economic development. In the health and education fields, there was growing emphasis on assistance for the medical rehabilitation and empowerment of handicapped people and education for mentally handicapped people.

The approval of projects featuring the Mekong Delta area in this period is presumably linked to the emphasis of the Country Assistance Program for Vietnam (2009) in the northern mountainous area, central highland region and Mekong Delta area to redress the disparities between urban and rural areas and also between different ethnic groups.

4) Continued Response to New Themes: Collaboration with JICA Volunteers Program and JICA Partnership Program (JFY2011 to the present)

The 2010's saw the simultaneous implementation of up to seven projects a year in the health field. The recipient areas were widened to include Hai Phong and Da Nang in addition to the more conventional northern mountainous area, Hanoi and HCMC. A project designed to train medical professionals also started. Since JFY2009, Japan's administration led by the Democratic Party of Japan has adopted a policy of demanding linkage between JICA Volunteers and JICA Partnership Program and the priority issues listed in the Country Assistance Program.

In the education field, Ritsumeikan University has continued the "Project for Developing and Expanding Education Programs for Children with Intellectual Disabilities in Order to Raise the School Attendance Rate in Vietnam" in Hanoi, HCMC and Da Nang. One NGO is implementing "The Project for Establishment of Training System on Inclusive Education in Dong Nai Province". These projects appear to respond to the actual needs of Vietnam as both Japan's Country Assistance Policy for Vietnam (2012) and the SEDP 2010 - 2015 of Vietnam call for assistance for socially vulnerable people.

In the rural development field, Showa Women's University has been implementing the "Project to Promote Self-Sustaining Community Development in Vietnam through Heritage Tourism" since JFY2011 in Hanoi, Thua Thien-Hue Province and Tien Giang Province. Showa Women's University has been consistently contributing to the preservation of the townscape of Hoi An and it aims to apply the experience of tourism development in Hoi An to other cities in Vietnam.

In the environment field, projects assisting Halong Bay, Hoi An and Hai Phong are continuing. In the field of water supply and sewerage, a number of Japanese local governments have continually provided assistance for Vietnamese cities/provinces. Some examples are the Tokyo Metropolitan Government and Chiba Prefectural Government for Hanoi, Kita-Kyushu Municipal Authority for Hai Phong, Osaka Municipal Authority for HCMC and Kobe Municipal Authority for Kien Giang Province. The Kita-Kyushu Municipal Authority also implemented the Program to Improve Plant Management of Manufacturers in Hai Phong. In the disaster prevention field, the Ehime Prefectural Government, the Graduate School of Kyoto University and a NGO have been implementing their own projects, suggesting a positive response of Japan to its own Country Assistance Policy for Vietnam (2012).

## **15.2 Contribution of Japan's ODA through JICA Volunteers and JICA Partnership Program**

In this section, the (i) achievements of collaboration between the JICA Volunteer Program and JICA Partnership Program for the preservation of the townscape and tourism development in Hoi An, (ii) achievements of cooperation between the Hue Construction and Water Supply

State-Owned Company Limited (HueWACO) and Yokohama Waterworks Bureau, and (iii) Long-term and continual dispatch of JICA Volunteers (Japanese Language Education and Occupational Therapy) are introduced as symbolic examples of contributions made by JICA Volunteer Program and the JICA Partnership Program to not only Vietnam but also Japan.

### **15.2.1 Case Study 1: “Collaboration between JICA Volunteer Program and JICA Partnership Program for Preservation of Townscape and Tourism Development in Hoi An”**

Following the designation of Hoi An as a cultural asset by GOV in 1985, Japan has continually provided assistance for Hoi An for 20 years since its initial tourism development activities for the preservation of this cultural asset. The main body of this continued assistance has been changing from the private sector to university and further to ODA (dispatch of experts, JOCV and JICA Partnership Program) in the midst of the major current of rapid economic development and a sharp increase in Hoi An’s visibility after its designation as a World Cultural Heritage Site in 1999 and the subsequent emergence of environmental problems.

#### (1) History of Japanese Assistance for Preservation of Townscape of Hoi An

In 1985, GOV designated Hoi An as a cultural asset. The *Doi Moi* Policy introduced in 1986 accelerated economic development. Hoi An received an increased number of tourists and a new local trend of replacing old buildings with new buildings began to emerge in the late 1980s to the 1990s. Sensing the danger of losing such a historic townscape, GOV made a request to Japan, Poland, the Netherlands, China and other countries to provide cooperation for the preservation of the townscape. Japan was then selected as a principal aid country because of its superior skills in regard to the restoration of wooden houses, the existence of a Japan Town in Hoi An and other reasons.

## (2) Outline of Japan's Assistance for Hoi An from 1993 to the Present

In 1991, representatives of the Agency for Cultural Affairs and a research institute visited Hoi An to check its townscape. In the following year of 1992, a university team (with the participation of several universities and its secretariat being set up at Showa Women's University) began a townscape and archaeological study. Based on the findings of this study, restoration work was implemented in 1993 through 2001 with the financial support of Japanese private enterprises and others. In the first two years, the mayor of Hoi An did not allow any restoration work except by the Japanese team so that the Japanese restoration techniques could be well understood by the local community. Starting in 1997, JICA dispatched experts under the technical cooperation scheme. A total of six experts (in the fields of archaeology, building restoration and awareness-raising of residents) were dispatched JFY2003.



The ancient town of Hoi An is inscribed on the World Cultural Heritage List. (Photographed by a visiting study team member)

The designation of Hoi An as a World Cultural Heritage Site in 1999 changed the character of the city, making it more tourism-oriented, and the perception of the city on the part of its citizens gradually changed as well. The "Project for Improvement of Preservation and Restoration Technology for Traditional Folk Houses" (Showa Women's University), which was implemented under the JICA Development Partner Program from JFY2000 to 2003, targeted cultural assets in six provinces. One building in Hoi An in Quang Nam Province was selected for



The ancient town of Hoi An viewed from the opposite bank of Thu Bon River. According to tourists, the river water has become murkier than ever before. (Photographed by a visiting study team member)

immediate restoration and the relevant techniques were transferred. Meanwhile, JOCVs were continually dispatched to Vietnam from JFY2003 to the present (four generations in the architecture field, four generations in the environmental education field and one volunteer each in the environmental education through public-private collaboration and tourism fields).

The Okinawa Prefectural Government and the Okinawa Citizens' Recycling Movement have been implementing the Plan and Operation of the Program to Promote Awareness of 3R for Solid Waste (Naha City Model) since JFY2008 and the Hoi An Naha Model Solid Waste Management Project since JFY2012. In recent years, Japanese assistance for Hoi An has increasingly featured a response to environmental loads (solid waste and waste water) resulting from tourism development along with the preservation of cultural assets.

### (3) Analysis of Role and Contribution of Japan's ODA for Hoi An

Japan's assistance for Hoi An has consistently been characterized by personnel input under the JICA Volunteer Program and JICA Partnership Program instead of relying on massive funding under the Technical Cooperation Scheme, ODA Loan Scheme and/or Grant Aid Scheme. Despite the modest outlook of the programs involved, Japan's assistance can be said to have made a major contribution to the society and economy of Vietnam because of the great improvement in the visibility of Hoi An as a tourism resort by Japan's contribution to the designation of Hoi An as a World Cultural Heritage Site and also because of its significant economic impact.

#### 1) Impact on Visibility

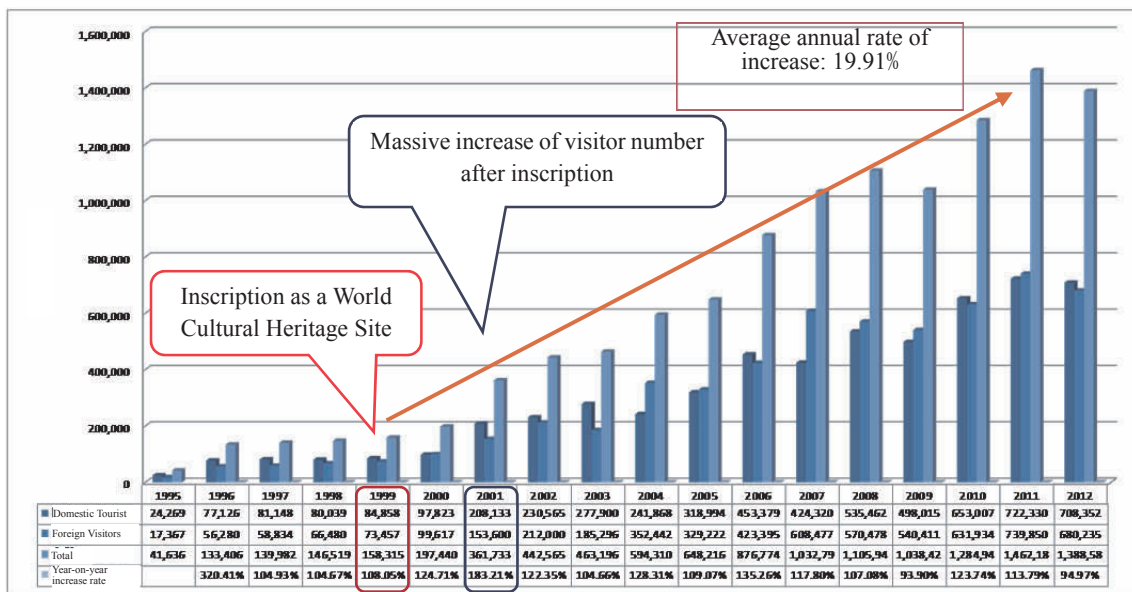
According to the Hoi An Centre for Monument Management and Preservation, which acts as the counterpart for Japanese assistance projects for Hoi An, the largest positive impact for Hoi An has been the preservation of the townscape of Hoi An, which was achieved through cooperation between Japanese and Vietnamese experts that won the UNESCO Asia-Pacific Award for Cultural Heritage Conservation following its designation as a World Cultural Heritage Site in 1999. Wanderlust Travel Magazine in the UK ranked Hoi An as the top tourist destination in the city category in 2013 above Kyoto (ranked third).

#### 2) Economic Impact

In the early 1990s, the number of tourists visiting Hoi An was around 2,000 to 3,000 a year. Following its designation as a World Cultural Heritage Site in 1999, the number of visitors rapidly increased, exceeding 1.46 million in 2011. The average annual increase rate since 2000 has been as high as 19.9%.

Hoi An was originally a town which relied on local agriculture and fisheries. The combined share of tourism and the service industry in the GDP of Hoi An passed the 50% level in 2000 and the 60% level in 2005. While the GDP of Hoi An increased 6.8 times from 133,006 million VND in 1995 to 906,986 million VND in 2010, the combined revenue of tourism and the service industry increased 12.4 times in the same period from 44,316 million VND to 551,178 million VND.





(Source: Quoted from materials prepared by K. Ando, a tourism development advisor)

**Figure 15-4: Historical Trends of Visitor Numbers to Hoi An**

The size of the tourism-related working population doubled in five years from 4,578 in 2005 (total working population: 50,186) to 8,706 in 2010 (total working population: 57,641), indicating the creation of new jobs (based on materials prepared by K. Ando, a tourism development advisor).

These impacts on Hoi An in terms of economy and visibility are highly valued by the UNESCO. In particular, the preservation of the buildings of the ancient town, which is designated as a World Cultural Heritage Site, is the result of Japanese assistance and local funding. As this ancient town has been the base for tourism (economic) development in Hoi An, Japan's contribution in terms of economic impact has been quite substantial.

#### (4) Advantage of Japanese Assistance over Other Donors

The Hoi An Center for Monument Management and Preservation points out a major difference between Japan's assistance and the assistance of other donors in that Japan provides both financial and technical cooperation while other donors (Canada, the Netherlands, the US and others) simply provide financial cooperation with the termination of assistance at the end of the financial cooperation period. Such dual assistance has been a major factor for Hoi An's phenomenal development. The center also highly evaluates the training of Vietnamese experts by Japanese organizations, including JICA as having made an important contribution.

#### (5) Future ODA Status of Hoi An and Desirable Japanese Assistance

According to the tourism development advisor, Hoi An has almost reached the graduation stage

as far as Japan's ODA is concerned. At present, Hoi An has begun to play a role of transferring its knowledge and experience to other pilot areas for tourism development in Vietnam.

In 2011, GOV formulated the Urban Development Master Plan for Hoi An and work is in progress to extend the urbanization and development beyond the municipal boundary of Hoi An. The municipal authority is planning to develop the city as an eco-city, the concept of which incorporates the preservation of tourism resources and suburban development. The center's own evaluation of the status of Hoi An is that "the city is facing a new phase in terms of urban and tourism development. There is new critical thinking about the way to preserve cultural assets from the viewpoint of sustainable development. It is hoped that Japan will continue to offer its own experience to the city of Hoi An and also advice on the development vision for Hoi An."

In 2013, GOV has requested to Japan for grant aid to implement "Water Quality Improvement Project for Japanese Bridge Area, Hoi An, Vietnam"

**Column 15-1: Example of Collaboration between the JICA Partnership Program and JOCV Program for Solid Waste Reduction by Hoi An Municipal Authority and Okinawa Prefectural Government**

JOCVs specializing in environmental education have been dispatched from JFY2007 to the present to Hoi An where environmental conservation has become an urgent issue following a rapid increase of the number of tourists in recent years. Joint efforts have been made by Hoi An and Japan to reduce the volume of waste, including the Plan and Operation of the Program to Promote Awareness of 3R for Solid Waste (Naha City Model) since JFY2008 and the Hoi An Naha Model Solid Waste Management Project since JFY2012, both of which have been jointly implemented by the Okinawa Prefectural Government and Okinawa Citizens Recycling Movement.



In and around the Ancient town of Hoi An, litter bins for separate waste collection have been placed every several tens of meters. (Photographed by a visiting study team member)

An official of the Hoi An Resources and Environment Bureau explains that "Using the Naha model, Hoi An has developed its understanding of solid waste management; and its approach to solid waste, waste water and air pollution has been transformed through training in Japan. Especially since the visit to Naha City by the Mayor of Hoi An (Le Van Giang) to obtain first-hand knowledge of environmental conservation activities,

active effort has been made to apply the Naha Model to Hoi An.” He also praises the field work of the JOCVs in addition to their desk work and their sincere commitment that has had a positive impact on the work morale of the citizens of Hoi An.

Litter bins for separate waste collection have been placed in and around the ancient town of Hoi An based on the new knowledge acquired in Japan and an awareness-raising campaign has been launched targeting its citizens.

### **15.2.2 Case Study 2: “Cooperation between HueWACO and Yokohama Waterworks Bureau”**

#### **(1) History of Cooperation between HueWACO and Yokohama Waterworks Bureau**

The Yokohama Waterworks Bureau is a water supply utility which introduced the first modern water supply service in Japan. Following the dispatch of its staff members to Afghanistan in JFY1973, the Bureau has provided international cooperation for water service providers in various countries.

The cooperative relationship with Hue began when one trainee was invited from Hue to the Bureau in JFY1999. The Bureau conducted a study in Dong Nai Province in JFY1999 and HCMC in JFY2000 together with other major water supply utilities in Japan (Sapporo, Tokyo, Nagoya and Kita-Kyushu). The Bureau also implemented the project under the JICA Partnership Program (acceptance of trainees and dispatch of Japanese experts) through cooperation with the HueWACO in JFY2003 and the HueWACO and HCMC Water Corporation in JFY2004 and 2005, contributing to the capacity building of the staff members of the HueWACO, etc. This history and the relationship of trust with the Director of the HueWACO culminated in the launch of the “Project for Human Resources Development for the Water Sector in the Middle Region of Vietnam,” a technical cooperation project of the Yokohama Waterworks Bureau and HueWACO in JFY2006. This project then developed into the “Project for Human Resources Development for Urban Water Supply Utilities in the Central Region” in JFY2010. This project was designed to develop human resources for 18 water supply utilities in the central region while disseminating the knowledge accumulated by the HueWACO. This project was the first JICA technical cooperation project implemented solely by a single local government in Japan.

#### **(2) Analysis of Role and Contribution of Japan’s ODA to Vietnamese and Japanese Society**

In June 2008, during the implementation period of the technical cooperation project but after the completion of the JICA Partnership Program, the Hue Municipal Authority declared “safe

municipal water.” This was followed by a similar declaration by the provincial government of Thua Thien-Hue in August 2009. These marked the first announcements of “clean municipal water which is drinkable” in Vietnam.

The biggest contribution of Japan’s assistance for Hue is believed to be the advancement of “grassroots technical cooperation” initiated by the Japanese public to a “technical cooperation project” of which the implementation required a request by the developing country, resulting in the provision of safe drinking water throughout Thua Thien-Hue Province. Interviews with staff members of the Yokohama Waterworks Bureau found that the establishment of a relationship of trust between the Bureau and the HueWACO led to raised awareness on the part of staff members of the Bureau and the vitalization of the entire Bureau because of its involvement in human resources development activities, ultimately resulting in improvement of the quality of the water supply service for citizens of Yokohama. Such an outcome constitutes a contribution to Japan, capitalizing on the characteristic of a “public participatory project.”

### **15.2.3 Case Study 3: “Long-term and Continual Dispatch of Plural JICA Volunteers (Japanese Language Education and Occupational Therapy)”**

#### (1) Japanese Language Education

##### 1) Background of Dispatch of Volunteers for Japanese Language Education

Approximately 46,000 people are learning the Japanese language in Vietnam (2012), putting Vietnam in 8<sup>th</sup> place on the global table.<sup>44</sup> The number of Vietnamese people learning the Japanese language has been increasing for the purpose of finding employment with a Japanese-affiliated enterprise or seeking promotion against a background of growing economic and cultural exchanges with Japan. The Japanese language has been designated the primary foreign language to be studied at some secondary schools. The increasing importance of the Japanese language in the educational system in Vietnam is illustrated by the fact that a Japanese language course has been introduced by many universities since 2005 with the introduction of the first master’s degree course in the Japanese language in 2009. Although the dispatch of volunteers for Japanese language education by JICA is not listed as a priority issue in Japan’s Country Assistance Program for Vietnam, it has been continuing with the growing popularity of learning the Japanese language and the institutionalization of such learning in Vietnam’s educational system. The number of JICA volunteers since the first dispatch in 1995 to the present is as high as 76 (61 JOCVs and 15 SVs). Their main places of assignment are (1) the University of Languages

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<sup>44</sup> Japan Foundation, preliminary results of the “Survey on Japanese Language Education Abroad 2012”

and International Studies - Vietnam National University, Hanoi (ULIS), (2) Hanoi University of Foreign Trade and (3) Hanoi University of Foreign Studies. Ho Chi Minh City National University and the College of Foreign Languages - University of Da Nang are also recipients of Japanese language teachers.

2) Dispatch of JICA Volunteers to the University of Languages and International Studies - Vietnam National University, Hanoi (ULIS)

From 1995 to the present, 14 JICA volunteers have successively been dispatched to the University of Foreign Languages and International Studies – Vietnam National University, Hanoi (ULIS). As the ULIS is a prestigious university under the direct control of the central government<sup>45</sup>, the state of Japanese language education there considerably affects Japanese language education throughout Vietnam. The first master’s degree course in Japanese language in Vietnam was introduced at the ULIS in 2009. The number of students learning the Japanese language at the ULIS has shown a trend of gradual increase as shown in Table 15-4. JICA’s continual dispatch of many volunteers to such a leading university in Vietnam is highly significant.

**Table 15-4: Chronology of the Number of Japanese Language Students at the ULIS**

Major	2007 – 2008	2008 – 2009	2009 – 2010	2010 – 2011	2011 – 2012
Japanese Language	78	96	85	82	102
Japanese Language Teaching (Teacher Training Course)	29	18	28	29	29
Total	100	114	113	111	131

(Source: ULIS)

According to the Dean of the Faculty of Oriental Linguistics and Culture, the destination of JICA volunteers for Japanese language education at the ULIS, the primary purpose for students to study the Japanese language at the ULIS is future employment.

The latest survey by the faculty on the employment of its graduates found that (1) those employed by Japanese affiliated enterprises account for 58% of all graduates, (2) those employed by enterprises with international business partners, including those in Japan, account for 26%, and (3) the remaining 16% work as Japanese language teachers.<sup>46</sup> It is very clear that Japanese language education has a direct link to employment related to Japan.

<sup>45</sup> There are three types of universities in Vietnam, i.e. state universities and private universities controlled by the Ministry of Education and Training, and national universities directly controlled by the government (Vietnam National University, Hanoi and Vietnam National University, Ho Chi Minh City).

<sup>46</sup> Although 32 secondary and high schools teach the Japanese language, the number of Japanese language teachers is 42 nationwide. Training of Japanese language teachers is an urgent task. (Based on interviews at the ULIS)

In reference to JICA volunteers, the Dean appreciates that “the presence of native Japanese speakers is in itself very important.” JICA volunteers are also very helpful about teaching Japanese business manners and Japanese literature to students, to organize study meetings for Vietnamese teachers of the Japanese language, to act as judges for the intra-faculty Japanese speech contest and to help correct addresses for conferences, letters of request and other documents. The Dean has the idea of requesting the continual dispatch of JICA volunteers as Japanese language teachers, who can provide guidance for research work at a higher level bearing in mind that the introduction of a doctor’s degree course at the ULIS is on the horizon.

**Column 15-2: Interviews with students of the Japanese Language Education Course at ULIS**

Let us visit the Japanese language class of second year students at the ULIS. Today’s lesson primarily featuring “model conversations” is taught by a Japanese female SV, and the class is attended by 25 female and two male students.



The students are learning how to leave or receive a business-related message on the telephone.

“Hello, this is XXX company. How can I help?”

“Could I leave a message that I will be late for the meeting because my train is delayed?”

“I understand. I will pass on your message.”



All of the students repeat this conversation and memorize it. After practicing between themselves, some students act it out in front of the class. This exercise teaches the students how to leave or receive messages on the telephone while modifying the model conversation to suit an actual situation in Hanoi.

At the end of the lesson, the students were asked why they studied the Japanese language. In response to the question, “Where did you start learning the Japanese language?” 20 answered the university, five answered high school and one answered secondary school. To the question of “Why did you choose the ULIS?”, the majority said that the ULIS was the best university teaching the Japanese language. There was also an innocent reply that the ULIS is near home.

To the question, “What do you want to do in the future, utilizing your knowledge of the

Japanese language?” more than 20 said that they would like to work for a Japanese-affiliated enterprise or an enterprise linked to Japan. Two students wanted to become a Japanese language teacher and one student wanted to learn more about Japanese culture. A female student, who had volunteered to take part in the model conversation exercise in front of the class, explicitly expressed her hope of finding a job with a Japanese-affiliated enterprise, saying that with the closer cooperation and friendship between Vietnam and Japan, the number of Vietnamese people wanting to work for a Japanese-affiliated enterprise has been increasing.

There have been many student exchange programs as well as research collaboration with Japanese universities, including the University of Tokyo, Kyoto University, Nagoya University, Tsukuba University, Tokyo University of Foreign Studies, Doshisha University, Meiji University and Aoyama Gakuin University. The conscious effort to expand and improve Japanese language education in Vietnam are helping to form the future for the younger generation in Vietnam and Japan.

## (2) Occupational Therapy<sup>47</sup>

One example of an institution, which has received JICA volunteers in the health sector over a long period of time is Cho Ray Hospital to which JICA volunteers have been dispatched from 2001 to 2013. Cho Ray Hospital is one of the three main hospitals in Vietnam and has received two dieticians, one nurse and four occupational therapists from 2001 to 2013. The period (2004 – 2013) during which four volunteer occupation therapists have been successfully dispatched by the JICA overlaps with the implementation period of the “Project to Assist Physically Handicapped People through Local Rehabilitation and Their Empowerment (JFY2006 – 2008)” under the JICA Partnership Program and the “Project for Strengthening of the Medical Rehabilitation Service in the Southern Area of Vietnam (JFY2010 – 2013)” which was a JICA technical cooperation project. The collaboration of JICA volunteers with these two projects has assisted the entrenchment of the positive outcomes of these technical cooperation projects.

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<sup>47</sup> An occupational therapist (OT) is a person who conducts treatment designed to improve motor functions and/or psychological function of a person with a disability (occupational therapy). OTs help patients regain their independence and return to the working world with such occupational therapies as handicrafts, painting, participating in music and training of daily movements so that people with some types of disability can live an independent life. OTs assist people to not only regain their motor functions and/or reasoning ability but also to perform daily activities, such as bathing and eating, and also to return to work. OTs play an active role in rehabilitation along with physical therapists and speech therapists.

**Column 15.3: Dispatch of JICA Volunteers Reshaping the Local Understanding of  
Rehabilitation**

The Rehabilitation unit of Cho Ray Hospital enjoys the services of Ms. Pham Thi Ngoc Ai, a physical therapist with more than 30 years of experience at this department. She has been working alongside four generations of Japanese volunteer occupational therapists dispatched by the JICA and has been involved in the JICA Partnership Program and a technical cooperation project in the past.

The premises of Cho Ray Hospital are always busy with people of all ages waiting in turn for examinations with many of them sitting or even lying on the hospital floor. The Department of Rehabilitation is no exception as the facility is used by some 200 patients every day. The most prominent patients are those suffering from injuries from a traffic accident (average age of about 35 years old) and those suffering from heart disease (average age of 55 – 60 years old).

The rehabilitation unit is currently providing occupational therapy designed to enable patients to conduct daily activities without help. To be more precise, these daily activities include changing clothes and doing their hair as well as shopping, cooking and washing clothes.

Before the arrival of the first JICA volunteer, the hospital had no idea about conducting patient training for living without help. Even though physical therapy to train muscles and joints was practiced by means of physical massage and the use of in-house equipment, there was no concept of occupational therapy being conducted outside the hospital, including walking to the nearest bus stop and other daily activities. The year of 2006 saw the start of the JICA Partnership Program to assist patient

rehabilitation at the Department. This was followed by a JICA technical cooperation project which started in 2010. JICA volunteers collaborated especially with the latter and contributed to the preparation of an occupational therapy manual to serve 22 southern provinces in Vietnam. Regular staff meetings of the Department of Rehabilitation began around this time, encouraging information sharing among staff members.



Ms. Pham Thi Ngoc Ai explaining a tool provided by the JICA for occupational therapy (photograph taken by a member of the Study Team)





A tapestry made jointly by a JICA volunteer who is an occupational therapist and occupational therapy patients (photograph taken by a member of the Study Team)

The dispatch of JICA occupational therapist volunteers will come to an end in 2013. While effort is being made locally to sustain the positive outcomes of the dispatch of JICA volunteers, the Rehabilitation Unit is hoping that such dispatches will continue in the coming years in view of the significant impacts of JICA volunteers.

### 15.3 Characteristics of Japanese ODA and Lessons Learned

The modes of assistance of the JICA Volunteer Program and JICA Partnership Program have been reshaped with focus on responding to the changing needs in Vietnam that reflect social transformation and development while emphasizing motivation by the Japanese people and the implementation capacity and systems of recipient organizations in Vietnam.

