

**ASSET SURVEY FOR SMALL SCALE
PRO-POOR INFRASTRUCTURE
IN VIETNAM**

IRRIGATION SECTOR REPORT

JANUARY 2011

**JAPAN INTERNATIONAL COOPERATION AGENCY
NTC INTERNATIONAL CO., LTD.
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TOKYO ELECTRIC POWER SERVICES CO., LTD.**

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PREFACE

In response to request from the Government of the Socialist Republic of Viet Nam, the Government of Japan had extended Sector Project Loan (SPL) for “The Rural Infrastructure Development and Living Standard Improvement Projects (SPL I to III)” from 1996 and “Small-Scale Pro-Poor Infrastructure Development Projects (SPL IV & V)” from 2003. Japan International Cooperation Agency (JICA) conducted the survey to analyze the shortcomings in the planning of the infrastructure development projects and their operation, maintenance and management, and to develop the necessary information for the Japanese review of the SPL Projects.

JICA dispatched a survey team, headed by Mr. TSUCHIYA Toshihiro of NTC International Co., Ltd. and consisting of NTC International Co., Ltd. and Katahira Engineering International and Tokyo Electric Power Services Co., Ltd. to the Socialist Republic of Viet Nam between April 2010 and October 2010.

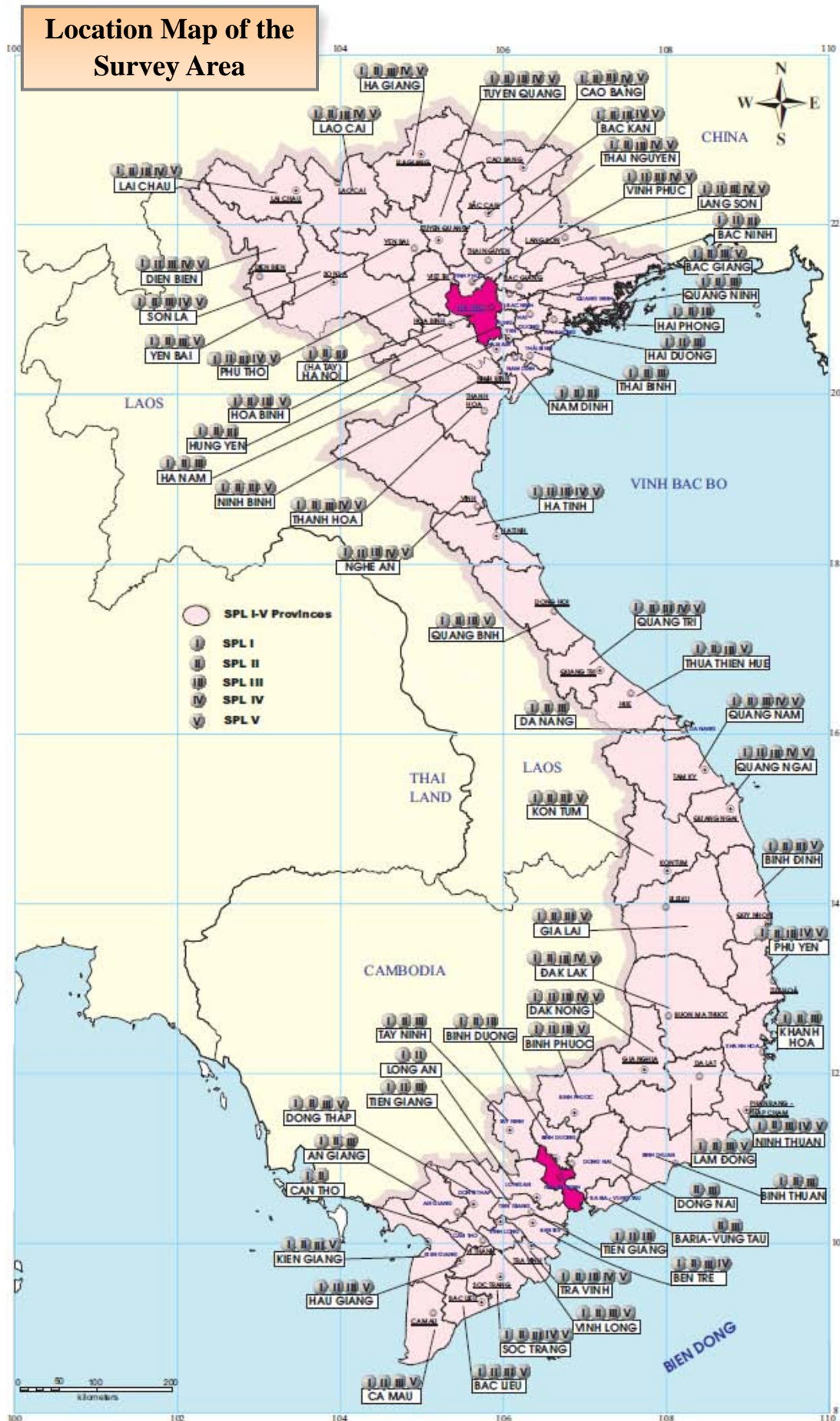
The team held discussions with officials concerned of the Government of the Socialist Republic of Viet Nam, and conducted the site surveys in the survey area. Upon returning to Japan, the team conducted further studies and prepared this final report.