Deputy Director General, Foreign Economic Relations Department of the MPI, which is the counterpart agency for JICA volunteers, praises the stance of JICA volunteers to “fully commit themselves to their work” based on his own involvement in a number of Japan’s ODA projects from the time Japan’s ODA for Vietnam was restarted to the present. He also says that “Vietnamese people have developed a very close relationship with the volunteers who live in the same way as Vietnamese people. JICA volunteers are very important in enhancing the friendship between the two countries.” Such an observation illustrates the outstanding characteristics of the JICA Volunteer Program.

The MPI is not the only organization where the sincere commitment of JICA volunteers to their work has had a positive impact on staff members. Other organizations include the Hoi An Municipal Authority and Cho Ray Hospital.

In the case of the JICA Partnership Program, staff members of the Hoi An Municipal Authority, HueWACO and others have expressed the opinion that Japan’s ODA is quite different from the assistance of other donors in that Japan conducts the in-depth transfer of technologies and skills through training by Japanese as well as Vietnamese experts in addition to financial assistance while other donors simply provide financial assistance, and that such technical cooperation has

greatly contributed to the establishment of advanced technologies in Vietnam. It is fair to say that the JICA Partnership Program implements many activities which directly benefit people in remote mountain areas and villages, where it is difficult for an ordinary technical cooperation project to reach. Local public bodies and other Japanese organizations involved in the JICA Partnership Program are achieving the improved awareness and capacity building of their own staff members as well as those of counterpart organizations in Vietnam through the acquisition and refinement of the experience of international cooperation and new knowledge

The MPI believes that it is necessary for Vietnam to continue to receive JICA volunteers for the country's development, focusing in particular on such fields as Japanese language education, health care, agriculture and handicrafts (preservation of traditional industries in Vietnam).

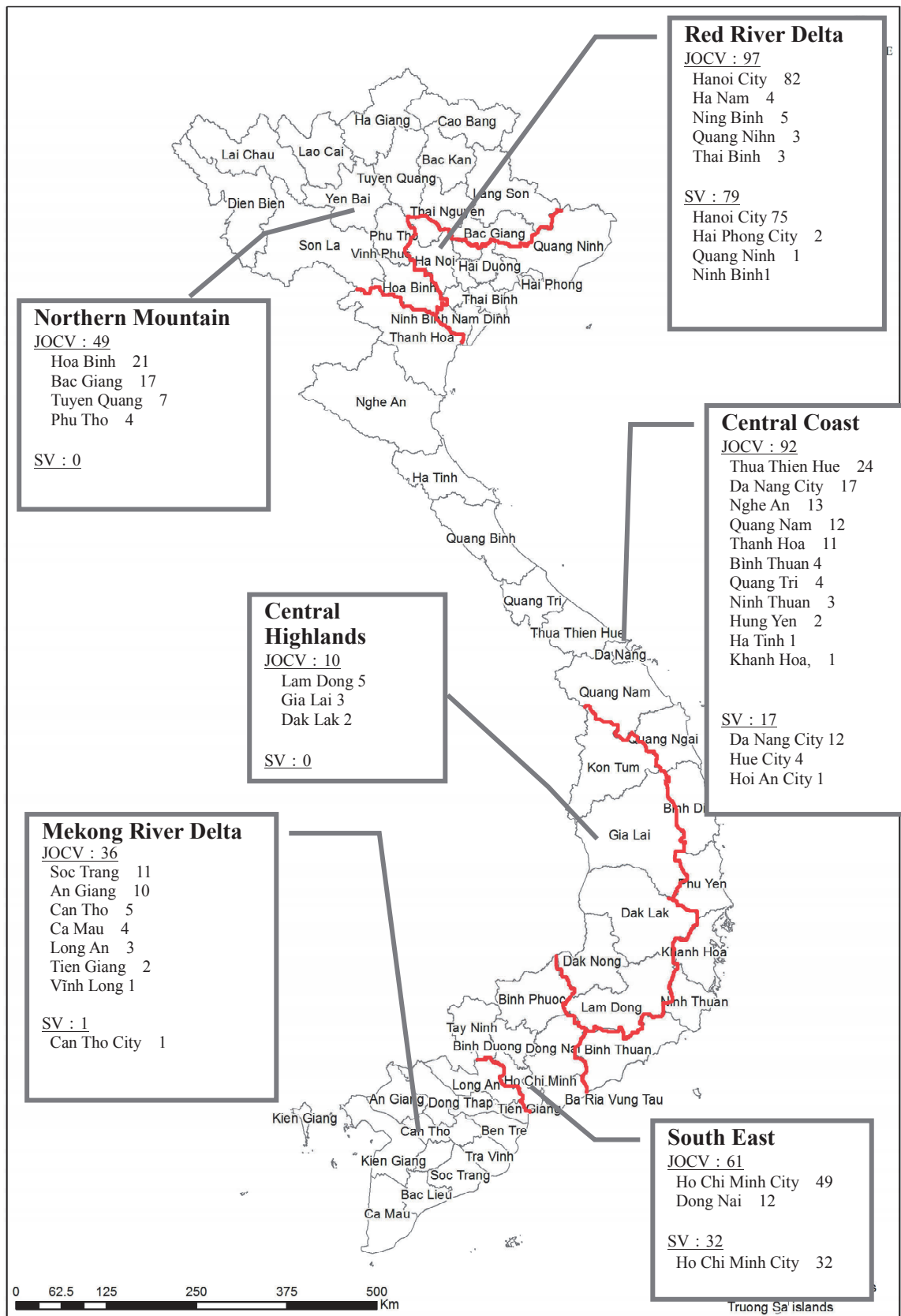


Figure 15-5: Number of Dispatched JICA Volunteers in Vietnam by Region (As of July 17, 2013)



## CHAPTER 16 : DEVELOPMENT PARTNERS, NGO/NPO, AND PRIVATE SECTOR

### 16.1 Collaboration between Vietnam and Development Partners

Most of development partners resumed ODA operations in Vietnam after the Vietnam Donors Conference held in Paris in 1993. Among the development partners in Vietnam, Japan, the World Bank, Asian Development Bank (ADB), France, Germany, South Korea, Australia and others have supported Vietnam comprehensively in terms of sectors and modalities. Although the amount of the support is smaller than the above mentioned partners, partners such as U.K., the Nordic countries in Europe and others have supported Vietnam in specific areas based on their own philosophy, and therefore, have exercised leadership in the community of development partners. Japan has been a leading bilateral donor with a huge gap with the second group as shown in Chapter 3. The World Bank and ADB have supported Vietnam on a scale similar to Japan (net disbursement of the World Bank in 2011 was USD987 million<sup>48</sup>, while ADB's total approved amount including loan, technical assistance and grant in 2012 was USD1,290 million)<sup>49</sup>. The activities the World Bank and ADB in Vietnam, as well as those of U.K. and France as cases of bilateral development partners are outlined below.

#### 16.1.1 World Bank's Support for Vietnam

##### (1) World Bank's strategies

The World Bank resumed relations with Vietnam in 1976. After the suspension of operations by Vietnam's involvement with Cambodia in 1978, the World Bank resumed its operations in Vietnam in 1993. The World Bank carries out its operations based on the multi-year rolling plan called Country Assistance Strategy (CAS, and later Country Partnership Strategy [CPS]). Since its first CAS (1995-1997) which was formulated in 1994, the World Bank has made six CAS/CPS thus far.

The first CAS set out 5 priority elements: (1) structural adjustment lending to support Vietnam's transition to a market economy, (2) support to build the necessary policies and institutions of a market economy, (3) lending focused on infrastructure, (4) targeted effort to reduce poverty through projects supporting rural development and human resource development, (5) support for the Government's program of environmental protection<sup>50</sup>.

The objective of the succeeding series of CAS/CSP was to contribute to economic development and poverty reduction, and activities under those CAS/CSP have covered a wide range of many

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<sup>48</sup> OECD Stat, August 14, 2013

<sup>49</sup> ADB (2012a). (The total amount was not obtained through OECD Stat)

<sup>50</sup> World Bank (2011b)

fields, mainly, 1) support for policy and institutional reform, national governance capacity strengthening, and international integration in the transition to a market economy, 2) support for socio-economic infrastructure development, environmental and natural resource protection, 3) support for agriculture and rural development, poverty reduction, 4) policy analysis and advisory activities, 5) aid coordination, and 6) improvement of program/project implementation<sup>51</sup>.

CAS2003-2006 and the succeeding CAS/CPS aligned with development policies of GOV. Aligned with the Comprehensive Poverty Reduction and Growth Strategy (CPRGS), CAS2003-2006 set the theme of: 1) transition to a market economy, 2) equitable, socially inclusive, and sustainable development, and 3) promoting good governance. CPS2007-2011 was also aligned with SEDP of GOV and had four pillars, where were 1) improving the business environment, 2) strengthening social inclusion, 3) strengthening natural resource and environmental management, and 4) improving governance. The framework of the latest CPS2012-2014 was developed with an emphasis on 1) competence (improving economic management and the business environment, improving the quality and efficiency of infrastructure service, capacity development, 2) sustainability (improving natural resource management, strengthening environmental protection and management, and enhancing preparedness for natural hazards and climate change), and 3) opportunity (improving the livelihood of the poor, social protection, basic rural infrastructure development and water supply, education, and health).

(2) The signed and disbursed amount from the World Bank

As Table 16-1 shows, since resuming operations, loans for basic infrastructure including transportation, information, power, urban development and irrigation has been one of the most notable areas of support by the World Bank.

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<sup>51</sup> The State Bank of Vietnam

**Table 16-1: Number of Projects and Signed and Disbursed Loan amount by Sectors**  
(Unit: USD million)

	Number of Projects	Singed amount(*)	Disbursed amount (*)	Proportion of signed amount
Transportation	12	1,462.7	825.12	14%
Energy	11	1,966	1,170.40	19%
Irrigation	4	41966	327.06	4%
Information	1	87.87	7.64	1%
Urban development, Drainage	15	1,424.62	481.93	14%
Agriculture	15	1,343.05	1,107.08	13%
Rural development	8	365.9	231.68	4%
Healthcare	8	600.48	427.53	6%
Education and Training, Finance – Banking	6	399.82	160.67	4%
Others	13	2,325	2,033	22%
Total	93	10,395.1	6,772.13	100%

(Source : The State Bank of Vietnam)

Note: \*The signed amount: from 1994 to December, 2009. The disburse amount: from 1994 to February, 2010

At the same time, the World Bank provided Vietnam with a Structural Adjustment Credit (SAC) of USD150 million in 1994. SAC supported structural reforms for the transition to a market economy with a focus on constructing a legal framework and financial system. However, the negotiations for the second SAC was suspended because of the issue of conditionality, and the World Bank did not provide general budget support until 2001. After the establishment of CPRGS in 2001, the first Poverty Reduction Support Credit (PRSC) was approved in 2001, which supported implementation of CPRGS with a focus on State Owned Enterprise (SOE) reform, financial sector reform, trade reform and others. The series of PRSC lasted until the 10th PRSC with the participation of 14 development partners including Japan, and mobilized approximately USD1,500 million from the development partners and USD1,100 million from the World Bank itself. Currently, the World Bank provides lending through the Economic Management and Competitiveness Credit.

### (3) The World Bank's Contribution to Development Results

The key results of the World Bank's support to Vietnam include the following areas<sup>52</sup>:

- 1) Support for policy and institutional reforms and economic structural adjustment to shift to a market economy has been one of the effective areas of support from the World Bank through general budget support such as SAC and PRSC.
- 2) Support for infrastructure and social development: Infrastructure development has been one of the most prioritized areas for support since the introduction of CAS in 1994, and the

<sup>52</sup> The State Bank of Vietnam, World Bank (2012), and an interview with the World Bank

World Bank has been a leading donor in this field together with Japan and ADB. The special feature of the World Bank's support in infrastructure development has been the integration of support for development of policies and institutions and strengthening sector management capacity into all programs and projects. The World Bank also has supported introducing market mechanisms in the infrastructure sector. Especially, the energy sector, which is one of the sectors that the World Bank has supported the most, has been successful in producing significant development results such as achievement of a nationwide transmission network. The World Bank has contributed not only to this development results, but also to improving operational efficiency such as sector reforms and the introduction of market mechanisms.

- 3) Poverty Reduction: The World Bank has supported planning and implementation of CPRSG and PRSC, as well as improving the livelihood of the poor through rural and urban development.
- 4) A leading role in aid coordination: Vietnam is considered to be one of the most successful countries in aid coordination (see details in 16.1.3 below). The World Bank has played a leading role in CG meetings since the first Vietnam Donors Conference in 1993 in Paris.

### **16.1.2 ADB's Support for Vietnam**

#### **(1) ADB strategies**

Since ADB resumed operations in 1993, ADB has supported Vietnam based on 4 strategy papers: 1994-2001 Country Assistance Plan (CAP), 2002-2004 Country Strategy and Program (CSP), 2007-2010 CSP, and 2012-015 Country Partnership Strategy (CPS). An outline of each strategy is given below.

- 1) 1999-2001 CAP (based on 1995 Country Operational Strategy Study): The strategy covered many areas but emphasized policy and institutional reform, agriculture and natural resource management, social and physical infrastructure, and environmental and natural resource management.
- 2) 2002-2004 CSP aimed at ensuring that growth would reach the poor. A geographic focus on the Central Region was adapted and priority crosscutting themes were environment and regional cooperation.
- 3) 2007-2010 CSP is aligned with the Government's SEDP for 2006-2010 and incorporates a result framework. It is focused on (i) economic growth through business-led, pro-poor, and sustainable economic growth, (ii) inclusive social development, and (iii) sustained environmental management. The key theme of promoting poverty reduction by supporting growth and private sector development is woven through the document.
- 4) 2012-2015 CPS: The prioritized sectors include (i) agriculture and natural resources, (ii)



education, (iii) energy, (iv) finance, (v) transport, and (vi) water supply. Private sector development and public sector management are treated as cross-cutting issues, and health focuses on sector management. Withdrew from the industrial and trade sectors.

(2) The cumulative loan amount of ADB

The table 16-2 illustrates the cumulative loan amount of ADB up to 2012. After resuming operations until early 2000, the proportion of loans was well balanced within the infrastructure (mainly transport and energy) and software (agriculture and natural resources, multi-sector service, and law, economic management and public policy). However, the sector focus shifted to large infrastructure projects in the mid-2000s. The proportion of the infrastructure rose to 69% in 2005-2006, and 83% in 2007-2008. This shift was aligned with the government's renewed focus on the role of large-scale infrastructure in growth and poverty reduction as indicated in CPRGS<sup>53</sup>.

**Table 16-2: Cumulative ADB Lending by Sector up to 2012**  
(Unit: USD million)

	Number of loans	Amount	Proportion to total amount
Agriculture and Natural Resources	31	1,600.66	13%
Education	15	740.5	6%
Energy	14	2,574.57	22%
Finance	11	542	5%
Health and Social Protection	9	283.2	2%
Industry and Trade	6	139.5	1%
Public Sector Management	13	1,029.08	9%
Transport and ICT	24	3,716.9	31%
Water Supply and Other Municipal Infrastructure and Services	15	1,059.82	9%
Multi-sector	7	280	2%
Total	145	11,966.23	100%

(Source: ADB (2012a))

(3) ADB's Contribution to Development Results

Based on the result framework of CSP2007-2010, ADB highlights its contribution to development results in the following manner<sup>54</sup>.

- 1) Business-led and pro-poor economic growth: (i) support in the transport sector has aided economic recovery and rural development through improved connectivity. ADB assistance helped improve national roads, provincial and district roads, rural roads and bridges. The sector also contributed to economic development and poverty reduction

<sup>53</sup> ADB (2009)

<sup>54</sup> ADB (2009), and an interview with ADB

through regional cooperation in the Greater Mekong Sub-region, GMS). (ii) Support for energy has contributed to reducing the supply-demand gap through the construction of power plants, and improvement in energy losses and power outages through the rehabilitation and expansion of distribution systems. (iii) Support in technical and vocational training and private higher education has helped address the shortage of skilled workers, and (iv) support for financial sector reforms contributed to widening the access of private sector companies to capital market and lease financing.

- 2) Inclusive social development: (i) support in agriculture and rural development has contributed to the improvement of irrigation and drainage facilities, improved access to rural credit, (ii) focused directly on improving the socioeconomic status of disadvantaged groups and ethnic minorities especially in the Central Region, (iii) improvements to better access to education facilities through facility construction, (iv) support in the health sector helped improve access to healthcare through health facility construction and renovation. ADB also contributed to the policy dialogue to improve the focus of the health insurance system toward the poor. ADB especially thinks its contribution to agricultural development and primary education is immense, partly because the support from other development partners has been limited. Isolated areas (Central Region) are also supported almost exclusively by ADB.
- 3) Environmental management: The ADB's support has contributed to (i) an increase in forest cover and stabilized land use, and (ii) improved access to water and providing 24-hour supply of safe drinking water through the development of water supply facilities.

### **16.1.3 Support by Bilateral Development Partners**

#### **(1) U.K. (Department for International Development, DFID)<sup>55</sup>**

Since resuming ODA to Vietnam in 1993, U.K. has provided assistance to Vietnam with the objective of poverty reduction. For the first 10 years of operation, the focus was more on implementing projects directly targeting poverty reduction such as extending support through NGOs in central Vietnam and implementing a poverty reduction program in the northern mountains. Since 2003, DFID has aligned its development strategies with the development plans of Vietnam such as SEDP, and accordingly, has extended support in the areas of primary education, rural roads, poverty reduction program in the Northern Mountain, Governance (public financial management through a Multi-donor Trust Fund), and PRSC. After 1998, DFID shifted its main modality from a bilateral project-based approach to a program-based approach, and further to an approach which emphasized the partnership with other development partners, especially with the World Bank and ADB. Since 2004, sector approach and budget support have

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<sup>55</sup> DFID (2007) and an interview with DFID

been more dominant modalities of DFID. DFID is one of the first development partners that took part in PRSC, and DFID also has supported the government poverty reduction program (Program 135).

DFID signed the Development Partnership Arrangement (2006-2016) in 2006. Under the arrangement, budget support such as PRSC, Program 135, and assistance under the sector approach in primary education and sanitation were extended in 2006-2010. In 2011-2016, programs were implemented under three pillars: (1) MDGs related programs (rural roads, primary education, HIV/AIDS – all of them were implemented under the partnership with the World Bank, rural water supply and sanitation under Program 135, and others), (2) Governance (anti-corruption), and (3) Prosperity (economic growth).

DFID will exit from Vietnam in March 2016 following the termination of the agreement. DFID is making a responsible exit plan which incorporates issues on how policy impact can be made, how priority should be placed in resource distribution, and how other partners can take over DFID's assistance. MDGs related program under the DFID's three pillars will be terminated in 2013, and DFID thinks the assistance in these areas will be continuously extended by the World Bank, Belgium, the Global Fund to Fight HIV/AIDS, Tuberculosis, and Malaria. Regarding "Prosperity" (economic growth), DFID is considering an exit plan to promote the role of the private sector in the pro-poor growth and public service provision. Under the scheme of the Business Challenge Fund, DFID encourages private companies that have innovative business models in the areas of agriculture value chain, low-carbon growth, and small scale infrastructure development (seed money grant). DFID is also developing a scheme to incorporate innovative technology in the climate change area by the private sector (to be funded by the World Bank and AusAID). DFID promotes Public-Private Partnership (PPP) by providing technical assistance for legal and institutional development. As PPP and climate change are part of the strategic areas of the U.K.-Vietnam Partnership, the British Embassy is taking over the assistance in these areas, though the amount of support will be limited.

## (2) France (AFD<sup>56</sup>)

France is the second largest bilateral donor next to Japan in terms of assistance amount. In the beginning (1994), the focus of assistance was placed on agriculture and rural development, then AFD shifted the focus to infrastructure development, and has provided assistance in energy, transportation (metro), and water supply and sanitation. The current strategy prioritizes sustainable urban development, support for the modernization of the productive sector with strong environmental and social impacts, and climate change. AFD does not cover the areas of

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<sup>56</sup> AFD and an interview with AFD

education, health, highway/expressway and governance. The main modalities are budget support (Support Program to Respond to Climate Change), project finance, grant aid for feasibility studies and capacity development, and concessional loans.

As Vietnam becomes a lower middle-income country, the loans have become less concessional since 2010. AFD has currently two loan schemes: sovereign loan and non-sovereign loan. The sovereign loan is the main scheme. However, the upper limit of annual commitment is 100 million Euros. Regarding the non-sovereign loan, which does not have a government guarantee (borrowers are SOEs/private companies), AFD is the first development partner to extend a non-sovereign loan to EVN. AFD considers promoting non-sovereign loans further, so that AFD can directly support the private sector, although AFD takes risks. As to infrastructure development, AFD has promoted PPP by the project development facility co-funded by ADB, and has provided assistance to MPI for legal framework development.

#### **16.1.4 Aid Coordination in Vietnam**

Many initiatives for aid coordination to improve aid effectiveness and efficiency have been taken in Vietnam, which include producing the Hanoi Core Statement, a strategy for implementing the Paris Declaration on Aid Effectiveness. The initiatives which have been taken include: (i) the Consultative Group Meeting (CG Meeting), (ii) Partnership Group on Aid Effectiveness (PGAE) and succeeding Aid Effectiveness Forum, as platforms for discussing the issues to improve aid effectiveness comprehensively, (iii) Sectoral and International Partnership Groups for discussing sector development strategies and plans and coordinating the activities of development partners, (iv) Six Banks Group consists of Japan (JICA), the World Bank, ADB, France (Agence Française Développement; AFD), Germany (Kreditanstalt für Wiederaufbau; KfW), and South Korea (Korean EXIM Bank) for coordination and streamlining of procedures, and (v) comprehensive multilateral policy dialogue through PRSC series, and others.

The effort by the Six Banks Group, which discusses the common issues of quality and efficiency of investment projects, is especially notable, as it has facilitated loan disbursement through harmonization and a streamlined process. Through the semi-annual Joint Portfolio Performance Review (JPPR), the Six Banks Group has discussed the issues of ODA legal framework and public investment management with the government, and thereby is reviewing guidelines such as procurement guideline, guideline for social and environmental consideration, and standardizing feasibility study guideline and monitoring format.<sup>57</sup> In addition, the group has discussed and cooperated how to tackle the problems associated with infrastructure projects. Japan, as one of the leading development partners in the field, played a major role.

The PRSC series, a long standing general budget support, have been implemented with the

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<sup>57</sup> Agulhas Applied Knowledge

participation of 14 development partners. Japan has participated since the 3rd PRSC after the development of CPRGS. Japan's contribution to CPRGS is appreciated by other development partners in terms of adding one chapter for the importance of large-scale infrastructure development, and emphasizing the growth. Japan participated in PRSC with policy messages to implement large-scale infrastructure development (CPRGS), and investment promotion and to improve the business environment (Vietnam-Japan Joint Initiative to Improve Business Environment). Specifically, Japan participated in project planning through policy dialogue in the area of improvements to public finance management through the resource allocation mechanism of CPRGS, and investment promotion and improvement of the business environment.<sup>58</sup>

Although Japan does not participate, budget supports for specific sectors and programs are being extended with the participation of many development partners, Multi-donor Trust Fund for public finance management, budget support for the government's poverty reduction program (Program 135), and sector budget support for Education for All. While development partners and the government exchange policy level dialogue under PRSC, more action oriented agendas are discussed and supported by the program/sector base budget support.<sup>59</sup>

Vietnam Development Partnership Forum (VDPF) is taking over the CG meeting, and the first meeting will be held in December 2013<sup>60</sup>. More practical and action-oriented policy dialogue is expected to be held at VDFP, and the forum will be open to NGOs, CSOs, research institutes, and depending on the content the discussion, the private sector will also participate. The main theme of the first meeting will be "relative competitiveness of Vietnam", and under this main theme, 1) private sector involvement in the public service provision, 2) social inclusiveness (poverty of ethnic minorities), 3) environmental management, and 4) vocational training will be discussed. On the Vietnam side, MPI will be the secretariat, and the aid coordination advisor dispatched to MPI from JICA will assist MPI; and on the development partners side, Japan will be the secretariat together with the World Bank and AusAID.

#### **16.1.5 Future Prospect**

In accordance with the transformation of Vietnam's status to a lower middle income country, some development partners are phasing out. U.K. is scheduled to phase out in March 2016, and other bilateral development partners such as Sweden, Denmark, Netherland, and Swiss are expected to exit by the end of 2015<sup>61</sup>. ADB and AFD will increase the proportion of market based lending relative to concessional loans. ADB plans to disburse approximately US\$1 billion in 2013, and the same level of disbursement is expected until 2016.

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<sup>58</sup> JICA (2008)

<sup>59</sup> MOFA (2006)

<sup>60</sup> This part is written according to an interview with Aid coordination advisor

<sup>61</sup> DFID (2013)

The World Bank continues concessional lending for the time being. The World Bank will focus on (i) the issue of poverty of ethnic minorities, and (ii) efficiency improvement and introduction of the market mechanism in infrastructure development. Regarding the poverty reduction of ethnic minorities, the World Bank will shift the focus from the current rural infrastructure development to improvement of agricultural productivity, access to markets, and selection of crops, which are more directly linked to poverty reduction. As for the issues in infrastructure development, the World Bank continuously focuses on the privatization and improvement of the price system in water supply companies, as well as separation of generation, transmission and distribution, improvement of price structure and improvement of energy loss in the energy sector.

## **16.2 Collaboration between Vietnam and NGO/NPO**

### **16.2.1 International NGOs in Vietnam**

Majority of International NGOs (INGO) closed offices after the surrender of South Vietnam in 1975, and less than 10 INGOs operated in Vietnam by late 1980<sup>62</sup>. The number of INGOs significantly increased in the 1990s as the organizations and regulatory framework which manage activities of INGOs were established.

People's Aid Coordinating Committee (PACCOM) was established in 1989 to coordinate the activities of INGOs. PACCOM was an organization which had the function of coordinating INGO's activities under the Vietnam Union of Friendship Organizations (VUFO). In 1993, Prime Minister Decision No.581/TTg on establishment of representative offices and coordination offices of INGOs in Vietnam was established. Accordingly, PACCOM has functioned as a secretariat of the Committee for Foreign NGO Affairs (COMINGO), and INGOs are able to obtain a permit for operation from PACCOM<sup>63</sup>. INGOs are required to implement a project with a local partner introduced by PACCOM. In 1996, Prime Minister's Decision No.340/QD-TTg for activities of INGOs in Vietnam was established,

With this environment improvement, INGOs such as Action Aid, Care International, and Oxfam obtained permits and started operations in 1990. The number of INGOs which have a relationship with Vietnam increased to 500 in 1995, and reached 900 in 2012. Among them 500-600 INGOs hold permits from PACCOM. INGOs investments in Vietnam increased significantly, from approximately USD16 million in 1990, USD80 million in 1999, USD270 million in 2009 and reached USD300 million in 2012.

The NGO Resource Center was established in 1993, as a networking organization of INGOs. The NGO Resource Center was a platform for sharing information, coordinating activities, and

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<sup>62</sup> This section is based on the literature and an interview with VUFO-NGO Resource Center unless otherwise specified.

<sup>63</sup> Sano

collaborating in policy recommendations at CG meetings and other occasions. In 1998, NGO Resource Center was renamed as the VUFO-NGO Resource Center after establishing a partnership with VUFO. VUFO-NGO Resource Center has representatives from both VUFO and INGOs and is engaged in the activities mentioned above. As of July 2013, the number of INGO members of the VUFO-NGO Resource Center is 135. Members include INGOs that have supported Vietnam for a long time including Care International, Save the Children, Oxfam GB, Action AID, Plan International, Asian Foundation and others. Investment by members occupies 85% of the said total investment of INGOs: USD300 million. 15% of the members are U.S. based organizations, and there are 20 organizations from U.K., several members from Canada and Australia, and one Japanese NGO. In terms of budget size, 20 members have an annual budget of USD2 million and more than half of the members have an annual budget of USD50-100 million dollars.

### **16.2.2 Support from Japanese NGOs/NPOs in Vietnam**

In the early stages, many individuals such as doctors and teachers started their support to Vietnam when they encountered children with disabilities and street children during their personal trips to Vietnam and started up the network and activities as NGOs. Their networks with Vietnam were rather personal, their activities were relatively small-scale, but nevertheless, they continued activities with the support of individuals who shared their views on Vietnam<sup>64</sup>.

In the mid-1990s, Japan Volunteer Center (JVC) and Save the Children Japan (SCJ) established their representative offices in Hanoi, started operations on an organizational basis, and implemented projects in multiple development agendas. Later, other NGOs such as Japan Vietnam Friendship Association, National Federation of UNESCO Association in Japan, and AMDA followed.

JVC started operations in 1990 and temporally completed operations in 2009. JVC's activities included vocational training, improvement in the livelihoods of slum dwellers, literacy education, providing credit to female entrepreneurs, support for people with visual impairment, education facility construction and providing scholarships, rural development, agricultural diversification and others<sup>65</sup>. SCJ started its operations in 1995 in the field of child nutrition and has continued its operations partly in cooperation with ODA schemes including subsidies for nongovernmental organizations involved in international development assistance by the Ministry of Foreign Affairs (MOFA), JICA Community Empowerment Program, MOFA Grant Assistance for Grassroots Projects, JICA Partnership Program and others. The presence of JVC and SCJ was appreciated by the INGO community as their budget size was relatively large and they used to be a member of the VUFO-NGO Resource Center.

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<sup>64</sup> Sano

<sup>65</sup> Sano

According to PACCOM<sup>66</sup>, as of April 15, 2102, 58 Japanese NGOs have registered or are in the process of registration at COMINGO (among them, four NGOs obtained permission to have a representative office, five NGOs obtained permission to have a project office, and the 49 NGOs obtained permission to implement a project). Main areas of activities by Japanese NGOs include vocational training, community development, environment, health and others. Geographically, projects by Japanese NGOs are mainly implemented in Hanoi and Ho Chi Minh City, and most of the NGOs funds that are disbursed are concentrated in these two cities. Other than these two cities, the areas the projects are implemented include Hai Phong City, Hoa Binh Province, Thua Thien-Hue Province, Da Nang City, Quang Nam Province, Kon Tum Province, Nam Dinh Province, Hai Duong Province, An Giang Province and others. According to PACCOM, the total amount of assistance by Japanese NGOs from 2006 to 2011 was USD85 million. Assistance by Japanese NGOs accounts for approximately 3.8% of the total amount of INGO assistance. Many Japanese NGOs rely on funding sources from ODA, which is a special feature of Japanese NGOs compared to other INGOs, according to PACCOM. In addition, INGOs from other countries have a long-term plan of about 5 years, while Japanese NGOs operate activities under a 1-2 year plan because of the internal regulations of the funding source.

Thus, many Japanese NGOs utilize ODA funds. Among the collaboration schemes, collaboration under the JICA Partnership Program is explained in Chapter 15, and the other major ODA funding scheme is Grant Assistance for Japanese NGO's Projects by MOFA. The scheme was established in 2002, and approximately 600 million yen in total were disbursed for 17 organizations implementing 39 projects (counting the contracts signed each year of multiple-year projects) in Vietnam<sup>67</sup>. The projects were implemented in the areas of nutrition, agriculture and rural development, support for people with disabilities, education and others. The scheme was revised in 2010 to incorporate the increase in project amount, project implementation in multiple years, streamlining of the accounting procedure and others<sup>68</sup>. Accordingly, the project amount tends to increase in Vietnam.

Japanese NGOs pointed out the issues in funding and the inability to expand the operation due to a limited funding source. At the same time, the number of Japanese NGOs in Vietnam is limited because of the difficult registration procedure in Vietnam. The difficulty pointed out by Japanese NGOs as well as ODA implementing agency include: (i) INGOs are required to obtain a permit from PACCOM, (ii) they are required to implement a project in collaboration with a local partner, (iii) activities other than the one registered at PACCOM are not allowed, (iv) complicated registration procedure at PACCOM, and (v) constant changes in regulations.

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<sup>66</sup> PACCOM, and based on an interview with PACCOM

<sup>67</sup> MOFA website

<sup>68</sup> MOFA (2010)



### 16.2.3 Cases of Japanese NGO Assistance to Vietnam

There are some cases where activities by Japanese NGOs have produced significant impacts on Vietnam's policy and institutions, such as cooperation by the National Federation of UNESCO Associations in Japan (NFUAJ), and the Japanese Organization for International Cooperation in Family Planning (JOICFP). Activities of both organizations stated as their own projects and were later implemented in collaboration with JICA (Development Partnership Program, JICA Partnership Program, and technical cooperation project).

NFUAJ started the "Project for Promotion of Adult Literacy in the Northern Mountainous Region in 2000" (under the JICA scheme, the project is named "Promotion of Adult Literacy for Sustainable Community Development in the Northern Mountain Region of Vietnam" and "The Project for Promotion of Community Learning Center"). The project was implemented in 40 villages in Lai Chau Province (Tua Chua, Phong Tho, and Dien Bien Phu) to build a Community Learning Center (CLC) at each village, and train people to operate CLC for the adult literacy education program and income generation, awareness raising program. The adult literacy education and income generation, awareness raising program by CLC was recognized as a model for Vietnam to follow, and CLC as a place for continuing education was mentioned in the Education Law in 2005. The number of CLC, which started with 40 villages, has increased to 10,000 nationwide<sup>69</sup>. Although this project was in collaboration with UNESCO, which carried out awareness raising activities for the Ministry of Education and Training, it was NFUAJ that implemented the model in 40 villages with the objective of developing a model applicable to the entire country using funds from Japan's ODA. As a result, the CLC model was adopted in Lai Chua Province and Vietnam as a whole, and thus, the project has produced significant impact on the policy and institution of adult literacy education in Vietnam.

JOICEP implemented three projects under JICA's technical cooperation: "The Reproductive Health Project in Nghe An Province, Phase 1 (1997-2000, Dispatch of experts)," "The Reproductive Health Project in Nghe An Province, Phase 2 (2000-2005)," and "Capacity Building for Dissemination of Community-based RH Promotion Approach (2005-2009)." These projects were implemented to build the capacity of the Community Health Center (CHC) for safe deliveries of rural pregnant women. The projects were planned with the aim of making policy recommendations from the actual results produced in multiple villages. Therefore, the project extended the model throughout the province (19 districts, 469 villages). Actually, the project was successful throughout province. Based on this experience, the province made a policy proposal to the Ministry of Health; and the project was recognized as a model in the

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<sup>69</sup> UNESCO Hanoi office website

northern region.

Thus, good practices were found in the assistance of Japanese NGOs, as the models established by Japanese NGOs can be expanded in collaboration with ODA, and lead to policy recommendations to Vietnam.

### **16.3 Trends in the Private Sector**

#### **16.3.1 Japan's Foreign Direct Investment in Vietnam**

##### (1) Trends of Japan's Foreign Direct Investment (FDI) in Vietnam

After the Doi Moi reforms in 1986, Japan's FDI started in the mid-1990s. After ODA was resumed, economic sanctions were lifted by the U.S. in 1994. When Vietnam became a member of ASEAN, the amount of FDI to Vietnam sharply increased in the mid-1990s and reached its peak in 1997. This period is seen as the first investment boom. During this period, the FDI increased due to the sharp appreciation of the yen and the shift of production bases overseas. Many large export-processing type manufacturers in industries such as cement, home electronics, automobile, motorcycle, computer components shifted their operation base to Vietnam. Motorcycle industries such as Honda and Yamaha in the north and medium sewing companies in the south are typical of the investments that were made in this period. In 1994, the Nomura-Haiphong Industrial Zone was developed as the first industrial zone/park by a Japanese company. Further, Thang Long Industrial Park was developed in northern Hanoi by Sumitomo Corporation in 1997, for which Japan extended an ODA loan for infrastructure development. In 2001, large assembling companies started operations in the north including Canon Vietnam at the Thang Long Industrial Park and Brother Industries, Ltd.

From 1998 to mid-2000s, FDI in Vietnam was sluggish partly because of the Asian financial crisis. However, the FDI increased from 2004 and entered the second investment boom in 2005 when the number of investments rose to 107, and the total investment amount reached USD433 million, which was double the previous year's amount<sup>70</sup>. This trend continued until 2008. During this period, large FDI included Yamaha Motor in Hanoi, Tohoku Pioneer Corporation in Haiphong, Mabuchi Motor in Da Nang, Daiwa Seiko (currently Globberide, Inc.) in the Central Region, Nidec Corporation in the south<sup>71</sup>. During this period, the development of various industrial parks including those developed by Japanese companies and hedging the risk of overconcentration to

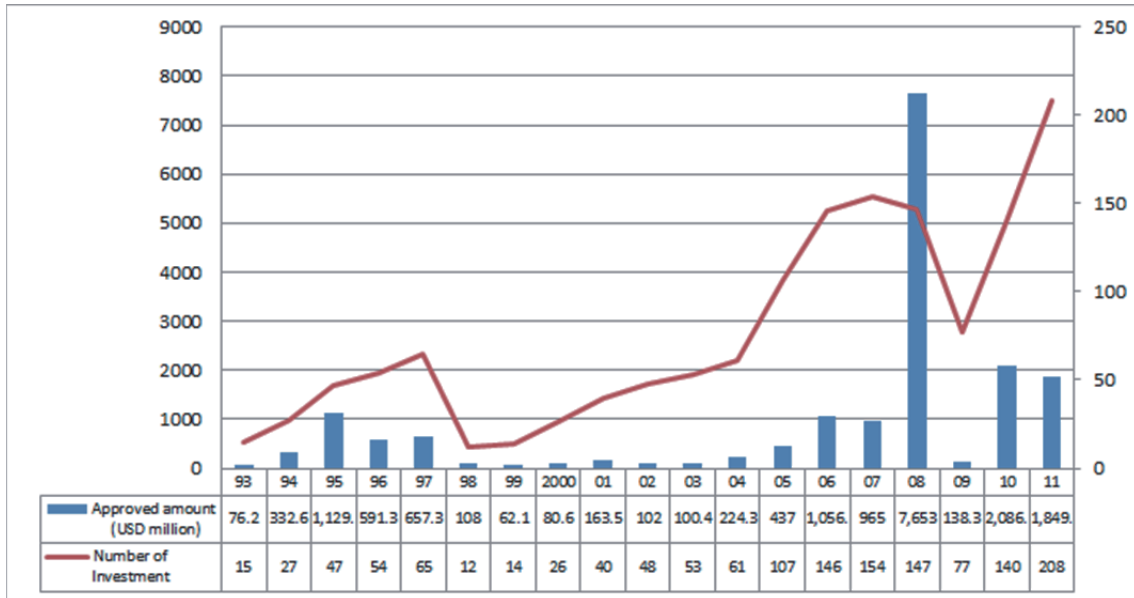
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<sup>70</sup> Moribe

<sup>71</sup> Moribe

China promoted the investment in Vietnam<sup>72</sup>.

The amount of FDI in 2012 reached a record of 440 billion yen. Moreover, the FDI in the first half of 2013 already amounted to 390 billion yen, which was double the FDI in 2012, although the number of investments did not catch up to the amount due to the depreciation of the yen.<sup>73</sup>



(Source: Moribe (Based on data from MPI))

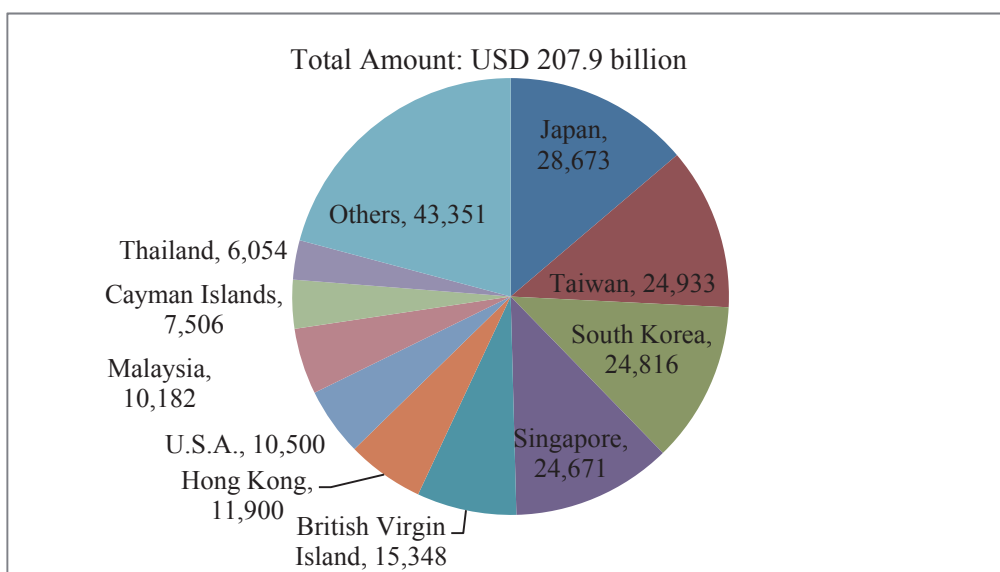
**Figure 16-1: Japan's FDI in Vietnam (New approval)**

## (2) The status of Japan's FDI in Vietnam

Japan had been the fourth largest source of FDI following Taiwan, South Korea, and Singapore in approval basis and the first in disbursement basis for a long time, but it has become the largest source of FDI in terms of cumulative amount as of December 2012.

<sup>72</sup> JBIC

<sup>73</sup> Based on an interview with The Japan Business Association in Vietnam



(Source: JETRO (2012))

**Figure 16-2: FDI in Vietnam (Cumulative up to 15 December, 2012)**

### (3) Future prospect of Japan's FDI

According to the study on Japanese companies' activities in Asia and Oceania by JETRO, the top five issues faced by Japanese companies in Vietnam were (i) the rise in wages, (ii) difficulty in local procurement, (iii) capacity of local human resources, (iv) difficulty in recruiting management staff, and (v) complicated customs clearance procedure<sup>74</sup>. Among these issues, the complicated procedure of customs clearance is an issue specific to Vietnam. In the past, infrastructure including the power shortage had been listed in the top five issues, and this is the first time this issue dropped out of the list. Although this may be due to some extent to climate conditions, Japanese companies seem to appreciate the improvement of infrastructure such as the improvements in power shortage and road development. Wage level in Vietnam is still lower than other surrounding countries. According to the above mentioned study by JETRO, 66% of the responding companies replied that they would expand business in 1-2 years.

### 16.3.2 Public Private Partnership (PPP)

The total investment requirement for infrastructure development is estimated to be 150–160 billion US dollars over the next 10 years.<sup>75</sup> ODA resources are acknowledged as insufficient to meet the increasing infrastructure funding needs of Vietnam. In addition, ODA funding resources are expected to decrease, as Vietnam becomes a middle income country. Therefore, promoting private resources in infrastructure development through PPP is perceived as inevitable in the future.

<sup>74</sup> JETRO (2012)

<sup>75</sup> ADB-AFD (2012)

In 2010, Decision 71/2010/QĐ-TTg set the framework for implementing PPP pilots project (effective in January 2011). However, the Decision only set the rough framework and e detailed regulations for actual operations were not presented. This unpredictable institutional framework discouraged private investors, and implementation of pilot projects had not progressed.<sup>76</sup> Foreign private companies are reluctant to take part in PPP because of the open bidding system, low tariff rates of public services, and an unpredictable permission system, procedures and legal interpretation. Further, the risk of projects without government guarantee was too high to take.<sup>77</sup>

While JICA has carried out 10 studies on the feasibility of PPP projects in the areas of energy, transportation and urban environment management<sup>78</sup>, the first PPP project in Vietnam is currently prepared. Dau Giay-Phan Thiet Expressway Project (DPEP), supported by the long-term loan and Viability Gap Funding by the World Bank, will be open to the market for 2nd investors while the 1st investor has already been selected.<sup>79</sup>

#### **16.4 Future Direction of Development Partners, the Private Sector and NGO/NPO and Lessons Learned**

Various leading edge approaches have been introduced in the ODA to Vietnam. Japan, as a top development partner along with the World Bank and ADB, has extended comprehensive assistance to almost all sectors with a focus on infrastructure development. However, for most bilateral development partners, implementing projects alone requires a high transaction cost. Therefore, efforts for harmonization and partnership were taken from an early stage. Accordingly, many development partners have actively participated in PRSC, budget support and sector approach. PRSC was an important forum for development partners, as the policy and institutional reform accompanying the transition to a market economy was an important development agenda for Vietnam. Participation in PRSC enabled development partners to influence the progress of institutional reform jointly, which would not have been possible by sole effort.

Currently, ODA is in the process of change. In conjunction with Vietnam's shift to the status of a lower middle income country, U.K., Sweden, Denmark and other development partners will phase out from Vietnam in 2015-2016. Development financial institutions will shift the terms of loans from concessional to market-based. Meanwhile, Vietnam still has huge funding needs for infrastructure development, and there are remaining problems of poverty and environmental

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<sup>76</sup> JBIC (2013)

<sup>77</sup> JETRO (2011)

<sup>78</sup> Rolling Plan for the Socialist Republic of Vietnam

<sup>79</sup> Ministry of Transport website

management. Many development partners promote PPP, and the first PPP supported by the World Bank is being prepared. Thus, the direction of PPP is expected to be propelled further. As is being discussed in the 1st VDPF, private sector involvement in the public service provision will be also discussed further. As in the case of U.K., an approach to incorporate private sector's innovation to pro-poor growth and public services in the areas of agriculture and climate change will be increasingly needed<sup>80</sup>. Japan's private sector has been one of the largest funding resources of FDI to Vietnam. Therefore, the impact on the Vietnam society is huge. In the future, ODA is expected to extend further support for the private sector to participate in PPP and public service provision.

Japanese NGOs have provided grass-roots assistance in the areas of vocational training, community development, environment and health. However, the scale of Japanese NGO's support is relatively small. Therefore, even though they implement effective projects, the target areas are limited, and they cannot scale up to apply the project effects to other areas in Vietnam. Japanese NGOs could consider how they collaborate with ODA to increase their activities and to apply models using technical advantages to other areas, and thereby make policy recommendations.

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<sup>80</sup> There are other cases. For example, Denmark (Denmark International Development Cooperation, DANIDA) has set up DANIDA Business Partnerships (DBP) Programme to support partnership between Denmark companies and Vietnam companies. The objective of DBP Programme is to improve the competitiveness of Vietnamese companies and thereby generate economic growth and reduce poverty. By incorporating commercial ideas and technologies by private companies, especially in the environment sector (renewable energy and waste management), DBP programme aims at maximizing benefits both of Vietnamese and Danish companies. DANIDA has provided USD71 million to support implementing 310 projects and establishing 150 long-term partnerships (DANIDA website).

## CHAPTER 17: PUBLIC RELATIONS FOR PROMOTING JAPAN’S ODA

### 17.1 Public Relations for Promoting Japan’s ODA

This section divides the structure of Japan’s ODA public relations in Vietnam into public relations by JICA, public relations by the Ministry of Foreign Affairs of Japan (Embassy of Japan in Vietnam), and public relations projects for the Japan-Vietnam Friendship Year, and provides an outline for each.

#### 17.1.1 JICA Public Relations Structure

Public relations in Vietnam by the JICA Vietnam Office can be broadly divided into (1) the creation of PR tools and (2) approach to media coverage in Vietnam and Japan.

##### (1) Creation of PR Tools

The JICA Vietnam Office has made use of the PR and information dissemination tools given in Table 18-1 to promote understanding and publicity of JICA projects. Most of these tools are made by the office staff.

**Table 17-1: JICA Vietnam Office Major PR tools**

<b>1) Pamphlets and PR material</b>		
“JICA Vietnam” “Japan’s ODA in Vietnam” Themed pamphlets	Japanese, Vietnamese, English	Representative annual printed matter Representative annual printed matter Created to coincide with events, as needed
Map showing projects across Vietnam	English	Available at the JICA Vietnam Office
<b>2) JICA items</b>		
Calendars (showing JICA projects and volunteer projects)	—	Distributed to CP, media, and international organizations
Stationery and conference bags with JICA logo	—	Created and distributed for conferences, etc., as needed
<b>3) Commemorative advertisements for 40th year of Japan-Vietnam relations and 20th year of ODA resumption</b>		
Noi Bai International Airport terminal advertisements	Vietnamese, English	ODA advertisement signboards in the Noi Bai International Airport terminal departure and arrival lobbies, placed in cooperation with the Embassy of Japan. Effective in publicizing Japan’s cooperation with Vietnam to travelers to and from Vietnam.
Pavement signboards with 40th year logo	Vietnamese, English	Pavement signboards with 40th year of Japan-Vietnam relations logo, placed during events.
<b>4) Information dissemination</b>		
JICA Vietnam Office monthly newsletter	Japanese, Vietnamese, English	Monthly reports distributed by email to JICA-related parties about events of the previous month. Also published swiftly on the website. Translated into Vietnamese and English and

		shared with more than 200 Vietnamese media outlets.
JICA website	Japanese, English	Updates on necessary information such as project information, project maps, articles on projects and activities.
5) Articles published in Japanese media		
<i>Vietnam Sketch</i> advertorials <a href="http://www.vietnam-sketch.com/">http://www.vietnam-sketch.com/</a>	Japanese	Vietnam's largest free monthly magazine with a history of more than 10 years. Monthly circulation of 25,000 across Vietnam. Targets Japanese tourists and residents in Vietnam. The JICA Vietnam Office selects a theme and creates articles based on on-going projects, interviews with experts, etc. Later published on the JICA website. Continued from November 2009 to March 2012.
<i>VinaBOO</i> articles "Sweat-and-tears accounts of international cooperation" <a href="http://www.jica.go.jp/vietnam/office/information/report/index.html">http://www.jica.go.jp/vietnam/office/information/report/index.html</a>	Japanese	Vietnam's second-largest free monthly magazine after <i>Sketch</i> , with a history of five years. Monthly circulation of 12,000 across Vietnam. Targets Japanese workers stationed in Vietnam and their families. Reports contributed by JICA experts and other personnel. Later published on the JICA website. Going since May 2010. Contributed articles published bimonthly, six times a year.
6) Archived material		
Digitized still photographs of completed projects	—	Archiving of material on completed projects

(Source: Compiled by the research group based on material submitted by and interviews with the JICA Vietnam Office)

**JICA Vietnam Office Major PR tools**

Pamphlets (top left), map introducing projects across Vietnam (top center), 40th year of Japan-Vietnam relations and 20th year of ODA resumption commemorative sign (right) and commemorative Noi Bai International Airport banner (bottom)  
(Photographs by JICA Vietnam Office)



## (2) Efforts toward Media Coverage in Vietnam and Japan

The JICA Vietnam Office's approach to media coverage consists of (1) press releases and (2) annual news conferences and ODA loan news conferences. Undertakings to promote correct understanding and coverage of JICA projects by Vietnamese and Japanese media consist of (3) the employment of a PR adviser, (4) building relations with and improving the skills of Vietnamese media, (5) building relations with Japanese media in Vietnam, and (6) collecting articles related to JICA activities.

### 1) Press Releases

The JICA Vietnam Office issues press releases in Vietnamese and English, targeting Vietnamese and Japanese media for new JICA project signing ceremonies and other official events, seminars, project progress reporting, etc. The press releases frequently lead to on-site coverage and interviews with the office staff, and then to extensive media coverage.

General press releases, other than those for important events such as news conferences, are emailed simultaneously to some 200 media outlets registered with the JICA Vietnam Office. Almost all the registered media outlets are Vietnamese newspapers, news agencies, television, radio, and online newspapers; nine are Japanese (television: NHK, TV Asahi; newspapers: The Nikkei, Asahi Shimbun; The Yomiuri Shinbun, and The AKAHATA news agencies: Jiji Press, Kyodo News, and NNA).

### 2) Annual News Conferences and ODA Loan News Conferences

The JICA Vietnam Office holds an Annual News Conference each year before Tet (the Vietnamese New Year, in January or February) on its current year performance and direction for the following year. In addition to this, it holds news conferences for the Vietnamese media upon the announcement of an ODA loan. It therefore holds a total of two or three news conferences every year.

On the advice of the PR adviser mentioned below, the news conferences are announced via invitations sent by post to 20 or 30 outlets, including Vietnam's major newspapers, news agencies, and television networks. Because Vietnamese and Japanese media require different information and have different interests, a separate news conference is held for the Japanese media.

### 3) Employment of PR Adviser

The JICA Vietnam Office employs an active journalist (as of 2013, a journalist for Vietnam News) as the PR adviser for guidance in strengthening awareness of JICA projects in Vietnam,

improving the contents of press releases, effectively approaching the media, etc. The PR adviser offers suggestions about the types of media to invite to the JICA Vietnam Office's news conferences and events, and, from a professional perspective, makes recommendations on how to write and check the contents of press releases.

#### 4) Building Relations with and Improving the Skills of Vietnamese Media

To build relations with the Vietnamese media, the JICA Vietnam Office makes the greatest possible effort to meet the requests of journalists. In addition to issuing press releases and invitations to news conferences, it accepts on-site coverage and interviews with JICA staff, and swiftly provides required information such as project materials and photographs.

At the suggestion of the PR adviser, it launched the Media Award in 2010. Eligible participants are Vietnamese journalists who have published articles or broadcast programs (limited to those covering JICA projects) for the Vietnamese media. The purpose of the contest is to promote Vietnamese journalists' interest in JICA projects and activities, and thereby increase media coverage, and also to improve the skills of the Vietnamese media and foster JICA-friendly journalists.