I hope that this report will contribute to the future development of the said Projects, and to the expansion of friendly and cooperative relation between our two countries.

Finally, I wish to express my sincere appreciation to the officials of Government and those concerned in the Socialist Republic of Viet Nam for the close cooperation they have extended to the survey.

January, 2011

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Director General
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Abbreviation

CL	Commodity Loan
CPC	Commune Peoples' Committee
DARD	Department of Agriculture and Regional Development
D/D	Detailed Design
DDB	District Development Board
DOT	Department of Transportation
DPC	District Peoples' Committee
DPI	Departments of Planning and Investment
EVN	Electricity of Vietnam
FO	Farmers Organization
F/S	Feasibility Study
GOJ	Government of Japan
GOV	Government of Vietnam
IMC	Irrigation Management Company
JBIC	Japan Bank for International Cooperation
JICA	Japan International Cooperation Agency
L/A	Loan Agreement
MB	Management Board
MCM	Million Cubic Meters
MOF	Ministry of Finance
MPI	Ministry of Planning and Investment
O&M	Operation and Maintenance
OM/M	Operation Maintenance and Management
PIM	Participatory Irrigation Management
PMU	SPLs Project Management Unit
PO	Project Owner
PPC	Provincial People's Committee
PPMU	Provincial Project Management Unit
SAPROF	Special Assistance for Project Formation
SPL	Sector Project Loan
SPMU	Sub-Project Management Unit
TPC	Town Peoples' Committee
VND	Vietnamese Dong

Asset Survey for Small Scale Pro-Poor Infrastructure in Vietnam

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Chapter 1 Background of the Survey

1.1 The SPL Projects Executed

After the introduction of the Doi Moi (Reform) policy in 1986, the Government of Vietnam (GOV) had challenged to shift its planned economy to the market economy and achieved remarkable economic growth, which is marked by the average annual growth rate of 8.9% from 1992 to 1996. This economic growth brought the dramatic reduction of the poverty rate in Vietnam (The current poverty lines set in the rural area and the urban area are VND 200,000/month and VND 260,000/month respectively.) from 58% in 1993 to 24% in 2004. However, the economic disparity between the rural area and the urban area is growing, and in the rural area where 90% of the poor live, the poverty rate was 25% in 2004 which was far higher than the 3.6% poverty rate of urban area.

Under these circumstances, the Government of Japan (GOJ) extended loans for the sectors with urgency such as rural road and water supply as “Rehabilitation Loan I & II” (CL I & II). In addition to these sectors, electricity distribution, irrigation and afforestation were added in “The Rural Infrastructure Development and Living Standard Improvement Projects – Sector Project Loan (SPL) I to III”. Furthermore, from 2003, the loan was extended to focus on the poor areas of road, electricity distribution, water supply and irrigation sectors as “Small-Scale Pro-Poor Infrastructure Development Projects - SPL IV & V”. SPL I to IV have already been completed and SPL V project is on-going. Besides, the loan agreement of the SPL VI was signed in November 2009. The total loan amounts of SPL I to V is 48,350 million Yen, and a little less than 1,200 projects were implemented in all the administrative districts except Ho Chi Minh municipality.

However, the assessment of the situations of those constructed facilities is considered to be insufficient due to a great number of the sub-projects, which spreads throughout the country, of SPL I – V Project. For example, the facilities constructed in the SPL I were already utilized for over 10 years, which indicates that the age of facilities will exceed their projected service life, which is 15 years in most of water supply sub-projects, in the near future. Moreover, some facilities seem to be not used as planned because of the modification of laws, damages caused by natural disasters, etc.

Under these circumstances, this Survey aims at grasping the actual situations of all the sub-projects executed in SPL I to V.