Media Award winners  
(Photograph by JICA Vietnam Office)

Furthermore, once a year, the JICA Vietnam Office organizes press tours in which the Vietnamese media visit project sites and interview experts and volunteers. The tours are a useful means to promote and expand understanding of JICA projects among the Vietnamese media.



Press tour  
(Photograph by JICA Vietnam Office)

#### 5) Building Relations with Japanese Media in Vietnam

At present, the JICA Vietnam Office's approach to Japanese media in Vietnam centers mainly only on press releases. In future, however, it is also considering organizing study sessions on JICA's projects and policies with an eye to encouraging high-quality media coverage in Japan. Specifically, it is contemplating organizing press tours and news conferences for the Japanese

media. Coverage in Japan is not necessarily favorable to JICA, and frequently nitpicking treatment by the media has an immense influence on the Japanese public. The office is considering ways to maintain friendly, positive relations and swiftly provide accurate information so that the articles written foster a more appropriate understanding among the public.

#### (6) Collecting Articles Related to JICA Activities

The JICA Vietnam Office collects articles written about JICA by Japanese, Vietnamese and English languages. The target media are 12 major Vietnamese and English newspapers (Vietnam News, Thanh Nien Daily, and Saigon Times, etc.), state-managed broadcast, radio and online news sites and so on. The target Japanese online news sites are JIJI Press and NNA, etc. Whether in Japan or in Vietnam, in the event that a negative article is published about Japan's ODA in Vietnam, it is swiftly obtained and immediately shared with the chief representative, deputy representative and responsible staff members, a correction to false reporting is requested, and the JICA office provides the correct information.

#### **17.1.2 Ministry of Foreign Affairs of Japan (Embassy of Japan in Vietnam) Public Relations Structure**

Public relations in Vietnam by the JICA Vietnam Office can be broadly divided into (1) the creation of PR tools and (2) approach to media coverage in Vietnam and Japan.

Public relations in Vietnam by the Embassy of Japan in Vietnam are outlined below, focusing mainly on efforts toward media coverage in Vietnam and Japan.

##### (1) Approach to Media Coverage in Vietnam

Interest from the Vietnam side in PR by the Embassy of Japan is not exclusively about ODA but rather covers a broad scope including politics, bilateral relations, and cultural cooperation. For this reason, the embassy says that its approach to PR exclusively about ODA is not as strategic as that of the JICA Vietnam Office. PR by the Embassy of Japan in Vietnam is the responsibility of the PR cultural section, whose specific approach is as follows.

##### 1) Interviews

About once a month, either the embassy's managerial staff or the economic section's top staff grants interviews to Vietnamese newspapers. To the extent possible, the embassy also accepts requests for written interviews.

## 2) Press Releases, News Conferences, and Television Coverage

Sections responsible for individual economic cooperation projects each issue press releases and, as needed, organize news conferences. The ambassador and envoy often attend the opening and closing ceremonies of infrastructure construction projects, and sees television and newspaper coverage of these events as an opportunity to promote what Japan and the embassy are doing.

## 3) Letters from the Ambassador to Vietnamese VIPs

Once every quarter, the former Ambassador Extraordinary and Plenipotentiary of Japan to Vietnam, Yasuaki Tanizaki, has disseminated his views on Japan's cooperation with Vietnam, and the latest international circumstances and challenges, by letter to Vietnamese VIPs.

## 4) Grassroots Grant aid PR Projects

Regarding grassroots grant aid projects, the embassy issues press releases, makes announcements, and organizes press tours involving visits to project sites as part of its PR activities.

## (2) Efforts toward Media Coverage in Japan

Japanese media coverage of projects in Vietnam is mainly the responsibility of the Ministry of Foreign Affairs. The embassy, however, does handle the five Japanese media outlets in Vietnam as needed.

### 17.1.3 Japan-Vietnam Friendship Year PR projects

2013 is the Japan-Vietnam Friendship Year, a milestone celebrating the 40th year of Japan-Vietnam diplomatic relations. Various Japan-Vietnam exchange events, the endorsement of Japan-Vietnam Friendship Year events, and PR activities have been in progress since the launch on March 16, 2012 of the Japan-Vietnam Friendship Year Executive Committee (chairman: former Ambassador Extraordinary and Plenipotentiary of Japan to Vietnam, Yasuaki Tanizaki). The embassy, too, is focusing on PR activities through Facebook and a dedicated website. The number of likes has reached more than 1,600 since the Facebook fan page was created 6 months ago.



Japan-Vietnam Friendship Year logo  
Source: Japan-Vietnam Friendship Year website

The North-South Railway has served as a symbol of the reunification of North and South Vietnam, which were divided by war, and also as a symbol of Japan-Vietnam friendship, as

Japan has cooperated in the project to repair and rebuild the railway line’s aging bridges.

Against this backdrop, a “Japan-Vietnam Friendship Train” decked out in the Japan-Vietnam Friendship Year logo is to make 34 runs on the North-South Railway between Hanoi and Ho Chi Minh City (the distance is 1,700 km) from May 8 to September 23, 2013, commemorating the 40th year of Japan-Vietnam diplomatic relations. The logo mark symbolizes Vietnam’s floral emblem “red lotus” and Japan’s “cherry blossoms” and their national flags. The train is gaining attention as a collaborative PR project between Vietnam Railways, the Vietnamese Ministry of Transport, the Embassy of Japan, JICA, and the Japan Chamber of Commerce and Industry, and contributing to the wide promotion of Japan-Vietnam friendship among the general public across Vietnam.

## 17.2 PR Performance and Achievements

### (1) JICA Vietnam Office PR Performance in JFY2012

The JICA Vietnam Office’s PR performance in 2012 is shown in Table 17-2.

It is notable that instances of JICA-related media coverage in Vietnam numbered 2,081 (total of online newspapers, paper-based newspapers, radio, and television).

According to the JICA office of media public relations, in a media coverage-related ranking of all overseas offices, the Vietnam office came in second, following Bangladesh (with some 4,000 instances of media coverage). Instances in Bangladesh and Vietnam by far outnumber those in other overseas offices, indicating that the results reflect the Vietnam Office’s approach to media coverage.

**Table 17-2: JICA Vietnam Office PR performance in FY2012**

Item	Instances
Press releases	47
Information provision	7
Press tours (Ha Long Bay environmental protection project)	1
News conferences (annual and yen loan)	2
Interviews	46
Journalist dispatch to JICA PR section training	1
Footage provision (interviews with JICA Volunteers and the experts, etc.)	7
Media Contest	1
Vietnamese media dispatch to Japan ( <i>Chugoku Shimbun, Akita Sakigake Shimpō, Okinawa Times</i> )	3
JICA-related media coverage in Vietnam	2,081

(Source: JICA Vietnam Office, Monitoring Sheet for Press Events in FY2012)

**Column 17-1: “Traffic Safety Culture” PR Continuing even after Completion of the Project for Traffic Safety Human Resource Development in Hanoi**

At the launch of the “Project for Traffic Safety Human Resource Development” in Hanoi, conducting PR activities on traffic safety was an uphill task. A helping hand came from a director at Hanoi TV, who planned a new talk program around the theme of traffic safety (45–60 minutes). The program started in 2006 and grew in popularity to run on a yearly basis. It continues to this day, even after the completion of the project.

Guest speakers include the project’s Japanese Chief Advisor, as well as Vietnamese sociologists and traffic inspectors, and officers of the Hanoi Traffic Police Division, the Hanoi Transport and Urban Public Works Service, and the Hanoi Propaganda and Education Department.

During the project, the program introduced and discussed the effects of the project’s progress, new technologies and road infrastructure. More recently, it features traffic safety themes linked to people’s lives.

According to the Chief Advisor, “It’s rare for a foreigner to appear on television in Vietnam. This alone is enough to spark the people’s interest.” The director at Hanoi TV says, “The people of Hanoi have a keen interest in road infrastructure and traffic safety in their city. We don’t measure viewer ratings, but we have received positive audience feedback. The theme is so popular that until 2010, we aired in the prime-time slot between 20:00 and 21:00. In Vietnam, information provided on television is recognized as official and reliable. In that sense, TV is a more effective means of public relations communication than other media.” He adds, “The Chief Advisor thoroughly understands the road traffic conditions in Hanoi, and he has won the trust of the people through his past work in JICA projects. He has a positive effect on traffic safety PR activities.”

Over the past five years, including time after the completion of the project, GOV has developed the road infrastructure, tightened up the traffic enforcement action taken by police, increased the police force, built a system for linking number of arrests to bonuses, and made a variety of other efforts to boost traffic safety. PR activities of the “traffic safety culture” are continuing even after the completion of the project, and figures related to traffic safety in Hanoi are improving every year.

### 17.3 Response from the Vietnamese People

A questionnaire survey was conducted on the awareness of Japan and Japan's ODA during the period from August to September 2013, targeting the students who major in journalism at three Vietnamese universities; Hanoi Academy of Journalism and Communication, Language Faculty, Danang University, Faculty of Journalism and Communication and HCMC University of Social Sciences and Humanities. 493 responses were collected from these universities.

Major question items were about the image and awareness of Japan and Japan's ODA, and expectations of Japan and Japan's ODA. The questionnaire survey results are shown in Appendix 4.

Tables 17-3 and 17-4 show some background information about the respondents.

**Table 17-3: Number of Respondents by University and their Family's Occupation**

University	%	Number	Occupation of respondents' family	%	Number
Hanoi Academy of Journalism and Communication	31.0%	153	Agriculture	40.4%	199
Language Faculty, Danang University	31.2%	154	Personal or family business	27.2%	134
Faculty of Journalism and Communication, HCMC University of Social Sciences and Humanities	37.7%	186	Staff of the Government or State owned Enterprises	23.9%	118
			Staff of Non-State Enterprises	8.5%	42
Total		493	Total		493

(Source: Prepared by the Study Team)

**Table 17-4: Number of Respondents by their Hometown**

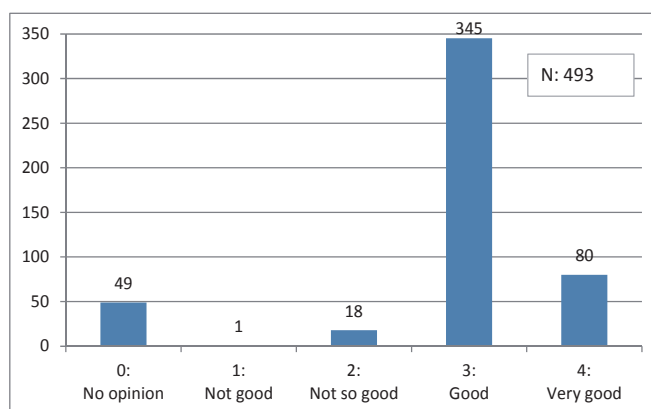
Hometown of respondents	%	Number
Central highland and coastal central area	36.1%	178
Hanoi, HCMC, Haiphong, Da Nang or Cantho	24.5%	121
Red- river delta	13.6%	67
Mekong delta or Southeast area	10.5%	52
Province in northern mountainous and midland area	7.9%	39
Southern central area	7.3%	36
Total		493

(Source: Prepared by the Study Team)

(1) Assessment of the relationship between Vietnam and Japan

The respondents were asked to assess the relationship between Vietnam and Japan. They were asked to choose one item from among 0 (no opinion), 1(not good), 2 (not so good), 3 (good), to 4 (very good) on this question.

Figure 17-1 shows that 345 students (70% of the respondents) chose 3 (good), 80 students (16.2%) chose 4 (very good). The smallest number of respondent chose 1(not good).

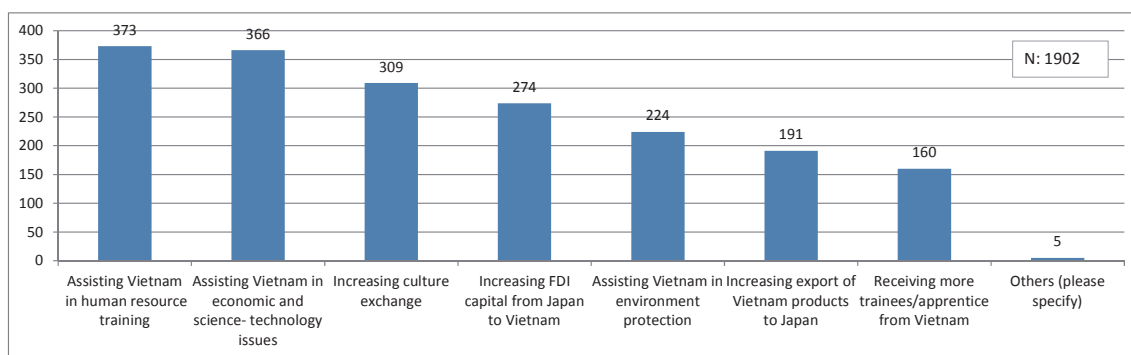


(Source: Prepared by the Study Team)

**Figure 17-1: Assessment of the Relationship between Vietnam and Japan**

Next, the respondents were asked, “What should be the measures from Japan side to improve its relationship with Vietnam?” (multiple answers allowed)

As shown in Figure 17-2, the respondents replied that Vietnam should be assisted in (1) human resources training, (2) economic and science- technology issues, (3) increasing culture exchange, (4) increasing FDI capital from Japan to Vietnam, and (5) environment protection, in that order.



(Source: Prepared by the Study Team)

**Figure 17-2: What should be the Measures from Japan Side to Improve the Relationship with Vietnam? (multiple answers allowed)**

(2) Awareness of Japan’s ODA in Vietnam

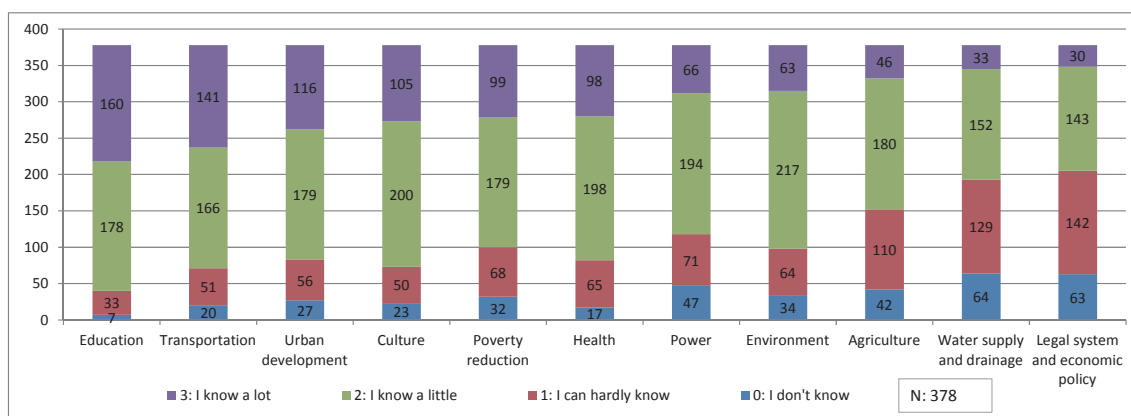
1) Awareness of Japan’s ODA in Vietnam

The respondents were asked, “Are you aware of the Japanese Government providing ODA funds to Vietnam?” 76.6% of the respondents (378 numbers) replied, “Yes” and 23.3% of the respondents (115 numbers) replied, “No.”



378 respondents who replied, “Yes,” were asked to specify their awareness of Japan's ODA in the each field, such as education, transportation, urban development, culture, poverty reduction, health, power, environment, agriculture, water supply and drainage, legal system and economic policy. They were asked to choose one item from among 0 (I don’t know), 1(I hardly know), 2 (I know a little) , to 3 (I know a lot) on this question.

As shown in the Figure 17-3, (1) education was best known among the respondents followed by (2) transportation and (3) culture. In contrast, legal system and economic policy, water supply and drainage, agriculture, and power were relatively unknown.



(Source: Prepared by the Study Team)

**Figure 17-3: Awareness of Japan’s ODA by Field**

Next, the respondents were asked to specify the name of a Japan’s ODA project which they knew well.

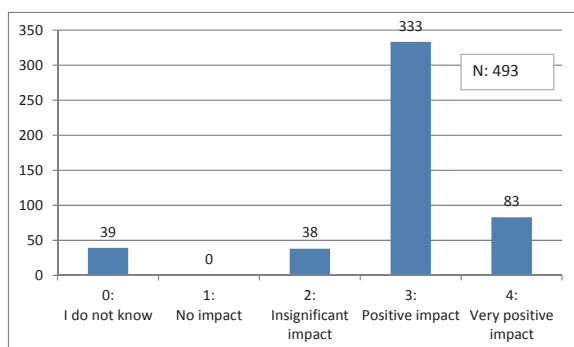
North - South Expressway was the most popular project with 20 respondents, followed by Terminal T2 at Noi Bai international airport with 10 respondents, EVN electricity project with 8 respondents, Thanh Tri Bridge with 7 respondents, project supporting Bach Mai Hospital with 6 respondents. The results show that the infrastructure projects are famous among Vietnamese university students.

The respondents were asked, “Have you ever known any negative information about Japan’s ODA projects?” 29.6% of the respondents (112 numbers) replied, “Yes,” and 70.4% (266 numbers) replied, “No.” 16 respondents answered “Ineffective,” followed by “Delay in implementation of many ODA projects,” with 12 respondents, “Bribery and misuse of ODA funds” with 10 respondents, and “Slow disbursement” with 6 respondents.

## 2) Impact of Japan’s ODA on development in Vietnam and the relation between Vietnam and Japan

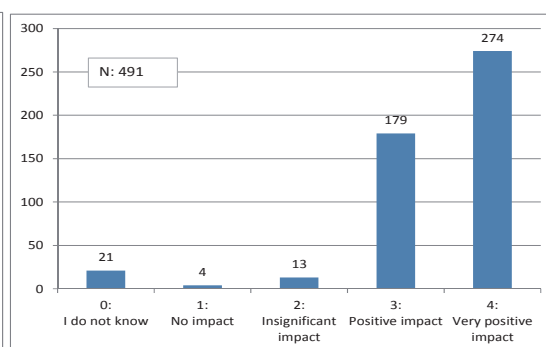
The respondents were asked, “Do Japan’s ODA funds have an impact on development in Vietnam?” and “Do Japan’s ODA funds promote the friendship between the two countries?” They were asked to choose one item from among 0 (I do not know), 1 (no impact), 2 (insignificant impact), 3 (positive impact), to 4 (very positive impact) for these questions.

As Figure 17-4 shows, 67.5% of the respondents (333 numbers) chose “3 (positive impact)”, followed by “4 (very positive impact)” with 83 respondents (16.8%). As Figure 17-5 shows, 55.8% of the respondents (274 numbers) chose “4 (very positive impact)”, followed by “3 (positive impact)” with 179 respondents (36.5%).



(Source: Prepared by the Study Team)

**Figure 17-4: Do Japan’s ODA Funds Have an Impact on Development in Vietnam?**



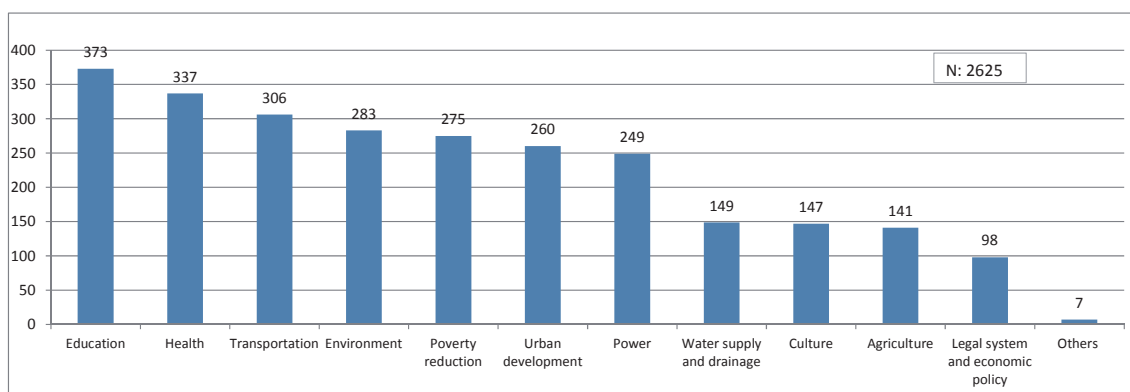
(Source: Prepared by the Study Team)

**Figure 17-5: Do Japan’s ODA Funds Promote Friendship between the Two Countries?**

## 3) Expectations of Japan and Japan’s ODA in the Future

The respondents were asked, “In which fields does Vietnam still need ODA from Japan?” and “Which ODA scheme does Vietnam still need from Japan?”

As Figure 17-6 shows, in terms of field, (1) education seemed most important, followed by (2) health, (3) transportation, (4) environment, and (5) poverty reduction. In terms of scheme, ODA loans seemed most needed for Vietnam, followed by grant aid and technical cooperation.



(Source: Prepared by the Study Team)

**Figure 17-6: In which fields does Vietnam still need ODA from Japan? (multiple answers are allowed)**

#### 17.4 Characteristics and Recommendations of PR for Japan's ODA

As can be seen from the report thus far, JICA has poured a greater amount of energy into PR activities in Vietnam than other countries, cooperating with public relations organizations and media of Vietnam to make technical cooperation projects produce a lasting effect and take root in the people's lives.

The results of the questionnaire survey targeting Vietnamese university students indicate that many students recognize Japan's ODA funding has a positive impact on the development of Vietnam and promotes friendship between the two countries. It is worth noting, however, that by category, the students' awareness does not necessarily correspond to the scale of Japan's ODA funding. As given in Chapter 2, the sum of Japan's assistance by category ranks from the top, (1) transportation, (2) energy, (3) water supply and drainage, telecommunications, and environment, (4) planning and administration, (5) agriculture and fisheries, and mining, (6) health, (7) education, and (8) trade, business, and tourism. Most of specific projects the students knew by name were infrastructure-related, but the category they claimed to know the best—even more than transportation—was education. The students do not have a high awareness of water supply and drainage or energy projects, despite the large scale of assistance.

Finally, given below are comments by a Vietnamese newspaper reporter and a Deputy Director General, Foreign Economic Relations Department of the MPI, who for many years has followed the PR activities for Japan's ODA.

##### (1) Evaluation of PR for Japan's ODA by a Vietnamese Newspaper Reporter

A reporter and Vice Director of the Information Center at Vietnam's largest and most important newspaper, Nhan Dan. Having been at Nhan Dan for 16 years, she writes 20 to 30 articles on

ODA in an average year, and is a two-time winner of JICA's Media Award. Rather than covering topics like infrastructure, which are generally easy to write about, she focuses on following the relationship between the Vietnamese people and JICA experts and volunteers in project areas such as tourism, environment, and health.

She has this to say about PR activities for Japan's ODA in Vietnam: "Japan is good at making sufficient, although infrequent, opportunities to provide the Vietnamese media with information. The Vietnamese media has plenty of opportunities to write about ODA projects, and the Vietnamese people have a solid understanding of Japan's ODA." Yet she believes there should be more opportunities for direct contact between the participants in ODA projects and the media. She does not rely solely on JICA's press releases and press tours but makes a point of also interviewing JICA experts and volunteers. As for PR activities in Japan, she says, "Both Japan and the Vietnamese media need to more actively promote Japan's ODA in Japan, so that the Japanese people gain a correct understanding of how their tax money is used and the impact it makes."

## (2) Evaluation of PR for Japan's ODA by the MPI

Deputy Director General, Foreign Economic Relations Department of the MPI, has been responsible for accepting Japan's ODA for many years. "Today, a good number of Vietnamese people are familiar with Japan's ODA. Structures built by Japan carry a plate with the Japanese flag, but even without it, the Vietnamese people know that the building is a result of Japan's assistance. The Vietnamese people know everything—that Japan's assistance doesn't end with a mere supply of money or goods, that the assistance reaches every corner of our country, that Japanese architecture is strong and uses an original construction method, and that assistance from Japan comes only at the end of a time-consuming process. The people's awareness has changed in this way thanks to 20 years of PR activities about Japan's ODA."

## APPENDIX



## APPENDIX-1: Project/Program List of Japan's ODA

Sector	Sub-sector	Project Name	Scheme	Area	Start	Completion
Governance	Legal Development	Cooperation in the Legal and Judicial Field in Vietnam (Phase 1)	Technical Cooperation	Whole Country	1996	1999
Governance	Legal Development	Cooperation in the Legal and Judicial Field in Vietnam (Phase 2)	Technical Cooperation	Whole Country	1999	2002
Governance	Legal Development	Cooperation in the Legal and Judicial Field in Vietnam (Phase 3)	Technical Cooperation	Whole Country	2003	2006
Governance	Legal Development	Capacity Building for Enforcement of Competition Law	Development Study	Whole Country	2005	2006
Governance	Legal Development	Technical Assistance for the Legal and Judicial System Reform (Phase1)	Technical Cooperation	Whole Country	2007	2011
Governance	Legal Development	Capacity Building for Enforcement of Competition Law and Implementation of Competition Policy in Vietnam	Technical Cooperation	Whole Country	2008	2010
Governance	Legal Development	Project for Strengthening Capacity of Consumer Protection Administration	Technical Cooperation	Whole Country	2010	2012
Governance	Legal Development	Technical Assistance for the Legal and Judicial System Reform (Phase2)	Technical Cooperation	Whole Country	2011	2015
Governance	Legal Development	Project for the Improvement of Legal Framework for Competition Law and Policy	Technical Cooperation	Whole Country	2012	2016
Governance	Public Administration Reform (PAR)	Capacity Building of Master Trainers for Modernization of Customs Administration Project	Technical Cooperation	Whole Country	2004	2007
Governance	PAR	Project for Improvement of Custom Administration	Technical Cooperation	Whole Country	2007	2009
Governance	PAR	Regional cooperation project on risk management for customs in Mekong region	Technical Cooperation	Whole Country	2007	2010
Governance	PAR	Project for Reinforcement of Customs Functions at Tan Cang Cat Lai Port of HoChi Minh City	Grant	East South	2008	2008
Governance	PAR	The Project for the Reinforcement of Custom Functions at the Haiphong Port	Grant	Red River	2009	2009
Governance	PAR	Project on Strengthening the Training System for Improving Capacity of Frontline Officers of Vietnam Customs	Technical Cooperation	Whole Country	2009	2012
Governance	PAR	Preparatory Survey of the Project for E-Customs and National Single Window for Customs Modernization	Development Study	Whole Country	2011	2012
Governance	PAR	The Project for E-Customs and National Single Window for Customs Modernization	Grant	Whole Country	2011	2015
Governance	PAR	Project for promoting E-customs in Vietnam	Technical Cooperation	Whole Country	2012	2015
Governance	PAR	Project on Tax Administration Reform in Vietnam (Phase 1)	Technical Cooperation	Whole Country	2005	2008
Governance	PAR	Project on Tax Administration Reform in Vietnam (Phase 2)	Technical Cooperation	Whole Country	2008	2011
Governance	PAR	Project on Tax Administration Reform in Vietnam (Phase 3)	Technical Cooperation	Whole Country	2011	2014
Governance	PAR	Enhancement of Capabilities of Government Officials for Administrative Reform	Technical Cooperation	Whole Country	2004	2006
Governance	PAR	The Project for Capacity Development of ODA Management	Technical Cooperation	Whole Country	2005	2008
Governance	PAR	Training for Capacity Development of Parliament	Technical Cooperation	Whole Country	2010	2013
Governance	PAR	Capacity Building of the Office of the Government	Technical Cooperation	Whole Country	2012	2015
Governance	PAR	Development of Implementation Capacity for Training of Government Officials at HCMA	Technical Cooperation	East South	2013	2016
Governance	Planning	Socio-Economic Development Planning Reform in Hoa Binh Province	Technical Cooperation	North Mountain	2007	2010
Governance	Planning	Capacity Development Program to Formulate Socioeconomic Development Policy	Technical Cooperation	Whole Country	2010	2012
Governance	Planning	Advisor for Capacity Strengthening of Development Planning Consultation	Technical Cooperation	Whole Country	2012	2014
Governance	Media	Provision of program production and editing equipments for Vietnam Television	Grant	Whole Country	1990	1990
Governance	Media	Vietnam Television Center Project	Loan	Whole Country	1997	1999
Governance	Media	Provision of Program Software for Vietnam Television	Grant	Whole Country	2004	2004
Governance	Media	Vietnam Television Center Project	Loan	Whole Country	2006	2011
Governance	Media	Capacity Development Program for Vietnam Television (VTV)	Technical Cooperation	Whole Country	2012	2015
Economic/Business	Macro/Reform	Commodity Loan	Loan	Whole Country	1973	1978
Economic/Business	Macro/Reform	Rehabilitation Loan	Loan	Whole Country	1993	1994
Economic/Business	Macro/Reform	Non-project Grant Aid	Grant	Whole Country	1993	2011
Economic/Business	Macro/Reform	Economic Reform Support Loan	Loan	Whole Country	1999	1999
Economic/Business	Macro/Reform	Poverty Reduction Support Credit (PRSC3)	Loan	Whole Country	2004	2004
Economic/Business	Macro/Reform	Poverty Reduction Support Credit (PRSC4)	Loan	Whole Country	2005	2005
Economic/Business	Macro/Reform	Poverty Reduction Support Credit (PRSC5)	Loan	Whole Country	2006	2006
Economic/Business	Macro/Reform	Poverty Reduction Support Credit (PRSC6)	Loan	Whole Country	2007	2007
Economic/Business	Macro/Reform	Poverty Reduction Support Credit (PRSC8)	Loan	Whole Country	2009	2009
Economic/Business	Macro/Reform	Poverty Reduction Support Credit (PRSC9)	Loan	Whole Country	2010	2010
Economic/Business	Macro/Reform	Poverty Reduction Support Credit (PRSC10)	Loan	Whole Country	2011	2011
Economic/Business	Macro/Reform	Economic Management and Competitiveness Credit I	Loan	Whole Country	2012	2012
Economic/Business	Market economy	Study on the Economic Development Policy in the Transition toward a Market - Oriented Economy (Phase 1)	Development Study	Whole Country	1995	1996
Economic/Business	Market economy	Study on the Economic Development Policy in the Transition toward a Market - Oriented Economy (Phase 2)	Development Study	Whole Country	1996	1997
Economic/Business	Market economy	Study on the Economic Development Policy in the Transition toward a Market - Oriented Economy (Phase 3)	Development Study	Whole Country	1999	2000
Economic/Business	Investment climate	The Study on Master Plan of Industrial Development in the Hanoi Area	Development Study	Red River	1994	1995
Economic/Business	Investment climate	The Master Plan and Feasibility Study on the Hanoi High Tech Park Project	Development Study	Red River	1996	1997
Economic/Business	Investment climate	The Study on the Hoa Lac Xuan Mai Areas Urban Development Project	Development Study	Red River	1997	1998
Economic/Business	Investment climate	Basic Study on Promotion of Strengthening of FDI Promotion Project (Overseas Basic Study)	Development Study	Whole Country	2002	2007
Economic/Business	Investment climate	Vietnam Japan Joint Initiative	initiative	Whole Country	2003	2014
Economic/Business	Investment climate	Advisor for Foreign Direct Investment	Technical Cooperation	Whole Country	2005	2010
Economic/Business	Investment climate	Vinh Phuc province investment climate improvement	Loan	Red River	2006	2014
Economic/Business	Investment climate	Strengthening of FDI promotion	Technical Cooperation	Whole Country	2007	2010
Economic/Business	Investment climate	Advisor for Management of Hoa Lac Hi-tech Park	Technical Cooperation	Red River	2007	2008
Economic/Business	Investment climate	Hoa Lac Hi-tech Park Infrastructure Development Project(Engineering Service)	Development Study	Red River	2009	2009
Economic/Business	Investment climate	Advisor for Foreign Direct Investment	Technical Cooperation	Whole Country	2010	2014
Economic/Business	Investment climate	Hoa Lac Science and Technology City Development Project	Loan	Red River	2011	2016
Economic/Business	Investment climate	Expert on Improving Business and Investment Environment	Technical Cooperation	Red River	2012	2014
Economic/Business	Institutions/operations	Study on the Development of Industrial Standardization, Metrology, Testing and Quality Management	Development Study	Whole Country	1996	1997

Sector	Sub-sector	Project Name	Scheme	Area	Start	Completion
Economic/Business	Institutions/operations	Modernization of Industrial Property Administration Project	Technical Cooperation	Whole Country	2000	2004
Economic/Business	Institutions/operations	The Study on Development of Industrial Statistics	Development Study	Whole Country	2004	2006
Economic/Business	Institutions/operations	Modernization of IP information system in Viet Nam	Technical Cooperation	Whole Country	2004	2008
Economic/Business	Institutions/operations	Improvement of new industrial statistics in Vietnam	Technical Cooperation	Whole Country	2006	2008
Economic/Business	Institutions/operations	Project on Strengthening the System and Operation on Standards and Conformance	Technical Cooperation	Whole Country	2009	2013
Economic/Business	Institutions/operations	Advisor for organizing national skill testing system in Vietnam	Technical Cooperation	Whole Country	2010	2013
Economic/Business	Institutions/operations	Project for Improvement of New Industrial Statistics in Vietnam	Technical Cooperation	Whole Country	2011	2012
Economic/Business	Institutions/operations	Project for Strengthening the Enforcement of Intellectual Property Rights in Viet Nam	Technical Cooperation	Whole Country	2012	2015
Economic/Business	SME	Study on the Promotion of the Small and Medium Scale Industrial Enterprises	Development Study	Whole Country	1998	1999
Economic/Business	SME	Small and medium sized enterprises finance I	Loan	Whole Country	1998	2004
Economic/Business	SME	Small and medium sized enterprises finance II	Loan	Whole Country	2004	2009
Economic/Business	SME	Reinforcement of the SME Technical Assistance Center	Technical Cooperation	Whole Country	2006	2008
Economic/Business	SME	Advisor on Small and Medium Enterprise Policy	Technical Cooperation	Whole Country	2007	2009
Economic/Business	SME	Small and medium sized enterprises finance III	Loan	Whole Country	2009	2012
Economic/Business	SME	Policy implementation advisor on SME development	Technical Cooperation	Whole Country	2010	2012
Economic/Business	SME	Strengthening public functions for supporting small and medium enterprises	Technical Cooperation	Whole Country	2011	2014
Economic/Business	Industrial human resources	The Vietnam Information Technology Training	Technical Cooperation	Red River	1996	2001
Economic/Business	Industrial human resources	The Project for Construction of Viet Nam - Japan Human Resources Cooperation Center in Hanoi City and HCMC	Grant	Red River	2000	2000
Economic/Business	Industrial human resources	The Project for Construction of Viet Nam - Japan Human Resources Cooperation Center in Hanoi City and HCMC	Grant	East South	2000	2000
Economic/Business	Industrial human resources	The Project for Strengthening Training Capability for Technical Workers in the Hanoi Industrial College	Technical Cooperation	Red River	2000	2004
Economic/Business	Industrial human resources	Follow-up Project for Strengthening Training Capability for Technical Workers in the Hanoi Industrial College	Technical Cooperation	Red River	2008	2008
Economic/Business	Industrial human resources	Vietnam-Japan Human Resources Cooperation Center (Hanoi and HCMC) (Phase 1)	Technical Cooperation	Red River, East South	2000	2005
Economic/Business	Industrial human resources	ASEAN university network/Southeast Asia engineering education development network	Technical Cooperation	ASEAN	2002	2017
Economic/Business	Industrial human resources	Higher Education Development Support Project on ICT	Loan	Red River	2005	2014
Economic/Business	Industrial human resources	Vietnam-Japan Human Resources Cooperation Center (Hanoi and HCMC) (Phase 2)	Technical Cooperation	Red River, East South	2005	2010
Economic/Business	Industrial human resources	Project for Strengthening the Capacity of ITSS Education at Hanoi University of Technology	Technical Cooperation	Red River	2006	2008
Economic/Business	Industrial human resources	Project for Strengthening the Capacity of ITSS Education at Hanoi University of Technology (Phase 2)	Technical Cooperation	Red River	2008	2012
Economic/Business	Industrial human resources	Project for Human Resource Development of Technicians at Hanoi University of Industry	Technical Cooperation	Red River	2009	2012
Economic/Business	Industrial human resources	Project for Capacity Development of Business Persons through Vietnam-Japan Human Resources Cooperation Center	Technical Cooperation	Red River, East South	2010	2014
Economic/Business	Industrial human resources	Project for strengthening TOT functions at Hanoi University of Industry (HaUI)	Technical Cooperation	Red River	2013	2016
Economic/Business	Financial sector	Advisor on Financial Policy	Technical Cooperation	Whole Country	2006	2008
Economic/Business	Financial sector	Intellectual Support Project for the Vietnam Bank for Social Policies (VBSP)	Technical Cooperation	Red River	2006	2007
Economic/Business	Financial sector	Project on Strengthening Ho Chi Minh City Securities Trading Center	Technical Cooperation	Whole Country	2006	2006
Economic/Business	Financial sector	Project for Strengthening Capacities of State Bank of Vietnam	Technical Cooperation	Red River	2008	2010
Economic/Business	Financial sector	Project for Institutional Capacity Development for Infrastructure Finance in Vietnam	Technical Cooperation	Red River	2008	2011
Economic/Business	Financial sector	Project for Strengthening Function of Central Bank	Technical Cooperation	Red River	2010	2011
Economic/Business	Financial sector	Project for Strengthening Function of Banking Supervision	Technical Cooperation	Red River	2010	2012
Economic/Business	Other	The Study on Master Plan of Steel Industry Development	Development Study	Whole Country	1996	1997
Economic/Business	Other	Feasibility Study on Installation of Steel Flat Product Mills (Phase1 F/S on cold rolling Mill)	Development Study	East South	1999	2000
Economic/Business	Other	Microfinancing project	Grant	North Mountain, Central Coast	2002	2002
Energy	Power generation	Da Nhim Hydroelectric Power Project	War Reparation	Central Coast	1955	1964
Energy	Power generation	Phu My Thermal Power Plant Project	Loan	East South	1994	2002
Energy	Power generation	Pha Lai Thermal Power Plant Project	Loan	Red River	1995	2003
Energy	Power generation	Ham Thuan - Da Mi Hydropower Project	Loan	East South	1995	2001
Energy	Power generation	Da Nhim Power System Rehabilitation Project	Loan	Central Coast	1997	2006
Energy	Power generation	Omon Thermal Power Plant and Mekong Delta Transmission Network Project	Loan	Mekong	2001	2009
Energy	Power generation	Dai Ninh Hydropower Project	Loan	Central Highland	1999	2008
Energy	Transmission and Distribution network	Phu My-Ho Chi Minh City 500kV Transmission Line Project	Loan	East South	2001	2007
Energy	Transmission and Distribution network	Power Transmission and Distribution Network Development Project(Power Sector Loan)	Loan	Whole Country	2004	2009
Energy	Safety management	The Project on Technical Electricity Engineer Training	Technical Cooperation	Whole Country	2000	2005
Energy	Energy Conservation	Advisor on Energy Conservation	Technical Cooperation	Whole Country	2007	2008
Energy	Safety management	The Project on Development Plan of Training Center for Electric Power Sector	Technical Cooperation	Whole Country	2007	2009
Energy	Safety management	Electric Power Technical Standards Promotion in Vietnam	Technical Cooperation	Whole Country	2010	2013
Energy	Energy Conservation	Establishment of Energy Management Training Center (Stage 1)	Technical Cooperation	Whole Country	2011	2012
Energy	Coal mine	Coal Mine Firedamp Gas Management Center	Technical Cooperation	Whole Country	2001	2005
Energy	Coal mine	Technical Cooperation in NEDO	Technical Cooperation	Whole Country	2005	2009
Energy	Coal mine	General Survey for the Current Safety Situation of Vietnamese Coalmines	Technical Cooperation	Whole Country	2008	2009
Energy	Power generation	The Feasibility Study on Rehabilitation of Da Nhim Power System	Development Study	Central Coast	1993	1994
Energy	Master Plan and Development survey	Mineral Exploration in the West Thanh Hoa Area	Development Study		1993	1994
Energy	Master Plan and Development survey	The Master Plan Study on the Electric Power Development	Development Study	Whole Country	1993	1995
Energy	Master Plan and Development survey	Mineral Exploration in the Bo Cu Area	Development Study		1996	1998
Energy	Power generation	Development Survey on Hydroelectric Power Plant in middle Dong Nai River	Development Study	East South	1998	1999
Energy	Master Plan and Development survey	The Mineral Exploration in the Dong Pao Area	Development Study		2000	2001
Energy	Transmission and Distribution network	The Renewable Energy Master Plan Study in the Northern Part	Development Study	North Mountain	2000	2002
Water Supply and Sewerage	Transmission and Distribution network		Development Study	North Mountain	2002	2003



Sector	Sub-sector	Project Name	Scheme	Area	Start	Completion
Water Supply and Sewerage	Power generation	Pumped Storage Power Project and Optimization for Peaking Power Generation	Development Study	Whole Country	2002	2004
Water Supply and Sewerage	Master Plan and Development survey	The study on National Power Development Plan for the period of 2006-2015, Perspective up to 2025 in Vietnam	Development Study	Whole Country	2005	2006
Water Supply and Sewerage	Master Plan and Development survey	Study on National Energy Master Plan	Development Study	Whole Country	2006	2007
Water Supply and Sewerage	Safety management	Study on Technical and Safety Standards for Electric Power Industry	Development Study	Whole Country	2006	2007
Water Supply and Sewerage	Energy Conservation	Master Plan for Energy Conservation and Effective Use	Development Study	Whole Country	2008	2009
Water Supply and Sewerage	Master Plan and Development survey	The Study on National Energy Master Plan in Vietnam	Development Study	Whole Country	2010	2011
Water Supply and Sewerage	Energy Conservation		Development Study		2011	2012
Water Supply and Sewerage	Power generation	Preparatory Survey Song Hau 1 Coal Fired Power Plant Project and its related common infrastructures (PPP Infrastructure)	Development Study		2011	2012
Water Supply and Sewerage	Power generation	Preparatory Survey on O Mon III Combined Cycle Power Plant Construction Project	Development Study	Mekong	2011	2012
Water Supply and Sewerage	Power generation	Project for Diesel Power Generation on Saigon City	Loan	East South	1970	???
Water Supply and Sewerage	Power generation	Rehabilitation Project on Da Nhim Hydroelectric Power Plant Project	Grant	Central Coast	1970	1971
Water Supply and Sewerage	Power generation	Can Tho Thermal Power Plant Project	Loan	Mekong	1971	???
Water Supply and Sewerage	Power generation	Nhin Binh Thermal Power Plant Project	Loan	Red River	2004	中止
Water Supply and Sewerage	Power generation	Thac Mo Hydropower Station Extension Project	Loan	Central Highland	2004	未定
Water Supply and Sewerage	Transmission and Distribution network	Da Lat - Cam Ranh Transmission Line Project	Loan	Central Highland	1972	???
Water Supply and Sewerage	Transmission and Distribution network	Rehabilitation Project on Da Nhim - Saigon Transmission Line Prorurement	Grant	Central Coast	1972	1972
Water Supply and Sewerage	Transmission and Distribution network	Technical Cooperation on Da Nhim - Saigon Transmission Line	Grant	Central Coast	1973	1973
Water Supply and Sewerage	Power generation	Nghi Son Thermal Power Plant Construction Project	Loan	Central Coast	2006	2014
Water Supply and Sewerage	Power generation	Thai Binh Thermal Power Plant and Transmission Lines Construction Project	Loan	Red River	2009	2016
Water Supply and Sewerage	Power generation	O Mon Thermal Power Plant Unit No.2 Construction Project	Loan	Mekong	2003	2015
Water Supply and Sewerage	Power generation	Energy Efficiency and Renewable Energy Promoting Project	Loan	Whole Country	2009	2014
Water Supply and Sewerage	Transmission and Distribution network	Power Transmission and Distribution Network Development Project	Loan		2007	2015
Water Supply and Sewerage	Water Supply	The project for water supply system in Gia Lam Area, Ha Noi City	Grant	Red River	1993	1995
Water Supply and Sewerage	Water Supply	The Study on Water Supply Development for Hanoi City	Development Study	Red River	1995	1997
Water Supply and Sewerage	Water Supply	The Project for Expansion of Water Supply System in Hai Duong City	Grant	Red River	1998	2001
Water Supply and Sewerage	Water Supply	The Water Sector Training Center Project in the Southern Areas of the Socialist Republic of Vietnam	Technical Cooperation	East South	1999	2002
Water Supply and Sewerage	Water Supply	The Project on Human Resources Development for Water sector in the Middle Region of Vietnam	Technical Cooperation	Central Coast	2006	2008
Water Supply and Sewerage	Water Supply	The Project on Capacity Development for Urban Water Supply Utilities in the Central Region	Technical Cooperation	Central Coast	2010	2013
Water Supply and Sewerage	Water Supply	PPP Duong River Water Supply System Project	Development Study	Red River	2010	2013
Water Supply and Sewerage	Water Supply	Preparatory Survey on Water Supply and Sewerage Treatment System Project in Phu Quoc Island, Kien Giang Province (PPP Infrastructure Project)	Development Study	Mekong	2011	2012
Water Supply and Sewerage	Water Supply	Southern Vietnam Water Supply Project	Development Study	East South	2012	2013
Water Supply and Sewerage	Sewerage/Drainage	Urban Drainage and Wastewater Disposal System in Hanoi City	Development Study	Red River	1993	1994
Water Supply and Sewerage	Sewerage/Drainage	Improvement Project of Drainage System in South Bac Duong Agricultural Area	Development Study	Red River	1993	1994
Water Supply and Sewerage	Sewerage/Drainage	Hanoi Drainage Project for Environmental Improvement	Loan	Red River	1995	2005
Water Supply and Sewerage	Sewerage/Drainage	The Project for improvement of drainage system in Tan Chi agricultural area	Grant	Red River	1997	2000
Water Supply and Sewerage	Sewerage/Drainage	The Detail Design Study on Ho Chi Minh City Water Environment Improvement Project	Development Study	East South	1999	2001
Water Supply and Sewerage	Sewerage/Drainage	Ho Chi Minh City water environment improvement project	Loan	East South	2001	2013
Water Supply and Sewerage	Sewerage/Drainage	Southern Binh Duong Province water environment improvement project	Loan	East South	2006	2013
Water Supply and Sewerage	Sewerage/Drainage	Preparatory Survey for Dong Nai Water Environment Improvement Project	Development Study	East South	2010	2011
Water Supply and Sewerage	Sewerage/Drainage	Project for Capacity Development on Sewerage Management in Ho Chi Minh City	Technical Cooperation	East South	2009	2010
Water Supply and Sewerage	Sewerage/Drainage	Preparatory Survey on Construction Project for Yen Xa Wastewater Treatment Plant	Development Study	Red River	2011	2012
Water Supply and Sewerage	Underground water	Development Survey for the Groundwater Development in Rural Part of Northern Provinces	Development Study	North Mountain	1998	1999
Water Supply and Sewerage	Underground water	Preliminary Survey for the Groundwater Development in Rural Part of Middle highland	Development Study	Central Highland	2000	2002
Water Supply and Sewerage	Underground water	Development Survey for the Groundwater Development in Central Highland Provinces	Development Study	Central Highland	2000	2001
Water Supply and Sewerage	Underground water	The Project for the Groundwater Development in Rural Part of Northern Provinces	Grant	North Mountain	2002	2004
Water Supply and Sewerage	Underground water	The Project for the Groundwater Development in Central Highland Provinces	Grant	Central Highland	2006	2009
Water Supply and Sewerage	Underground water	Preliminary Survey for the Groundwater Development in Rural Part of South Coastal Area	Development Study	East South	2007	2008
Water Supply and Sewerage	Underground water	Development Survey for Rehabilitation of Small-Scale Reservoirs in Quang Ngai Province	Development Study	Central Coast	2009	2010
Water Supply and Sewerage	Underground water	The Project for Rehabilitation of Small-Scale Reservoirs in Quang Ngai Province	Grant	Central Coast	2010	2010
Water Supply and Sewerage	Water Resource	Master Plan Study on Dong Nai and Surrounding Basins Water Resources Development	Development Study	East South	1994	1996
Water Supply and Sewerage	Water Resource	The Study on Nationwide Water Resources Development and Management	Development Study	Whole Country	2001	2003
Water Supply and Sewerage	Water Supply	Dong Nai and Ba Ria - Vung Tau water supply project	Loan	East South	1997	2017
Water Supply and Sewerage	Sewerage/Drainage	Ho Chi Minh City water environment improvement project (Phase I)	Loan	East South	2006	2017
Water Supply and Sewerage	Sewerage/Drainage	Second Hanoi Drainage Project for Environmental Improvement	Loan	Red River	2006	2017
Water Supply and Sewerage	Sewerage/Drainage	Drainage and wastewater treatment project of Hue City	Loan	Central Coast	2007	2017
Water Supply and Sewerage	Sewerage/Drainage	Ho Chi Minh City water environment improvement project (Phase II)	Loan	East South	2010	2017
Water Supply and Sewerage	Sewerage/Drainage	Southern Binh Duong Province water environment improvement project (Phase II)	Loan	East South	2011	2017
Water Supply and Sewerage	Sewerage/Drainage	Project for Capacity Development on Sewerage Management in Ho Chi Minh City (Phase II)	Technical Cooperation	East South	2011	2014
Transportation	Overall	The Master Plan Study in Transport Development in the Northern Part of Vietnam	Development Study	Red River	1993	1994
Transportation	Overall	The Study on the National Transport Development Strategy in Vietnam (VITRANSS)	Development Study	Whole Country	1999	2000
Transportation	Overall	The Comprehensive Study on the Sustainable Development of Transport System in Vietnam	Development Study	Whole Country	2007	2009
Transportation	Civil Aviation	F/S on New Development Plan of Hanoi International Airport	Development Study	Red River	1995	1996
Transportation	Civil Aviation	Tan Son Nhat Airport Terminal Construction Project	Loan	East South	2001	2007
Transportation	Civil Aviation	The Master Plan Study on the Development of the New CNS/ATM Systems in Cambodia, Lao PDR and Vietnam	Development Study	Mekong	2009	2010
Transportation	Civil Aviation	Terminal 2 Construction Project in Noi Bai Airport	Loan	Red River	2009	2013
Transportation	Civil Aviation	Terminal 2 Construction Project in Noi Bai Airport (Phase 2)	Loan	Red River	2011	2013
Transportation	Civil Aviation	The Project for the Capacity Development for Transition to the New CNS/ATM Systems in Cambodia, Lao PDR and Vietnam	Technical Cooperation	Mekong	2011	2016

Sector	Sub-sector	Project Name	Scheme	Area	Start	Completion
Transportation	Civil Aviation	Preparatory Survey for Long Thanh New International Airport Construction Project (PPP Infrastructure)	Development Study	East South	2011	2013
Transportation	Civil Aviation	The Project for Support on Establishment of the Programs for Operation & Maintenance in Noi Bai International Airport	Technical Cooperation	Red River	2012	2015
Transportation	Traffic Management	Improvement Plan for Transport Technical and Professional School No.1	Grant	Red River	2000	2000
Transportation	Traffic Management	Study on the Traffic Accident and Safety in Vietnam	Development Study	Whole Country	2001	2001
Transportation	Traffic Management	Traffic Safety Promotion Program Phase 1	Technical Cooperation	Whole Country	2002	2002
Transportation	Traffic Management	Basic Survey on Road Traffic Safety in Hanoi City	Development Study	Red River	2003	2004
Transportation	Traffic Management	Traffic Safety Promotion Program Phase 2	Technical Cooperation	Whole Country	2004	2004
Transportation	Traffic Management	Project for the Traffic Safety Human Resource Development in Hanoi	Technical Cooperation	Red River	2006	2009
Transportation	Traffic Management	The Northern Vietnam National Roads Traffic Safety Improvement Project	Loan	Red River	2006	2013
Transportation	Traffic Management	Study on National Road Traffic Safety Master Plan	Development Study	Whole Country	2007	2009
Transportation	Traffic Management	Project for Strengthening Traffic Police Training in People's Police Academy and Various Police Training Institutions	Technical Cooperation	Whole Country	2010	2013
Transportation	Traffic Management	The Project for Improving Public Transportation in Hanoi	Technical Cooperation	Red River	2010	2015
Transportation	Traffic Management	The Project on Improvement of Urban Transportation of Danang City	Technical Cooperation	Central Coast	2013	2016
Transportation	Port	Hai Phong Port Rehabilitation Project	Loan	Red River	1993	2006
Transportation	Port	F/S on Cai Lan Port Construction Project	Development Study	Red River	1993	1994
Transportation	Port	Study on Vung Tau Fishery Port Construction Plan	Grant	East South	1994	1996
Transportation	Port	Cai Lan Port Extension Project	Loan	Red River	1995	2004
Transportation	Port	M/P Study on Coastal Shipping Development	Development Study	Whole Country	1995	1996
Transportation	Port	The Study on the Port Development Plan in the Central Region of the Key Area	Development Study	Central Coast	1997	1998
Transportation	Port	Danang Port Improvement Project	Loan	Central Coast	1998	2007
Transportation	Port	Hai Phong Port Rehabilitation Project (Phase 2)	Loan	Red River	1999	2009
Transportation	Port	The Port Development Study in South Vietnam	Development Study	East South	2000	2002
Transportation	Port	Project on the Improvement of Higher Maritime Education in Vietnam	Technical Cooperation	Red River	2001	2004
Transportation	Port	D/D Study for Cai Mep - Thi Vai International Terminals	Development Study	East South	2004	2005
Transportation	Port	Cai Mep - Thi Vai International Port Construction Project	Loan	East South	2004	2013
Transportation	Port	The Project on Search and Rescue System (AIS & SARCS)	Technical Cooperation	Whole Country	2004	2005
Transportation	Port	The Project for Improvement of Port Management System in Vietnam	Technical Cooperation	Whole Country	2005	2008
Transportation	Port	The Preparatory Survey for Lach Huyen Port Development Project	Development Study	Red River	2009	2010
Transportation	Port	Technical Assistance Project related to the Da Nang Port Improvement Project	Technical Cooperation	Central Coast	2010	2010
Transportation	Port	Lach Huyen Port Infrastructure Construction Project (Port)	Loan	Red River	2011	2015
Transportation	Port	Lach Huyen Port Infrastructure Construction Project (Road and Bridge)	Loan	Red River	2011	2015
Transportation	Others	The Project for Capacity Enhancement in Construction Quality Assurance	Technical Cooperation	Whole Country	2010	2013
Transportation	Railway	M/P on Rehabilitation and Improvement of Railways in Vietnam	Development Study	Whole Country	1993	1995
Transportation	Railway	Hanoi - HCM City Railway Bridge Rehabilitation Project	Loan	Whole Country	1993	1995
Transportation	Railway	Hanoi - HCM City Railway Line Bridges Safety Improvement Project	Loan	Whole Country	2003	2006
Transportation	Railway	HCM City Urban Railway Project (Line 1: Ben Thanh - Suoi Tien Section)	Loan	East South	2006	2017
Transportation	Railway	Dispatch of Advisor for Railway Planning and Management	Technical Cooperation	Whole Country	2007	2009
Transportation	Railway	Building the National Technical Regulation and Standard Set for Railway	Development Study	Whole Country	2007	2008
Transportation	Railway	Hanoi City Urban Railway Construction Project (E/S, Line 1)	Loan	Red River	2007	2018
Transportation	Railway	Study on Integrated UMRT and Urban Development in Hanoi	Development Study	Red River	2009	2010
Transportation	Railway	Hanoi City Urban Railway Construction Project (Line 2: Nam Tang Long - Tran Hung Dao)	Loan	East South	2011	2017
Transportation	Railway	The Support on Setup of Operation and Management Company of Urban Railways in HCMC	Technical Cooperation	East South	2011	2013
Transportation	Railway	Study for the Formulation of High Speed Railway Projects on Hanoi - HCM City	Development Study	Whole Country	2011	2013
Transportation	Railway	Preparatory Survey for Hanoi City Urban Railway Line 5 (PPP Infrastructure)	Development Study	Red River	2011	2012
Transportation	Railway	Preparatory Survey for Hanoi City Urban Railway Line 1	Development Study	Red River	2011	2012
Transportation	Railway	The Technical Assistance Project to Strengthen the Capacity of Regulator and to Establish Operation and Maintenance of Metropolitan Railway Lines in Hanoi City	Technical Cooperation	Red River	2013	2015
Transportation	Road and Bridge	NH No.1 Bridge Rehabilitation Project Phase 1	Loan	Red River	1993	1995
Transportation	Road and Bridge	NH No.5 Improvement Project	Loan	Red River	1993	1995
Transportation	Road and Bridge	Study on Urban Transportation for Hanoi City	Development Study	Red River	1995	1996
Transportation	Road and Bridge	NH No.1 Bridge Rehabilitation Project Phase 2	Loan	Red River	1995	1998
Transportation	Road and Bridge	F/S on National Highway No. 18 Improvement	Development Study	Red River	1995	1995
Transportation	Road and Bridge	Rural Bridge Construction in Northern Mountain Area	Grant	North Mountain	1995	1998
Transportation	Road and Bridge	Hai Van Pass Tunnel Construction Project	Loan	Central Coast	1996	2005
Transportation	Road and Bridge	National Highway No. 18 Improvement Project	Loan	Red River	1997	2005
Transportation	Road and Bridge	National Highway No. 10 Improvement Project	Loan	Red River	1997	2007
Transportation	Road and Bridge	Thanh Tri Bridge Construction F/S	Development Study	Red River	1997	1998
Transportation	Road and Bridge	Can Tho Bridge Construction F/S	Development Study	Mekong	1997	1998
Transportation	Road and Bridge	Transport Infrastructure Development Project in Hanoi	Loan	Red River	1998	2009
Transportation	Road and Bridge	Thanh Tri Bridge Construction D/D Study	Development Study	Red River	1999	2000
Transportation	Road and Bridge	Thanh Tri Bridge Construction Project	Loan	Red River	1999	2005
Transportation	Road and Bridge	Can Tho Bridge Construction D/D Study	Development Study	Mekong	1999	2000
Transportation	Road and Bridge	Saigon East-West Highway Construction Project	Loan	East South	1999	2012
Transportation	Road and Bridge	Binh Bridge Construction Project	Loan	Red River	1999	2005
Transportation	Road and Bridge	Can Tho Bridge Construction Project	Loan	Mekong	2000	2010
Transportation	Road and Bridge	National Highway No.1 Bypass Road Construction Project	Loan	Mekong	2000	2012
Transportation	Road and Bridge	Bai Chai Bridge Construction Project	Loan	Red River	2001	2006
Transportation	Road and Bridge	The Project for Strengthening Training Capabilities for Road Construction Workers in Transport Technical and Professional School NO.1	Technical Cooperation	Whole Country	2001	2005
Transportation	Road and Bridge	Rural Bridge Construction in Mekong Delta Region	Grant	Mekong	2001	2003
Transportation	Road and Bridge	Rural Bridge Construction in Central Region	Grant	Central Coast	2001	2003
Transportation	Road and Bridge	M/P and F/S of Urban Transport in Hochiminh City Area	Development Study	East South	2001	2004
Transportation	Road and Bridge	Equipment for Bomb and Mine Exploration of Hochiminh Highway	Grant	East South	2001	2001
Transportation	Road and Bridge	Feasibility Study on Red River Navigation Improvement, the Segment through Hanoi	Development Study	Red River	2001	2002
Transportation	Road and Bridge	The National Highway No. 1 Bridge Rehabilitation Project Phase 3	Loan	Red River	2002	2011
Transportation	Road and Bridge	National and Provincial Road Bridges Improvement Project	Loan	Whole Country	2003	2011
Transportation	Road and Bridge	The New National Highway No.3 and Regional Road Network Construction Project	Loan	Red River	2004	2014
Transportation	Road and Bridge	Nhat Tan Bridge (Vietnam - Japan Friendship Bridge) Construction Project	Loan	Red River	2005	2013
Transportation	Road and Bridge	North-South Expressway Construction Project (Hochiminh - Dau Giay)	Loan	East South	2007	2014

Sector	Sub-sector	Project Name	Scheme	Area	Start	Completion
Transportation	Road and Bridge	Hanoi City Ring Road No.3 Construction Project	Loan	Red River	2007	2011
Transportation	Road and Bridge	The National Highway No. 1 Bridge Rehabilitation Project Phase 3-2	Loan	Mekong	2009	2012
Transportation	Road and Bridge	National Highway No.1 Bypass Road Construction Project (2)	Loan	Mekong	2009	2012
Transportation	Road and Bridge	Noi Bai International Airport to Nhat Tan Bridge Connecting Road Construction Project	Loan	Red River	2009	2013
Transportation	Road and Bridge	Advisor for Management, Operation, and Maintenance of Expressway System	Technical Cooperation	Whole Country	2010	2012
Transportation	Road and Bridge	North South Expressway Construction Project (Danang - Quang Ngai)	Loan	Central Coast	2011	2017
Transportation	Road and Bridge	North South Expressway Construction Project (Hochiminh - Dau Giay), the Second Phase	Loan	East South	2011	2014
Transportation	Road and Bridge	North South Expressway Construction Project (Ben Luc - Long Thanh)	Loan	East South	2011	2018
Transportation	Road and Bridge	The Preparatory Survey for Phap Van - Cau Gié Expressway Project in Hanoi (PPP Infrastructure Project)	Development Study	Red River	2011	2012
Transportation	Road and Bridge	The Preparatory Survey for Trung Luong - My Thuan Expressway Project (PPP Infrastructure Project)	Development Study	Mekong	2011	2012
Transportation	Road and Bridge	The Preparatory Survey for Freeway Traffic Management Systems in Hanoi Metropolitan Area	Development Study	Red River	2011	2012
Transportation	Road and Bridge	The Preparatory Survey for the Second Rural Bridge Construction in Central Region (FS Part 2)	Development Study	Central Coast	2011	2012
Transportation	Road and Bridge	Development of Landslide Risk Assessment Technology along Transport Arteries in Viet Nam	Technical Cooperation	Whole Country	2011	2016
Transportation	Road and Bridge	The Project for Capacity Strengthening of Expressway Management and Maintenance	Technical Cooperation	Whole Country	2011	2013
Transportation	Road and Bridge	The Project for Enhancing Capacity of College of Transport	Technical Cooperation	Whole Country	2011	2014
Transportation	Road and Bridge	The Project for Capacity Strengthening of Road Operation and Maintenance	Technical Cooperation	Whole Country	2011	2014
Transportation	Road and Bridge	The Preparatory Survey for Bien Hoa - Vung Tau Expressway Project (PPP Infrastructure Project)	Development Study	East South	2012	2013
Transportation	Road and Bridge	The Project for Development of Traffic Control System for Expressway in Hanoi	Grant	Red River	2012	2014
Transportation	Road and Bridge	Rural Bridge Construction in Central Region (Second Phase)	Grant	Central Coast	2012	2015
Telecommunication	Telecommunication	Telephone system in Saigon metropolitan	Loan	East South	1971	不明
Telecommunication	Telecommunication	Coastal Communication System Project	Loan	Red River	1997	2002
Telecommunication	Telecommunication	Central Vietnam Rural Telecommunication Project	Loan	Central Coast	1997	2011
Telecommunication	Telecommunication	The Viet Nam National Development of Telecommunications Project	Development Study	Whole Country	1998	1999
Telecommunication	Telecommunication	The Training Capability Strengthening Project on the Posts and Telecommunications Training Center No.1	Technical Cooperation	Whole Country	1998	2003
Telecommunication	Telecommunication	Coastal Communication System Project in Southern Part of Viet Nam	Loan	East South/Mekong	2000	2006
Telecommunication	Telecommunication	North - South Submarine Fiber Optic Cable Link Project	Loan	Whole Country	2002	中断
Telecommunication	Telecommunication	Third Country Training Course on Telecommunication	Technical Cooperation	Whole Country	2005	2008
Telecommunication	Telecommunication	Rural Community Internet Use Development Project	Loan	North Mountain	2006	中断
Telecommunication	Telecommunication	Third Country Training Project on IP (Internet Protocol) & NGN (New Generation Network) Telecommunications Technology	Technical Cooperation	Whole Country	2009	2011
Health	Infectious Disease	Project for Improvement of Cold Chain for Expanded Programme on Immunization	Grant	Whole Country	1995	1995
Health	Infectious Disease	Project for Prevention and Control of HIV/AIDS Transmission	Grant	Whole Country	2000	2000
Health	Infectious Disease	Project for Accelerated Measles Control (phase1, 2)	Grant	Whole Country	2000	2001
Health	Infectious Disease	Construction Facilities for Measles Vaccine Production	Grant	Whole Country	2003	2005
Health	Infectious Disease	HIV/AIDS Regional Coordination Center Project	Technical Cooperation	Whole Country	2005	2007
Health	Infectious Disease	Project for Strengthening Capacity for Measles Vaccine Production	Technical Cooperation	Whole Country	2005	2009
Health	Infectious Disease	Project for Improvement of Safety Laboratory for National Institute of Hygiene and Epidemiology	Grant	Whole Country	2006	2006
Health	Infectious Disease	Project for capacity development for National Institute of Hygiene and Epidemiology to control emerging and re-emerging infectious diseases	Technical Cooperation	Whole Country	2005	2008
Health	Infectious Disease	Project for Capacity Development for Laboratory Network in Vietnam of Biosafety and Examination of Highly Hazardous Infectious Pathogens	Technical Cooperation	Whole Country	2010	2015
Health	Infectious Disease	Project for Strengthening Capacity for Measles-Rubella Combined Vaccine Production	Technical Cooperation	Whole Country	2013	2016
Health	Healthcare	Cho Ray Hospital	Technical Cooperation	East South	1966	1975
Health	Healthcare	Saigon Hospital	Technical Cooperation	East South	1966	1975
Health	Healthcare	Medical Equipment for the Attachment Clinic	Grant	East South	1969	1969
Health	Healthcare	Medical Equipment for Cho Ray Hospital	Grant	East South	1970	1970
Health	Healthcare	Medical Equipment for Cho Ray Hospital	Grant	East South	1973	1973
Health	Healthcare	Medical supply, housing construction materials for refugees	Grant		1973	1973
Health	Healthcare	Facility of Cho Ray Hospital (Main building etc.)	Grant	East South	1973	1973
Health	Healthcare	Medical Equipment for Cho Ray Hospital	Grant	East South	1974	1974
Health	Healthcare	Facility of Cho Ray Hospital (auditorium, canteen)	Grant	East South	1974	1974
Health	Healthcare	New Cho Ray Hospital	Technical Cooperation	East South	1974	1977
Health	Healthcare	Project for the Rehabilitation and Upgrading of the Cho Ray Hospital	Grant	East South	1992	1994
Health	Healthcare	Project for Improvement of Medical Equipment in the Hai Ba Trung Hospital	Grant	Red River	1992	1992
Health	Healthcare	Project for Improvement of Medical Equipment in Hanoi City	Grant	Red River	1993	1994
Health	Healthcare	Project on Cho Ray Hospital	Technical Cooperation	East South	1995	1998
Health	Healthcare	Project for Improvement of the Bach Mai Hospital	Grant	Red River	1997	2000
Health	Healthcare	Bach Mai Hospital Project for Functional Enhancement	Technical Cooperation	Red River	1999	2004
Health	Healthcare	Project for Improvement of the Hue Central Hospital	Grant	Central Coast	2004	2006
Health	Healthcare	Project for Improvement of Equipment of National Institute of Pediatrics	Grant	Red River	2003	2003
Health	Healthcare	Project for Improvement of Medical Equipment of Da Nang Hospital	Grant	Central Coast	2005	2005
Health	Healthcare	In-country Training Program for Strengthening Capacity of Human Resources of Health Care Services in the Southern Area of Vietnam	Technical Cooperation	East South	2004	2008
Health	Healthcare	Project for Strengthening Health Service Provision in Hoa Binh Province	Technical Cooperation	North Mountain	2004	2009
Health	Healthcare	Project for the Improvement of Hoa Binh General Hospital	Grant	North Mountain	2005	2005
Health	Healthcare	Regional and Provincial Hospital Development Project	Loan	Whole Country	2005	2005
Health	Healthcare	Project for Improvement of Medical Services in the Center Region of Viet Nam	Technical Cooperation	Central Coast	2005	2010
Health	Healthcare	Bach Mai Hospital Project for Strengthening Training Capacity for Provincial Hospitals	Technical Cooperation	Red River	2006	2009
Health	Healthcare	Advisor to Ministry of Health	Technical Cooperation	Whole Country	2007	2009
Health	Healthcare	Project for Improvement of the Quality of Human Resources in the Medical Service System	Technical Cooperation	Whole Country	2010	2015
Health	Healthcare	Preparation Study on Regional and Provincial Hospital Development Project (2)	Development Study	Whole Country	2009	2010
Health	Healthcare	Regional and Provincial Hospital Development Project (2)	Loan	Whole Country	2012	2016
Health	Healthcare	Determine the Outbreak Mechanisms and Development of a surveillance Model for Multi-Drug Resistant Bacteria	Technical Cooperation	Whole Country	2011	2016
Health	Healthcare	Project for Strengthening Medical Service in Northwest Provinces	Technical Cooperation	North Mountain	2012	2016
Health	Maternal and Child Health	Reproductive Health Project in Nghe An Province (Phase1)	Technical Cooperation	Central Coast	1997	2000
Health	Maternal and Child Health	Reproductive Health Project in Nghe An Province (Phase2)	Technical Cooperation	Central Coast	2000	2005

Sector	Sub-sector	Project Name	Scheme	Area	Start	Completion
Health	Maternal and Child Health	Capacity Building for Dissemination of Community-based RH Promotion Approach	Technical Cooperation	Central Coast	2006	2009
Health	Maternal and Child Health	Project for Improvement of Equipment in the National Hospital for Obstetrics and Gynecology	Grant	Red River	2009	2012
Health	Maternal and Child Health	Project for Implementing Maternal and Child Health Handbook for Scaling Up Nationwide	Technical Cooperation	Whole Country	2010	2013
Education	Higher Education	Equipment of Language Laboratory for University of Hanoi	Grant	Red River	1993	1993
Education	Higher Education	Equipment of Language Laboratory for University of Ho Chi Minh City	Grant	East South	1994	
Education	Higher Education	Equipment of Language Laboratory for Hanoi College of Foreign Language	Grant	Whole Country	1995	
Education	Higher Education	Equipment for Learning Japanese for Hanoi Trade University	Grant	Red River	2000	
Education	Higher Education	Project for Human Resource Development Scholarship	Grant	Whole Country	2000	2016
Education	Primary Education	Project for the Improvement of the Facilities of Primary Schools (Phase 1)	Grant	Red River	1994	1994
Education	Primary Education	Project for the Improvement of the Facilities of Primary Schools (Phase 2)	Grant	Central Coast	1995	1995
Education	Primary Education	Project for the Improvement of the Facilities of Primary Schools (Phase 3)	Grant	Central Coast	1996	1996
Education	Primary Education	Project for the Improvement of the Facilities of Primary Schools (Phase 4)	Grant	Red River	1997	1998
Education	Primary Education	Project for Improvement of Facilities of Primary Schools in the Northern Mountain Region (Phase 1)	Grant	North Mountain	2000	2001
Education	Primary Education	Support Program for Primary Education Development (phase 1,2)	Development Study	Whole Country	2001	2003
Education	Primary Education	Project for Improvement of Facilities of Primary Schools in the Northern Mountain Region (Phase 2)	Grant	North Mountain	2003	2006
Education	Primary Education	Project for Strengthening Cluster-based Teacher Training and School Management	Technical Cooperation	Whole Country	2004	2007
Education	Education	Capacity Building of Ho Chi Minh City University of Technology to Strengthen University-Community Linkage Phase 1	Technical Cooperation	East South	2006	2009
Education	Higher Education	Capacity Building of Ho Chi Minh City University of Technology to Strengthen University-Community Linkage Phase 2	Technical Cooperation	East South	2009	2011
Social Security	Social Inclusion	Vocational Training Center for the Orphan	Grant		1971	1971
Social Security	Social Inclusion	Housing Construction Materials for Refugees	Grant		1973	1973
Social Security	Social Security	Project for Strengthening Medical Rehabilitation Service in the Southern Area of Vietnam	Technical Cooperation	East South	2010	2013
Social Security	Human Rights	Advisor to Anti-Trafficking in Persons	Technical Cooperation	Whole Country	2009	2011
Social Security	Human Rights	Project for the Establishment of Anti-Trafficking in Persons Hotline in Vietnam	Technical Cooperation	Whole Country	2011	2014
Agriculture	Irrigation	Phan Rang Irrigation Project	War Compensation	South East	1963	1973
Agriculture	Strengthening University	Technical Cooperation for Faculty of Agriculture, Can Tho University	Technical Cooperation	Mekong	1970	1975
Agriculture	Agriculture and Rural Development	Study on Agricultural Development Plan in Phan Rang Area	Development Study	South East	1971	1972
Agriculture	Strengthening University	Improvement of Facilities and Equipment of Faculty of Agriculture, Can Tho University	Grant	Mekong	1993	1995
Agriculture	Fisheries	Survey on Fisheries Resource	Development Study	Central Coast - South East	1994	1997
Agriculture	Agriculture and Rural Development	Study on Model Rural Development in Nam Dan District, Nghe An Province	Development Study	Central Coast	1996	1997
Agriculture	Strengthening University	Education and Research Capability Building Project of Hanoi Agricultural University	Technical Cooperation	Red River	1998	2004
Agriculture	Strengthening University	Mini-Project type cooperation program Improvement of Environmental Education in Agricultural Sciences in Can Tho University	Technical Cooperation	Mekong	1999	2001
Agriculture	Livestock Husbandry	Project of Strengthening National Institute of Veterinary Research	Technical Cooperation	Red River	2000	2004
Agriculture	Agriculture and Rural Development	Study on Integrated Agriculture Development Plan in Dong Thap Muoi Area	Development Study	Mekong	1998	2000
Agriculture	Irrigation	Phan Ri - Phan Thiet Irrigation Project	Loan	South East	2000	2015
Agriculture	Livestock Husbandry	Project for Improvement of Cattle Artificial Insemination Technology	Technical Cooperation	Red River	2000	2005
Agriculture	Post Harvest Technology	Strengthening of Food Industries Research Institute	Technical Cooperation	Red River	2002	2007
Agriculture	Fisheries	Project for Construction of Marine Culture Research and Development Center in Nha Trang	Grant	Central Coast	2002	2002
Agriculture	Agriculture and Rural Development	Improvement of Rural Living Condition in Nam Dan District in Nghe An Province	Grant	Central Coast	2003	2005
Agriculture	Post Harvest Technology	Improvement of technique for Thermal treatment for the disinfection on fruit flies	Technical Cooperation	Mekong	2004	2007
Agriculture	Agricultural Cooperative	Capacity Development of Participatory Irrigation Management System through Vietnam Institute for Water Resources Research (VIWRR) for Improvement of Agricultural Productivity	Technical Cooperation	Red River	2005	2010
Agriculture	Livestock Husbandry	Project for Improvement of Productive Technology in Small and Medium Scale Dairy Farms	Technical Cooperation	North Mountain	2006	2011
Agriculture	Agricultural Cooperative	Enhancing Functions of Agricultural Cooperatives	Technical Cooperation	Red River	2006	2010
Agriculture	Examination and Quarantine System	Phytosanitary Regional Training Program - JARCOM	Technical Cooperation	Red River	2007	2010
Agriculture	Agriculture and Rural Development	Master Plan Study on Improvement of Rural Living Conditions in North-western Mountainous Region in Vietnam	Development Study	North Mountain	2007	2008
Agriculture	Renewable Energy	Sustainable Integration of Local Agriculture and Biomass Industries	Technical Cooperation	Mekong	2009	2014
Agriculture		Support for the Disadvantaged Farmer	Grant	Whole Country	2009	2010
Agriculture	Agricultural Cooperative	Improvement of Extension System for Applying Better Farming System and Cultivation Techniques for Poor Farmers in the Mekong Delta	Technical Cooperation	Mekong	2009	2014
Agriculture	Renewable Energy	Sustainable Integration of Local Agriculture and Biomass Industries	Technical Cooperation	Mekong	2009	2011
Agriculture	Examination and Quarantine System	Strengthening the Capacities for the Field of Management of Vietnam's Crop Production Sector for Improving the Productivity and Quality of Crop's Products	Technical Cooperation	Red River	2010	2013
Agriculture	Agricultural Cooperative	Project for Promotion of Participatory Irrigation Management for Sustainable Small-Scale Pro Poor Infrastructure Development	Technical Cooperation	Whole Country	2010	2013
Agriculture	Strengthening University	Project for the Development of Crop Genotypes for the Midlands and Mountain Areas	Technical Cooperation	North Mountain	2010	2015
Agriculture	Agriculture and Rural Development	Northwest Region Rural Development Project	Technical Cooperation	North Mountain	2010	2015
Agriculture	Strengthening University	Project for Strengthening of Tay Bac University for Sustainable Rural Development of the Northwest Region	Technical Cooperation	North Mountain	2011	2014
Agriculture	Examination and Quarantine System	Project for Strengthening Capacity of Inspection System for Ensuring Safety of Agro-Fishery Foods	Technical Cooperation	Whole Country	2011	2014
Agriculture	Renewable Energy	Preparatory Study on Project of Bio-ethanol Production	Development Study	North Mountain - Red River	2011	2012
Agriculture	Agriculture and Rural Development	Project for Agriculture Development in Phan Ri - Phan Thiet	Technical Cooperation	South East	2011	2013
Agriculture	Agriculture and Rural Development	Project for Climate Change Adaptation for Sustainable Agriculture and Rural Development in the Coastal Mekong Delta	Technical Cooperation	Mekong	2011	2013
Agriculture	Agricultural Cooperative	Project for Enhancing Functions of Agricultural Cooperatives (Phase 2)	Technical Cooperation	Whole Country	2012	2015
Agriculture	Irrigation	Improvement of Irrigation System in Northern Nghe An Province	Loan	Central Coast	2013	2019

Sector	Sub-sector	Project Name	Scheme	Area	Start	Completion
Urban Development	Urban Development	Hanoi Urban Infrastructure Development Project (Phase I: Public Sector Support to Thang Long North Area)	Loan	Red River	1996	1996
Urban Development	Urban Development	Study on Sanitation Improvement Plan for Haiphong City in the Socialist Republic of Vietnam	Development Study	Red River	1999	2000
Urban Development	Urban Development	Hai Phong City Environmental Improvement Project	Loan	Red River	2004	2013
Urban Development	Urban Development	Preparatory Survey for Urban Development with Above- and Under-Ground Combined Structures at Ben Thanh Station Area in Ho Chi Minh City (PPP)	Development Study	East South	2010	2012
Urban Development	Urban Planning	The Comprehensive Urban Development Programme in Hanoi Capital City (HAIDEP)	Development Study	Red River	2004	2006
Urban Development	Urban Planning	The Study on Integrated Development Strategy for Da Nang City and Its Neighboring Area in the Socialist Republic of Vietnam (Dacross)	Development Study	Central Coast	2008	2010
Urban Development	Urban Planning	The Urban Planning Formulation and Management Capacity Development Project in the Socialist Republic of Vietnam (CUPCUP)	Technical Cooperation	Whole Country	2008	2012
Urban Development	Urban Development	The Study on Integrated Development Plan for Ben Thanh Station and Its Surrounding Area in Ho Chi Minh City (PPP project)	Development Study	East South	2010	2012
Regional Development	Regional Development	The Study on the Hoa Lac Xuan Mai Areas Urban Development Project (M/P, F/S)	Development Study	Red River	1998	1999
Regional Development	Regional Development	The Study on the Integrated Regional Socio - Economic Development Master Plan for Key Area of the Central Region (M/P)	Development Study	Central Coast	1995	1996
Regional Development	Regional Development	The Study of Artisan Craft Development for Rural Industrialization in the Socialist Republic of Vietnam	Development Study	Whole Country	2001	2003
Regional Development	Regional Development	Project on Capacity Development on Artisan Craft Promotion for Socio-economic Development in Rural Area	Technical Cooperation	North Mountain	2008	2011
Regional Development	Regional Development	The Study for Roadside Station Master Plan in the Socialist Republic of Vietnam	Development Study	Whole Country	2006	2008
Regional Development	Tourism	Comprehensive Study on Tourism Development in the Central Region of the Socialist Republic of Vietnam	Development Study	Central Coast	2000	2001
Regional Development	Tourism	Advisor for Tourism Development	Technical Cooperation	Whole Country	2011	2013
Regional Development	Rural Development	Rural Infrastructure Development and Living Standard Improvement Project / Sector Project Loan	Loan	Whole Country	1995	2002
Regional Development	Rural Development	Rural Infrastructure Development and Living Standard Improvement Project (II) / Sector Project Loan II	Loan	Whole Country	1996	2002
Regional Development	Rural Development	Rural Infrastructure Development and Living Standard Improvement Project (III) / Sector Project Loan III	Loan	Whole Country	1998	2008
Regional Development	Rural Development	Small-Scale Pro - poor Infrastructure Development Project (Sector Project Loan IV)	Loan	Whole Country	2002	2009
Regional Development	Rural Development	Small-Scale Pro Poor Infrastructure Development Project / Sector Project Loan V	Loan	Whole Country	2005	2013
Regional Development	Rural Development	Small-Scale Pro Poor Infrastructure Development Project / Sector Project Loan VI	Loan	Whole Country	2009	2013
Regional Development	Rural Development	The Project on Capacity Development of Participatory Agricultural and Rural Development for Poverty Reduction in the Central Highlands	Technical Cooperation	Central Highland	2009	2014
Regional Development	Rural Development	the project for Empowerment to the Community Damaged by Forest Fire in Ca Mau Province	Grant	Mekong	2007	2007
Regional Development	Regional Development	Advisor for Regional Development in Ca Mau Province	Technical Cooperation	Mekong	2009	2011
Environmental/Disaster	Environmental Management	The Hanoi City Environmental Protection Master Plan Development Study	Development Study	Red River	1997	1999
Environmental/Disaster	Environmental Management	The Study on Environmental Management Plan for Protection of Halong Bay	Development Study	Red River	1997	1999
Environmental/Disaster	Environmental Management	The Master Plan Study for Industrial Pollution Prevention (Waste Water)	Development Study	Whole Country	1999	2000
Environmental/Disaster	Environmental Management	The Study on Sanitation Improvement Plan for Hai Phong City	Development Study	Red River	2000	2001
Environmental/Disaster	Environmental Management	The Project on Improvement of Solid Waste Management in Hanoi City	Grant	Red River	2002	2002
Environmental/Disaster	Environmental Management	The Project for Enhancing Capacity of Vietnamese Academy of Science and Technology in Water Environment Protection (Phase-1)	Technical Cooperation	Red River	2003	2006
Environmental/Disaster	Environmental Management	Support Loan for Formulation of Environment Management System	Loan	Whole Country	2003	???
Environmental/Disaster	Environmental Management	The Project for Implementation Support for 3R Initiative in Hanoi City	Technical Cooperation	Red River	2006	2009
Environmental/Disaster	Environmental Management	In-Country Training Programme for Capacity Development of National Park Management	Technical Cooperation	Whole Country	2006	2009
Environmental/Disaster	Environmental Management	The Project for Enhancing Capacity of Vietnamese Academy of Science and Technology in Water Environment Protection (Phase-2)	Technical Cooperation	Red River	2008	2012
Environmental/Disaster	Environmental Management	The Study on Water Environment Management in Vietnam	Development Study		2008	2009
Environmental/Disaster	Environmental Management	Advisor for Environment Management	Technical Cooperation	Whole Country	2008	2010
Environmental/Disaster	Environmental Management	The Project for Strengthening Capacity of Water Environmental Management in Vietnam	Technical Cooperation	Whole Country	2010	2013
Environmental/Disaster	Natural Environment	The Project for Strengthening Community-based Management Capacity of Bidoup-Nui Ba National Park	Technical Cooperation	Central Highland	2010	2014
Environmental/Disaster	Environmental Management	The Study on Improvement Plan of Medical Wastewater and Solid Waste Management	Development Study	Whole Country	2010	2011
Environmental/Disaster	Environmental Management	Study on Utility Management of Environment-Conscious Industrial Park (PPP project)	Development Study		2010	2011
Environmental/Disaster	Natural Environment	The Study on Capacity Development for AR-CDM Promotion in Vietnam	Development Study	Whole Country	2006	2008
Environmental/Disaster	Climate Change	The Study on Potential Forests and Land related to Climate Change and Forest	Development Study	Whole Country	2009	2011
Environmental/Disaster	Climate Change	The Project on Support Program to Respond to Climate Change	Loan	Whole Country	2010	???
Environmental/Disaster	Climate Change	Project for Improvement of Capacity to Cope with Natural Disaster Caused by Climate Change	Grant	Whole Country	2010	2010
Environmental/Disaster	Climate Change	The Project for Capacity Building for National Greenhouse Gas Inventory in Vietnam	Technical Cooperation	Whole Country	2010	2013
Environmental/Disaster	Climate Change	Disaster Contingency Planning by Application of Artificial Satellite Information (Phase 1)	Loan	Whole Country	2011	???
Environmental/Disaster	Climate Change	Support Program for Climate Control	Loan	Whole Country	2011	???
Environmental/Disaster	Climate Change	Establishment of Carbon-Cycle-System with Natural Rubber	Technical Cooperation		2011	2016
Environmental/Disaster	Climate Change	Multi-beneficial measure for mitigation of climate change in Vietnam and Indochina countries by development of biomass energy	Technical Cooperation		2011	2016
Environmental/Disaster	Natural Environment	Improvement of Forestation Equipment in the Central Highlands	Grant	Central Highland	1992	1992
Environmental/Disaster	Natural Environment	The Project for Improvement of Equipment for Reforestation in North West Vietnam	Grant	North Mountain	1995	1996
Environmental/Disaster	Natural Environment	The Project for Afforestation Technology Development Project on Acid Sulphate Soil in the Me Kong Delta	Technical Cooperation	Mekong	1996	2001
Environmental/Disaster	Natural Environment	The Study on the Villager Support for Sustainable Forest Management on Central Highland	Development Study	Central Highland	1999	2002
Environmental/Disaster	Natural Environment	The Project for Afforestation on the Coastal Sandy Area (PACSA) in the Southern Central Vietnam (Phase-1)	Grant	Central Coast	2000	2004
Environmental/Disaster	Natural Environment	Study on Hydrogy Monitoring Plan in Mekong Basin	Development Study	Mekong	2001	2004
Environmental/Disaster	Natural Environment	The Project for Rehabilitation of Natural Forest in Degraded Watershed Area in the North of Vietnam	Technical Cooperation	North Mountain	2003	2008
Environmental/Disaster	Natural Environment	The Project on Community Development of Devastated Land by Forest Fire in Ca Mau province	Technical Cooperation	Mekong	2003	2006
Env - Disaster	Natural Env	The Preparatory Survey on the Project for Reforestation and Sustainable Management of Protection Forests in the Socialist Republic of Vietnam	Development Study	Whole Country	2004	2007
Environmental/Disaster	Natural Environment	The Project on the Villager Support for Sustainable Forest Management in Central Highland Region	Technical Cooperation	Central Highland	2005	2008
Environmental/Disaster	Natural Environment	Implementation Support for Forestry Policy	Technical Cooperation	Whole Country	2007	2010

Sector	Sub-sector	Project Name	Scheme	Area	Start	Completion
Environmental/Disaster	Natural Environment	The Project for Afforestation on the Coastal Sandy Area in the Southern Central Vietnam (Phase-2) (PASCA-2)	Grant	Central Coast	2008	2011
Environmental/Disaster	Natural Environment	Project for Forest Conservation	Grant	Whole Country	2009	2009
Environmental/Disaster	Natural Environment	The Preparatory Survey on the Project for Reforestation and Sustainable Management of Protection Forests in the Socialist Republic of Vietnam	Development Study	Whole Country	2009	2010
Environmental/Disaster	Environmental Management	The Project on Sustainable Environmental Management of Halong Bay	Technical Cooperation	Red River	2009	2012
Environmental/Disaster	Natural Environment	The Afforestation Planning and Implementation Capacity Strengthening Project (FICAB-2)	Technical Cooperation	East South	2008	2012
Environmental/Disaster	Natural Environment	The Project for Sustainable Forest Management in the North-western Watershed Areas (SUSFORM-NOW)	Technical Cooperation	North Mountain	2010	2015
Environmental/Disaster	Natural Environment	The Protection Forests Restoration and Sustainable Management Project	Loan	Central Highland	2011	???
Environmental/Disaster	Natural Environment	The Project for Development of National Biodiversity Database System	Technical Cooperation	Whole Country	2011	2015
Environmental/Disaster	Natural Environment	REDD+ Pilot Implementation in Dien Bien (Planning Phase) – Dien Bien REDD+ Pilot Project	Technical Cooperation	North Mountain	2012	2013
Environmental/Disaster	Disaster Prevention	The Project on Emergency Assistance for Natural Disaster (Flood and Typhoon)	Grant	Whole Country	1978	1978
Environmental/Disaster	Disaster Prevention	The Project on Emergency Assistance for Natural Disaster (Flood and Typhoon)	Grant	Whole Country	1983	1983
Environmental/Disaster	Disaster Prevention	The Project on Emergency Assistance for Natural Disaster (Flood and Typhoon)	Grant	Whole Country	1985	1985
Environmental/Disaster	Disaster Prevention	The Project on Emergency Assistance for Natural Disaster (Flood and Typhoon)	Grant	Whole Country	1985	1985
Environmental/Disaster	Disaster Prevention	The Project on Emergency Assistance for Natural Disaster (Flood and Typhoon)	Grant	Whole Country	1986	1986
Environmental/Disaster	Disaster Prevention	The Project on Emergency Assistance for Natural Disaster (Flood and Typhoon)	Grant	Whole Country	1987	1987
Environmental/Disaster	Disaster Prevention	The Project on Emergency Assistance for Natural Disaster (Flood and Typhoon)	Grant	Whole Country	1989	1989
Environmental/Disaster	Disaster Prevention	The Project on Emergency Assistance for Natural Disaster (Flood and Typhoon)	Grant	Whole Country	1997	1997
Environmental/Disaster	Disaster Prevention	The Project for Strengthening Disaster Prevention Capacity in the Central Region (Phase-1)	Technical Cooperation	Central Coast	2009	2012
Environmental/Disaster	Disaster Prevention	The Study on Control Measures against Natural Disaster and Climate Change by Using Satellite Information	Development Study	Whole Country	2010	2011
Environmental/Disaster	Disaster Prevention	The Project for Strengthening Disaster Prevention Capacity in the Central Region (Phase-2)	Technical Cooperation	Central Highland	2013	2016
Environmental/Disaster	Disaster Prevention	Distress Rescue System	Technical Cooperation	Whole Country	2005	2006
JICA Partnership Program	Healthcare	Integrated Program for Nutrition Improvement	Community Empowerment Program	North Mountain	1998	2001
JICA Partnership Program	Education	Comprehensive Support for Child Welfare Sector in Hue City	Partnership Program	Central Coast	1999	2001
JICA Partnership Program	Healthcare	Medical Treatment and Rehabilitation of Phonetic Function for Head and Neck Cancer Patient	Small-Scale Development Partner Program	East South	2001	2001
JICA Partnership Program	Education	Promotion of Adult Literacy for Sustainable Community Development in the Northern Mountain Region in Vietnam	Partnership Program	North Mountain	2001	2004
JICA Partnership Program	Education	Construction of Vocational Training Center for Youth with Vision Disabilities	Small-Scale Development Partner Program	North Mountain	2001	2001
JICA Partnership Program	Education	Vocational Guidance and Human Resources Development of Social Workers in Collaboration with Street Children Support Association	Small-Scale Development Partner Program	East South	2001	2001
JICA Partnership Program	Regional Development	Project for Improvement of Preservation and Restoration Technology for Traditional Folk House	Partnership Program	Central Coast	2001	2004
JICA Partnership Program	Environmental Management	Project for Improvement of Waste Disposal in Hai Phong City	Small-Scale Development Partner Program	Red River	2001	2001
JICA Partnership Program	Education	Integrated Child Development Program in Yen Bai Province	JICA Partnership Program	North Mountain	2003	2006
JICA Partnership Program	Education	Project for Promotion of Community Learning Centre in the Northern Mountainous Region	JICA Partnership Program	North Mountain	2003	2005
JICA Partnership Program	Water Supply and Sewerage	Project for the Training of Sewerage Maintenance Engineers in Hanoi	JICA Partnership Program	Red River	2003	2003
JICA Partnership Program	Water Supply and Sewerage	Water Supply Business Improvement Project in Thua Thien-Hue Province	JICA Partnership Program	Central Coast	2003	2003
JICA Partnership Program	Healthcare	Assistance for Paediatric and Neo-natal Care in Hanoi	JICA Partnership Program	Red River	2003	2003
JICA Partnership Program	Environmental Management	Human Resource Development in the Field of Environmental Protection -Lesson and learn from Minamata Disease-	JICA Partnership Program	—	2003	2004
JICA Partnership Program	Agriculture	Training Program of Insect Pest Control for the Environment-Conscious Agriculture	JICA Partnership Program	—	2003	2003
JICA Partnership Program	Agriculture	Training Program of Breeding Technology for Agricultural Products by Genetic Engineering Procedure	JICA Partnership Program	—	2003	2003
JICA Partnership Program	Environmental Management	Technology Transfer Project on Measuring Method of Noise and Malodor Pollution	JICA Partnership Program	—	2004	2004
JICA Partnership Program	Water Supply and Sewerage	Project for the Training of Sewerage Maintenance Engineers in Hanoi	JICA Partnership Program	Red River	2004	2004
JICA Partnership Program	Environmental Management	Promotion of Recycling of Resources	JICA Partnership Program	Red River	2004	2004
JICA Partnership Program	Environmental Management	Environmental Education in Asia	JICA Partnership Program	Red River	2004	2006
JICA Partnership Program	Water Supply and Sewerage	Water Supply Business Improvement Project in Thua Thien-Hue Province and HCMC	JICA Partnership Program	Central Coast	2004	2004
JICA Partnership Program	Healthcare	Medical Technical Support of Perinatal Care and Neonatal Treatment	JICA Partnership Program	Red River	2004	2004
JICA Partnership Program	Healthcare	Advanced Clinical Training Asian Medical Practitioner	JICA Partnership Program	—	2004	2006
JICA Partnership Program	Environmental Management	Environmental Education for Major Cities in Asia	JICA Partnership Program	Red River	2004	2006
JICA Partnership Program	Environmental Management	Technical Support of Environmental Protection and Conservation of Natural Environment for Administrators	JICA Partnership Program	—	2004	2004
JICA Partnership Program	Healthcare	Assistance for Radiological Technologies at Cho Ray Hospital	JICA Partnership Program	East South	2005	2008
JICA Partnership Program	Water Supply and Sewerage	Water Supply Business and Water Pipeline Improvement Project	JICA Partnership Program	Red River	2005	2005

Sector	Sub-sector	Project Name	Scheme	Area	Start	Completion
JICA Partnership Program	Water Supply and Sewerage	Water Supply Business Improvement Project in Thua Thien-Hue Province and HCMC	JICA Partnership Program	Central Coast	2005	2005
JICA Partnership Program	Healthcare	Contributions to the improvements of nutritional status and clean water supply through increasing the capacity of local authorities in Vietnam	JICA Partnership Program	Red River	2005	2008
JICA Partnership Program	Education	Capacity Building Program in the Field of Special Needs Education in Chiba Prefecture and Vietnam	JICA Partnership Program	Red River	2006	2008
JICA Partnership Program	Education	Acceptance of technical training participants from Hue City	JICA Partnership Program	Central Coast	2006	2008
JICA Partnership Program	Disaster Prevention	Enhancing Community Resilience and Livelihood Security to Cope with Natural Disasters in Central Vietnam	JICA Partnership Program	Central Coast	2006	2009
JICA Partnership Program	Healthcare	Project to Assist Physically Handicapped People through Local Rehabilitation and their Empowerment	JICA Partnership Program	East South	2006	2008
JICA Partnership Program	Environmental Management	Human Resource Development in the Field of Environmental Protection -Preservation of a Mangrove Forest in HCMC -	JICA Partnership Program	East South	2007	2008
JICA Partnership Program	Environmental Management	Comprehensive Water Environment Project in Hanoi	JICA Partnership Program	Red River	2007	2009
JICA Partnership Program	Environmental Management	Approache to Prevention of Global Warming by Environmental Protection-Oriented Society	JICA Partnership Program	Central Coast	2007	2009
JICA Partnership Program	Environmental Management	Human Resource Development in the Field of Environmental Protection (for young administrators) by Fukuoka Prefecture	JICA Partnership Program	Red River	2007	2009
JICA Partnership Program	Governance	Kagawa-esque International Cooperation Project Political Human Resources Development Program in Haiphong City, Vietnam	JICA Partnership Program	Red River	2007	2013
JICA Partnership Program	Agriculture	Technical Support for Rice Growers to Raise their income by Developing their Agricultural Technologies	JICA Partnership Program	Mekong	2008	2010
JICA Partnership Program	Agriculture	Capacity Building for Market-Oriented Economy in Agricultural Cooperative Coc Thanh As a Model of Village Development in the Red River Delta	JICA Partnership Program	Red River	2008	2010
JICA Partnership Program	Environmental Management	Plan and Operation of Program to promote Awareness for 3R of Solid Waste (Naha City Model)	JICA Partnership Program	Central Coast	2008	2011
JICA Partnership Program	Education	Developing Education Programs for Children with Intellectual Disabilities in order to Raise the Attendance Rate at Primary Schools in Vietnam	JICA Partnership Program	Red River	2008	2011
JICA Partnership Program	Agriculture	Technical Cooperation Project for Improving Rural Living and Nature Conservation by Multipurpose Use of Charcoal and Wood Vinegar in the Bach Ma National Park	JICA Partnership Program	Central Coast	2008	2011
JICA Partnership Program	Economic/Business	Development of model curriculum, teaching methods, materials and tools to teach Micro-controller based manufacturing techniques in order to satisfy user needs	JICA Partnership Program	Red River	2009	2011
JICA Partnership Program	Environmental Management	Environmental Improvement activities through Cleaner Production	JICA Partnership Program	Red River	2009	2011
JICA Partnership Program	Environmental Management	Project on support for building a recycle-oriented system involving local residents in Halong Bay area	JICA Partnership Program	Central Coast	2009	2012
JICA Partnership Program	Disaster Prevention	Capacity Building for School Centered Community Based Disaster Risk Management in Central Vietnam	JICA Partnership Program	Central Coast	2009	2010
JICA Partnership Program	Agriculture	Support for young farmers by organic farming technique	JICA Partnership Program	Central Highland	2010	2013
JICA Partnership Program	Healthcare	Capacity building toward evidence-based medicine among health care professionals at University of Medicine and Pharmacy, Ho Chi Minh City and its related institutes	JICA Partnership Program	East South	2010	2012
JICA Partnership Program	Agriculture	Production of KAKI and Extension of processing technology	JICA Partnership Program	Central Highland	2010	2013
JICA Partnership Program	Environmental Management	Support for improving capability of waste landfill management technology in Haiphong City	JICA Partnership Program	Red River	2010	2012
JICA Partnership Program	Water Supply and Sewerage	Improvement Program for Water Purification Method against Organic Substances	JICA Partnership Program	Red River	2010	2012
JICA Partnership Program	Regional Development	Regional Development with People's Participation based on Japanese experience of Roadside Station in Minamiboso City -Vitalization by Formulation Selling Outlet of Reliable Vegetables-	JICA Partnership Program	Central Coast	2010	2012
JICA Partnership Program	Environmental Management	Comprehensive Water Environment Project in Hanoi (Phase 2)	JICA Partnership Program	Red River	2010	2011
JICA Partnership Program	Healthcare	DOI THOAI Project (Dialogues On Inclusion : Together for Health and Overcoming Adversity and Isolation)	JICA Partnership Program	Red River	2010	2011
JICA Partnership Program	Education	Follow-up Program of Integrated Child Development Program in Yen Bai Province	JICA Partnership Program	North Mountain	2010	2011
JICA Partnership Program	Healthcare	SWAN II: Contributions to the improvements of nutritional status and clean water supply through increasing the capacity of local authorities in Vietnam	JICA Partnership Program	Red River	2010	2012
JICA Partnership Program	Disaster Prevention	Integrated Approach to the Vulnerable People to Cope with Natural Disasters in Central Vietnam	JICA Partnership Program	Central Coast	2010	2013
JICA Partnership Program	Economic/Business	Training of Plastic Engineer Leaders	JICA Partnership Program	East South	2011	2014
JICA Partnership Program	Education	The Project for Establishment of Training System on Inclusive Education in Dong Nai Province	JICA Partnership Program	East South	2011	2013
JICA Partnership Program	Water Supply and Sewerage	Technical Transfer of the Water Supply Business and Water Pipeline Improvement by Bureau of Waterworks of Tokyo Metropolitan Government	JICA Partnership Program	Red River	2011	2013
JICA Partnership Program	Healthcare	Medical Technical Support of Cardiovascular Diseases in Vietnam	JICA Partnership Program	Red River	2011	2013
JICA Partnership Program	Economic/Business	A program for improving plant management of manufacturers in Hai Phong	JICA Partnership Program	Red River	2011	2013
JICA Partnership Program	Disaster Prevention	Development and Implementation of disaster Education Programs in Hue City	JICA Partnership Program	Central Coast	2011	2013
JICA Partnership Program	Healthcare	Kagawa-esque International Cooperation Project Medical Human Resources Development Program in Haiphong City, Vietnam	JICA Partnership Program	Red River	2011	2013
JICA Partnership Program	Disaster Prevention	Capacity Building for School Education of Disaster Risk Reduction in Central Vietnam	JICA Partnership Program	Central Coast	2011	2012
JICA Partnership Program	Regional Development	The Project to Promote Self-sustaining Community Development in Vietnam through Heritage Tourism	JICA Partnership Program	Red River, Central Coast, Mekong	2011	2014
JICA Partnership Program	Education	Developing and Expanding Education Programs for Children with Intellectual Disabilities in order to Raise the School Attendance Rate in Vietnam	JICA Partnership Program	Red River, East South, Central Coast	2011	2013

Sector	Sub-sector	Project Name	Scheme	Area	Start	Completion
JICA Partnership Program	Environmental Management	Technical Cooperation Project for Improving Rural Living and Nature Conservation by Multipurpose Use of Charcoal and Wood Vinegar in the Bach Ma National Park	JICA Partnership Program	Central Coast	2011	2012
JICA Partnership Program	Agriculture	The Project on Production and Marketing Capacity Improvement for Sustainable Agriculture, Farmer Empowerment, Rice Improvement, and Cleaner Environment	JICA Partnership Program	Red River	2012	2014
JICA Partnership Program	Healthcare	Project for the implementation of hospital nurse and midwife education progra	JICA Partnership Program	Central Coast	2012	2014
JICA Partnership Program	Water Supply and Sewerage	Aid project for personnel training to promote sewerage works in Haiphong, Vietnam	JICA Partnership Program	Red River	2012	2014
JICA Partnership Program	Environmental Management	HoiAn's Naha Model Solid Waste Management Project	JICA Partnership Program	Central Coast	2012	2015
JICA Partnership Program	Healthcare	An approach to sharing radiological technology within a local south area of Vietnam by constructing a medical support network	JICA Partnership Program	East South	2012	2016
JICA Partnership Program	Environmental Management	Project on communication, education and public awareness on the project of Hai Phong City Solid Waste Managem	JICA Partnership Program	Red River	2012	2015
JICA Partnership Program	Regional Development	Focus on (michi no eki) roadside stations, 6th industrialization of agriculture within localities	JICA Partnership Program	Central Coast	2013	2015
JICA Partnership Program	Water Supply and Sewerage	Project for Capacity Improvement for Urban Drainage Management in Ho Chi Minh City Vietnam	JICA Partnership Program	East South	2013	2015
JICA Partnership Program	Water Supply and Sewerage	The capacity development program on the water environmental improvement in Kien Giang Province of Vietnam	JICA Partnership Program	Mekong	2013	2015
JICA Partnership Program	Water Supply and Sewerage	Improvement of HPWSC's Capacity on Distribution Network Management	JICA Partnership Program	Red River	2013	2015



## Appendix-2: Major Economic Indicators of Vietnam

INDICATOR	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
<b>BASIC INDICATORS</b>																			
Total population, million, as of 1 July	71.41	72.57	73.73	74.88	76.02	77.11	78.12	79.08	80.00	80.95	81.91	82.85	84.22	85.12	86.02	86.93	87.84	88.78*	
GDP by industrial origin at current market prices, billion Dong	22892	27036	31382	361016	399942	441846	487295	535762	613443	779338	914001	1061955	1246769	1616047	1809149	2157828	2779850	3245419*	
Per capita GDP, US Dollar	288	337	381	374	374	402	416	441	482	558	642	731	843	1070	1130	1224	1408	1596	
GDP Growth, annual change, percent	9.5	9.3	8.2	5.8	4.8	6.8	6.9	7.1	7.3	7.8	7.5	7.0	6.4	5.7	5.4	6.4	6.2	5.2*	
Consumer price index annual change, percent	...	5.7	3.2	7.8	4.3	-1.6	-0.5	4.0	3.2	7.8	8.3	7.1	8.3	23.1	5.9	10.0	18.6	9.2*	
Unemployment rate*, percent	...	...	...	4.5	4.4	2.3	2.5	2.2	2.2	2.1	2.5	4.9	4.9	3.6	3.2	2.7	2.0	1.8*	
Exchange rates, end of period, Dong per US Dollar	11015	11149	12292	13990	14028	14514	15084	15403	15846	15777	15916	16054	16114	16977	17941	18932	20828	20828	
<b>EXTERNAL TRADE</b>																			
Exports, fob, million US Dollars; calendar year	5449	7256	9165	9360	11541	14483	15029	16706	20149	26485	32447	39226	48561	62685	57066	72237	98906	114573*	
Imports, cif, million US Dollars; calendar year	8155	11144	11952	11500	11742	15637	16218	19746	25256	31969	36761	44891	62765	80714	69949	84839	106750	113792*	
Trade balance, million US Dollars; calendar year	-2706	-3888	-2407	-2140	-201	-1154	-1189	-3040	-5107	-5484	-4314	-5065	-14204	-18029	-12853	-12602	-8844	781*	
Major destinations of Exports, million US Dollars; calendar year																			
1. United States	170	204	287	469	504	733	1065	2453	3839	5025	5924	7845	10105	11887	11356	14238	16928	19427	
2. Japan	1461	1546	1675	1514	1786	2757	2510	2437	2809	3542	4340	5240	6090	8468	6232	7728	10791	13722	
3. China, People's Rep. of	362	340	474	440	746	1536	1417	1518	1883	2899	3228	3243	3646	4850	4909	7309	11125	14755	
4. Korea, Rep. of	235	558	417	229	320	353	406	469	492	608	664	843	1243	1794	2065	3092	4715	5199	
5. Australia	55	65	230	472	815	1272	1042	1328	1421	1885	2723	3745	3802	4352	2277	2704	2519	3262	
Major origins of Imports, million US Dollars; calendar year																			
1. China, People's Rep. of	330	329	404	515	673	1401	1606	2159	3139	4595	5900	7391	12710	15974	16441	20019	24594	37647	
2. Korea, Rep. of	1254	1781	1584	1421	1486	1754	1887	2280	2625	3359	3594	3908	5340	7255	6976	9761	13176	17541	
3. Japan	916	1260	1509	1482	1618	2301	2183	2505	2982	3553	4074	4702	6189	8240	7468	9016	10400	11803	
4. Singapore	1425	2033	2128	1964	1879	2694	2478	2534	2976	3618	4482	6274	7614	9378	4248	4101	6391	11421	
5. Thailand	440	495	575	674	562	811	792	955	1282	1859	2374	3034	3744	4906	4514	5602	6384	7310	
Direct Investment	1780	2395	2220	1671	1412	1298	1300	1400	1450	1610	1889	2315	6516	9279	6900	7100	6569	7168*	
<b>DOMESTIC SAVINGS AND INVESTMENT</b>																			
Gross domestic saving, percent of GDP at current market prices	18.2	17.2	20.1	21.5	24.6	27.1	28.8	28.7	27.4	26.2	27.8	28.1	26.8	24.3	25.0	24.7	25.8	...	
Gross domestic capital formation, percent of GDP at current market prices	27.1	28.1	28.3	29.0	27.6	26.6	31.2	33.2	35.4	33.4	33.8	34.5	39.6	36.5	37.2	35.7	29.8	27.2*	
<b>FINANCIAL SECTOR</b>																			
Money supply (M2), percent of GDP at current market prices	23.0	23.8	26.0	28.4	35.7	50.5	58.1	61.4	67.0	68.3	75.6	86.9	108.1	100.4	115.7	129.3	112.4	108.4	
<b>GOVERNMENT FINANCE</b> fiscal year ending 31 December																			
Total revenue and grants, billion Dong	51723	60467	65352	72965	78489	90749	103888	121716	150566	188614	238636	289170	336273	434761	466286	588429	684652	741501	
Total expenditure and net lending, billion Dong	54589	62889	77027	78814	91870	109633	120968	134090	171408	197476	247749	276770	347468	424864	531704	632657	768557	871038	
Overall budgetary surplus/deficit, billion Dong	-2866	-2422	-12279	-5849	-13361	-18884	-17080	-12374	-13852	1138	-9063	13000	-11195	8957	-65418	-44428	-83875	-129537	
Domestic borrowing, billion Dong	2709	552	5205	-2814	1491	6110	7333	4711	6327	4671	4625	3160	-6740	-37962	11405	...	...	...	
Foreign borrowing, billion Dong	157	1870	192	3288	4837	6392	4809	5506	4577	3210	2615	5804	6779	15007	30338	...	...	...	
Taxes, percent of GDP at current market prices	21.9	21.7	20.0	19.6	19.0	20.1	21.2	22.3	25.3	25.1	25.7	26.5	26.5	26.3	25.3	26.7	24.4	22.6	
Taxes, percent of GDP at current market prices	19.1	19.2	17.7	16.5	16.7	18.0	19.1	19.8	20.0	20.0	21.0	22.3	21.5	22.5	20.6	22.4	21.1	20.5	
Total expenditure, percent of GDP at current market prices	23.8	23.1	22.6	20.3	21.2	22.6	24.4	24.2	26.4	24.0	25.1	25.3	27.0	25.5	28.1	27.2	26.6	25.8	
Overall budgetary surplus/deficit, percent of GDP at current market prices	-1.3	-0.9	-3.9	-1.6	-3.3	-4.3	-3.5	-2.3	-2.2	0.1	-1.0	1.2	-0.9	0.6	-3.6	-2.1	-3.0	-4.0	
<b>EXTERNAL INDEBTEDNESS</b> as of end of period																			
Total debt outstanding and disbursed, million US Dollars	25428	26255	21751	22432	23249	12859	12617	13347	15568	17993	19039	18649	23285	26488	33085	49343	57841	...	
External debt, percent of GNI	124.0	106.2	82.5	84.0	82.1	41.9	39.1	38.7	41.0	40.4	36.7	31.3	33.8	30.1	35.7	48.4	49.1	...	
Total long-term debt, percent of total debt	85.6	83.6	87.2	88.5	88.0	89.9	90.4	90.8	88.4	86.1	85.1	85.6	79.1	83.1	82.6	84.8	81.9	...	
Short-term debt, percent of total debt	12.9	14.3	10.8	9.8	10.2	7.2	6.2	5.9	6.1	11.9	13.5	13.0	19.9	16.2	15.7	14.1	17.2	...	
Debt service, percent of exports of goods and services	...	4.1	7.5	9.0	10.0	7.5	6.7	6.1	3.6	2.7	2.6	2.1	2.3	2.0	2.3	3.5	3.2	...	

\* = Provisional/preliminary/estimate/budget figure  
(Source: ADB, Key Indicators for Asia and the Pacific 2013; World Bank, World Development Indicators)

## APPENDIX-3: Questionnaire Survey Result of the Awareness of Japan's ODA by Vietnamese University Students

A questionnaire survey was conducted on the awareness of Japan and Japan's ODA during the period from August to September 2013, targeting the students who major in journalism at three Vietnamese universities; Hanoi Academy of Journalism and Communication, Language Faculty, Danang University, Faculty of Journalism and Communication and HCMC University of Social Sciences and Humanities. 493 responses were collected from these universities.

### (1) Some Background Information about the Respondents

**Table A3-1 : Number of Respondents by University and their Family's Occupation**

University	%	Number	Occupation of respondents' family	%	Number
Hanoi Academy of Journalism and Communication	31.0%	153	Agriculture	40.4%	199
Language Faculty, Danang University	31.2%	154	Personal or family business	27.2%	134
Faculty of Journalism and Communication, HCMC University of Social Sciences and Humanities	37.7%	186	Staff of the Government or State owned Enterprises	23.9%	118
			Staff of Non-State Enterprises	8.5%	42
Total		493	Total		493

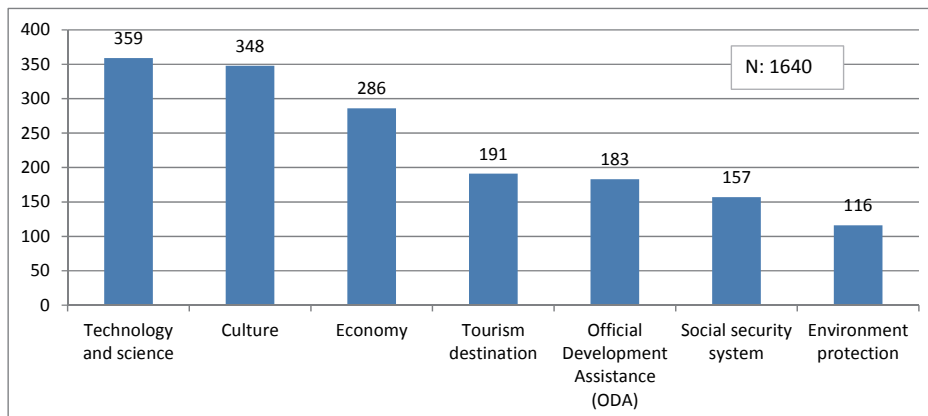
(Source: Prepared by the Study Team)

**Table A3-2 : Number of Respondents by their Hometown**

Hometown of respondents	%	Number
Central highland and coastal central area	36.1%	178
Hanoi, HCMC, Haiphong, Danang or Cantho	24.5%	121
Red- river delta	13.6%	67
Mekong delta or Southeast area	10.5%	52
Province in northern mountainous and midland area	7.9%	39
Southern central area	7.3%	36
Total		493

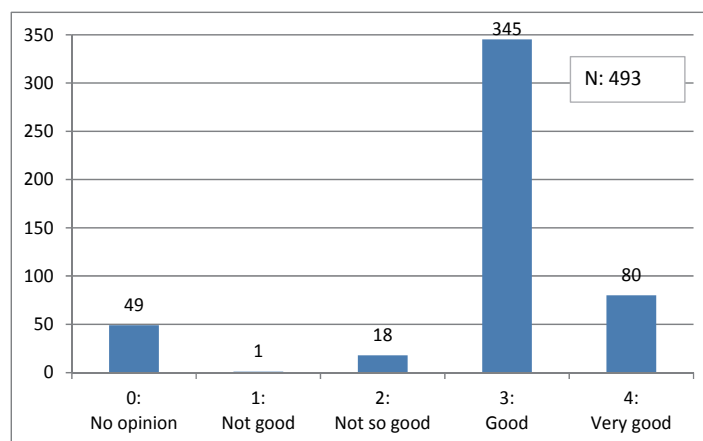
(Source: Prepared by the Study Team)

(2) Questions and Answers



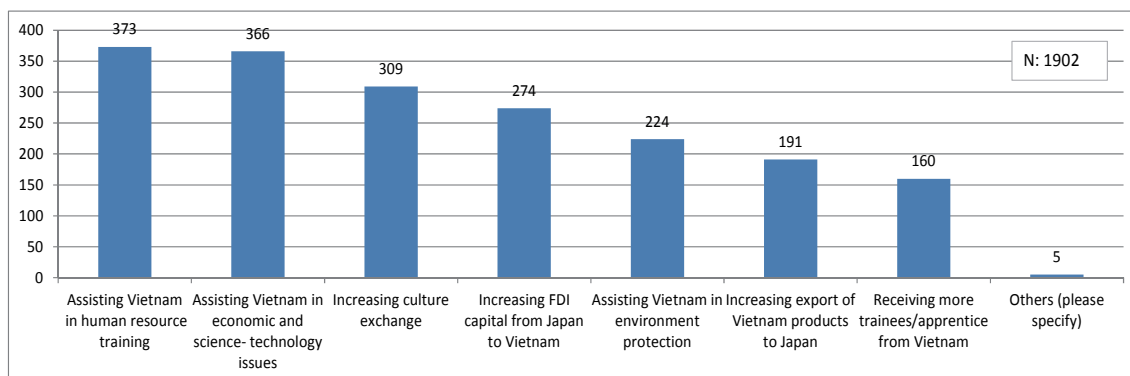
(Source: Prepared by the Study Team)

**Figure A3-1: Impression of Japan (multiple answers allowed)**



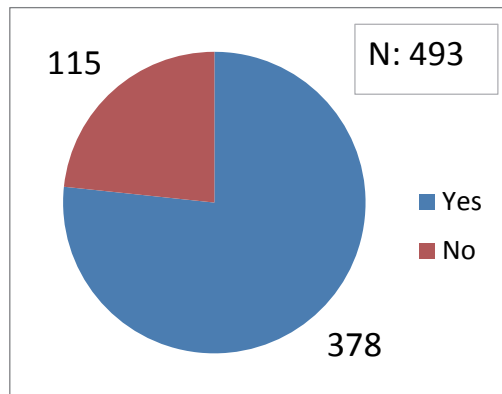
(Source: Prepared by the Study Team)

**Figure A3-2: Assessment of the Relationship between Vietnam and Japan**



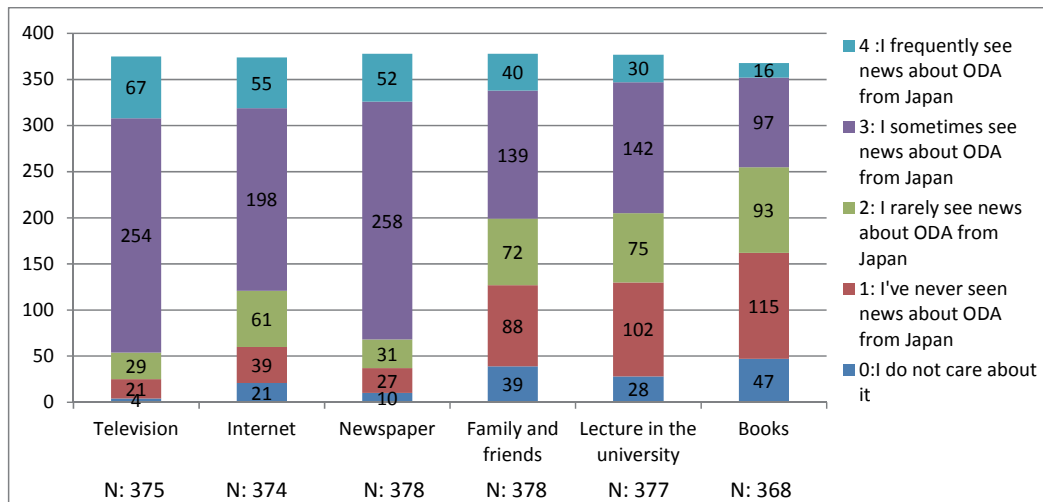
(Source: Prepared by the Study Team)

**Figure A3-3: What should be the Measures from Japan Side to Improve the Relationship with Vietnam? (multiple answers allowed)**



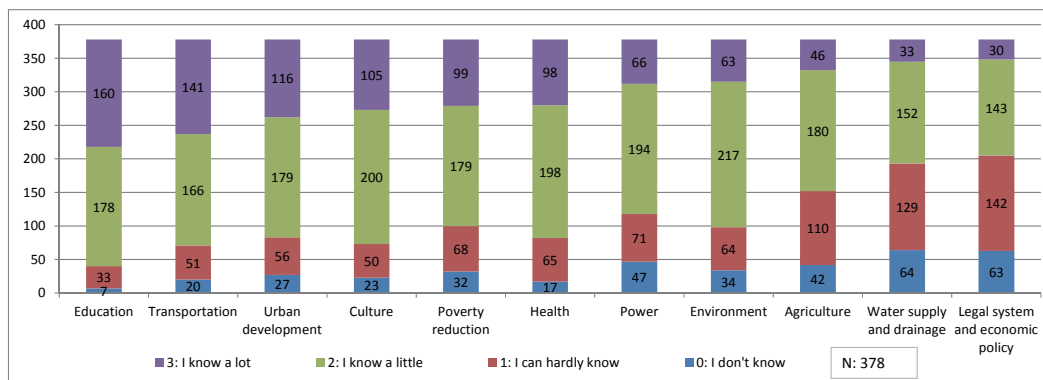
(Source: Prepared by the Study Team)

**Figure A3-4: Are You Aware of Japanese Government Providing ODA Funds to Vietnam?**



(Source: Prepared by the Study Team)

**Figure A3-5: From which Information Sources and to What Extent Are You Aware of Japan's ODA?**



(Source: Prepared by the Study Team)

**Figure A3-6 : Awareness of Japan's ODA by Field**

**Table A3-3: Japan's ODA Projects which are Well-known by the Respondents**

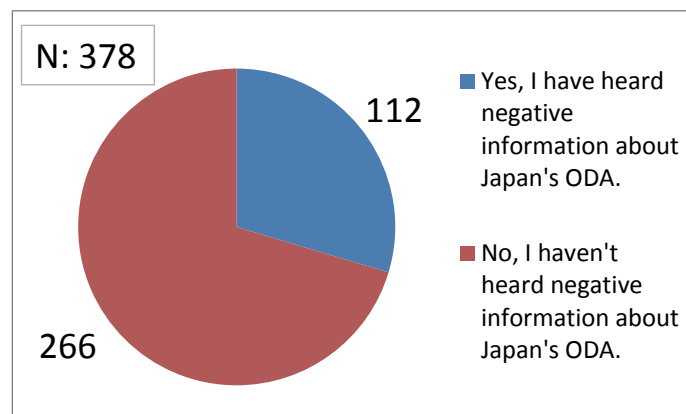
Ranking	Project	Number
1	North - South Expressway	20
2	Terminal T2 at Noi Bai International Airport	10
3	EVN Electricity Project	8
4	Thanh Tri Bridge	7
5	Project of Supporting Bach Mai Hospital	6
6	Vietnam Space Center, Can Tho Bridge, East - West Highway, HoChiMinh City	5
9	Nhat Tan Bridge, Lach Huyen Port	4
11	VJCC, Da Nhim Hydroelectric Power Station, Thu Thiem Tunnel, Hanoi's Metro, Ben Thanh - Suoi Tien Metro	3
16	Nghi Son Thermal Power plant, Tan Son Nhat International Airport, Hai Van Tunnel	2
20	Dung Quat Refinery, Hoan Lao No.2 Primary school, Bo Trach, Quang Binh, Phuoc Hoa Irrigation Work, PMU18, Vietnam-Japan Friendship Hospital, Cai Mep - Thi Vai Port at Tan Thanh District, Constructing Cao Bang's Roads, Upgrade of Highway 1A, Expansion Project of Wireless Connection System in Danang, Thang Long Boulevard, Bai Chay Bridge, Ha Noi Ring road No.3, Mother and Child Health Handbook in Dien Bien, Hoa Binh, Thanh Hoa and An Giang, Nhat Tan - Noibai Expressway, Ninh Thuan Nuclear Power Plan, Project to Improve the Capacity of Ensuring Biosafety and Pathogen Testing, Projects of Clean Water and Sanitation and Hygiene in Red River Delta, Northern Mountains Poverty Reduction Project	1

(Source: Prepared by the Study Team)

**Table A3-4 : The Field of a Japan's ODA which are Well-known by the Respondents**

Ranking	Field	Number
1	Transport development, Expressway	6
3	Bridge, Protective forest rehabilitation, Urban transportation	3
6	E-costums, Clean water, PPP Cooperation, Education, Afforesting, Human resources development, Project of building schools in rural area, Poverty reduction, Healthcare	2
15	Supporting Vietnam to become an industrial country by 2020, Building infrastructure, Energy, Environmental protection, Coping with climate change, Capacity development of highschool teacher, Supporting to strengthen financial decentralization, Scholarships program for human resource development, Agricultural and rural development, Metro, Hospital Equipment Supply, Cultural exchange, Labour Cooperation	1

(Source: Prepared by the Study Team)



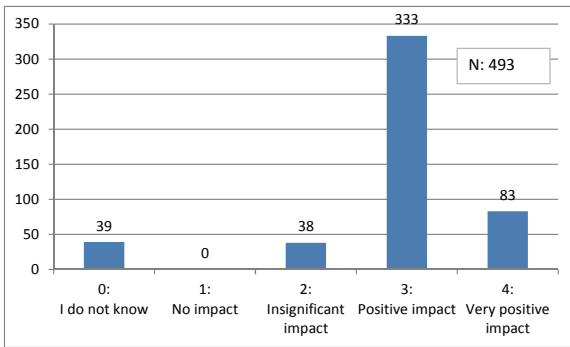
(Source: Prepared by the Study Team)

**Figure A3-7 : Have You Heard Any Negative Information about a Japan's ODA Project?**

**Table A3-4 : The Negative Impression of Japan's ODA by the Respondents**

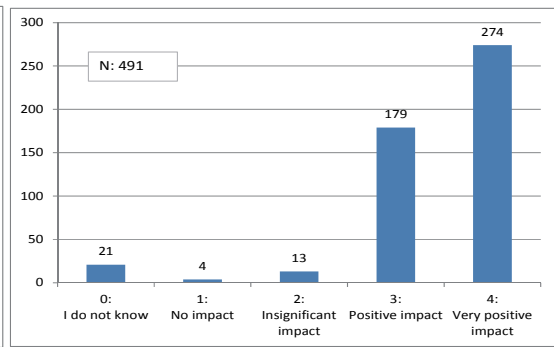
Ranking	The Negative Impression of Japan's ODA	Number
1	Ineffective	16
2	Delay in implementation of many ODA projects	12
3	Bribery and misuse of ODA funds	10
4	Slow disbursement	6
5	Can Tho Bridge	5
6	ODA loans from Japan will be decreased	4
7	ODA projects are implemented in a spirit of "for Japan".	3
8	Vietnam is dependent on ODA	2
9	PMU18, Project has not been extended yet, Some ODA projects are not completed on funds investment, ODA had planned withdrawal from Vietnam, Environmental pollution, Education development, Rural transportation, Not good for economy, Can we believe that it takes 30 billions dollar to build expressway?, Quality of transportation projects, Using fund improperly, The policies are too hard, Land compensation, North - South Expressway (Ben Luc - Long Thanh section), Some imported construction materials from Japan are very expensive, Tardy progress on Hoang Cau Metro - Hanoi, ODA funds have not been widely and frequently distributed, Derogation in East - West Expressway Project	1

(Source: Prepared by the Study Team)



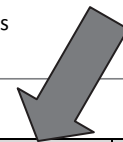
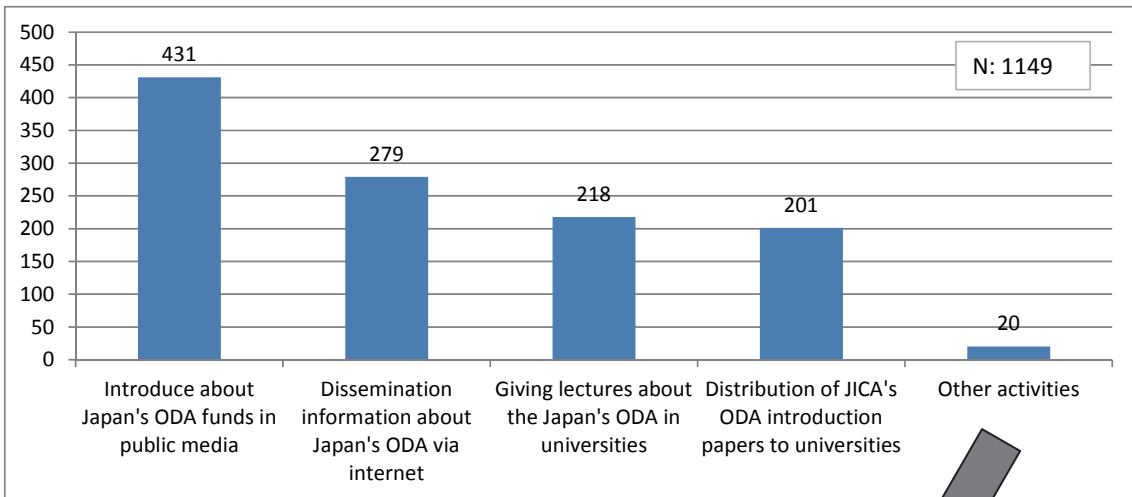
(Source: Prepared by the Study Team)

**Figure A3-8: Do Japan's ODA Funds Have Impact on Development of Vietnam?**



(Source: Prepared by the Study Team)

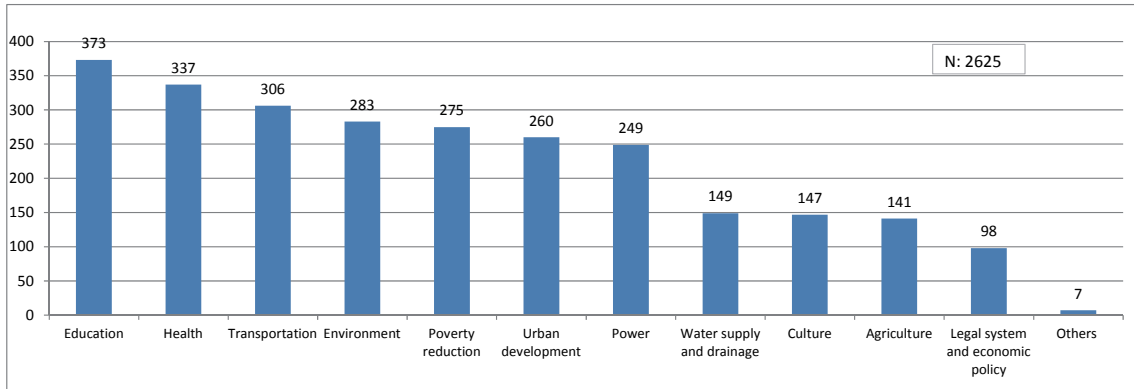
**Figure A3-9: Do Japan's ODA Funds Promote the Friendship between Two Countries?**



ranking	Other activities	number
1	Introducing Japan's ODA projects directly at the local level, without any intermediary agency	5
2	Showing information of ODA loans through the introduction of ODA projects	3
3	Making propaganda of Japan's ODA Creating more cultural exchange activities for Vietnamese and Japanese students	2
4	Introducing Japan's ODA projects through lectures in universities, Enhancing the diplomacy activities with Vietnam	1

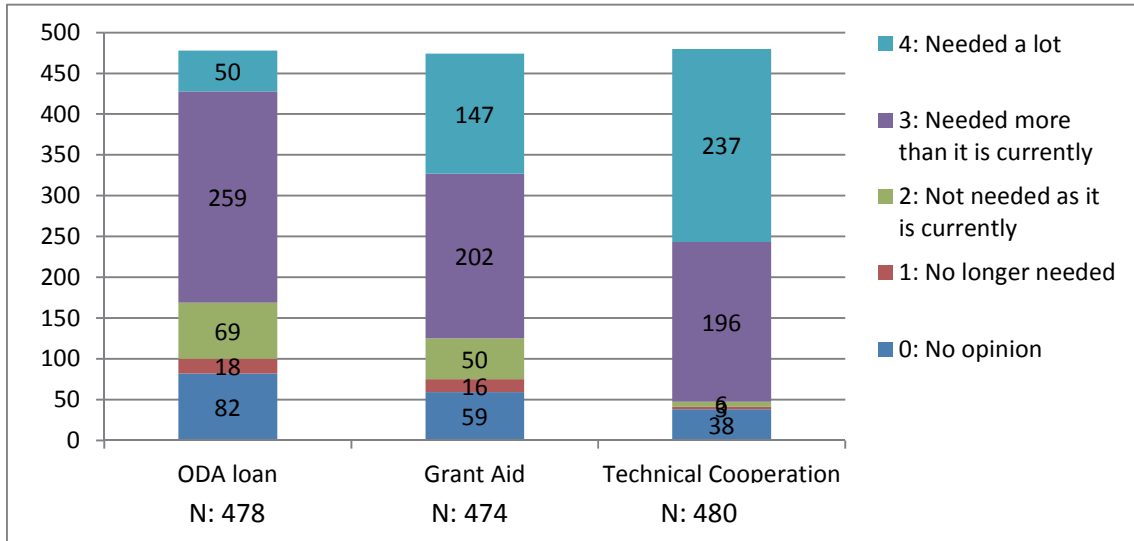
(Source: Prepared by the Study Team)

**Figure A3-10 : Which PR Activity should the Japanese Government Implement? (multiple answers are allowed)**



(Source: Prepared by the Study Team)

**Figure A3-11: In Which Fields Does Vietnam Still Need ODA from Japan? (multiple answers are allowed)**



(Source: Prepared by the Study Team)

**Figure A3-12: In Which ODA Scheme Does Vietnam Still Need Assistance from Japan? (multiple answers are allowed)**



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