1.2 Outline of SPL Projects

In 1994, based on the request of the GOV, the GOJ decided to extend the rehabilitation loans (CL I&II) for the purpose of improving international trade unbalance caused by chronic war and subsequent economic recession. The loan covered for the procurement of imported materials (fuel, asphalt, pumps and pipes etc.) for water supply and road construction sub-projects. In order to continue the assistance for the economic growth of Vietnam, it was indispensable to reduce the disparities between the urban and rural areas and to develop the rural areas where the majority of

population lives. For this purpose, the Rural Infrastructure Development and Living Standard Improvement Projects (SPL I, II and III) were carried out from 1996. In these SPL Projects, the loans covered cost including the insufficient construction cost which was one of the major problems in the execution of sub-projects under the rehabilitation loan. In addition to this, electricity distribution sector was added in SPL II (1997) and the irrigation sector was started in SPL III (1999).

From 2003, in coordination with Vietnamese policy on the poverty reduction strategy, the loan was extended as “Small-Scale Pro-Poor Infrastructure Development Projects - SPL IV & V”. In these SPL Projects, the target areas were focused on the less-developed areas (northern mountainous area, central highland area, etc.) where a number of ethnic minority groups live, and covered road, water supply, electricity distribution and irrigation sectors. Besides, the loan agreement (L/A) of the SPL VI was signed in November 2009 for the Phase-3 Small-Scale Pro-Poor Infrastructure Development Projects which covers mainly the northwest mountainous area and the central highland area, where the poverty rate is high.

Total amount of SPL I-V loans are summarized in the Table 1.2-1.

Table 1.2-1 Loan Amount SPLI-V Unit: Million yen

SPL I	(March 1996, L/A was signed)	: 7,000
SPL II	(February 1997, L/A was signed)	: 4,000
SPL III	(March 1999, L/A was signed)	: 12,000
SPL IV	(March 2003, L/A was signed)	: 10,562
SPL V	(March 2006, L/A was signed)	: 14,788
Total		48,350

Around 1,200 sub-projects have been implemented under the SPLs as shown in Table 1.2-2.

Table 1.2-2 Number of Sub-Projects by each Sector under SPLs

Sector	Road	Electricity distribution	Water Supply	Irrigation	Afforestation	Total
No. of Subprojects	518	526	96	85	5	1,230
No. of Target Provinces	62	60	44	36	5	

1.3 The Projects Area

The sub-projects spread through the whole country of Vietnam except Ho Chi Minh municipality, i.e. in 62 provinces. The number of sub-projects of each sector sorted by the region is summarized in the Table 1.3-1 below. Regarding the region, refer to the Appendix 1.1. The list of the sub-projects and their distribution by province are shown in Appendix 1.2 and 1.3.

Table 1.3-1 Number of Sub-projects by Region

Region \ Sector	Road	Electricity Distribution	Water Supply	Irrigation	Total
North East	118	115	19	20	272
North West	35	26	8	4	73
Red River Delta	114	83	8	2	207
North Central Coast	79	82	27	23	211
South Central Coast	39	55	9	13	116
Central Highland	36	42	9	14	101
South East	32	45	2	3	82
Mekong Delta	65	78	14	6	163
Total	518	526	96	85	1225

Note: Five afforestation sub-projects are not included

1.4 Vietnamese Implementing Organization

The implementing organizations of SPLs are Ministry of Planning and Investment (MPI), Ministry of Finance (MOF), Commercial Bank for Foreign Trade of Vietnam (Vietcombank), Provincial People's Committee (PPC) and Project Management Units at central level (PMU) and provincial level (PPMU). Project Owner (PO) decided in the investment decision also establishes the Sub-project Management Unit (SPMU). Followings are the duties of each organization.

(1) Ministry of Planning and Investment (MPI)

- To ensure program investment decisions in accordance with the law and the development plan, and to meet the objectives of the SPL Project.
- To coordinate with JICA to review and select the sub-project base on proposal of the PPC.
- Informing PPC for implementation of the list of sub-projects and allocated JICA fund for each sub-project.
- To approve selecting consultants for the program in accordance with current procurement legislation.
- To inspect and supervise the implementation of the SPL Project.
- To ensure the necessary resources for monitoring activities, the management and supervision of the SPL Project.
- To develop and implement the measures prescribed by law for the prevention and fighting against corruption and improper use of the fund which affect the SPL Project's objectives.
- To be responsible on the authority in accordance with current laws on violations of regulations in the process of supervising the implementation of the SPL Project.
- To be responsible on the process of implementing the SPL Project, for causing the delay, leakage and waste and corruption in accordance with current legislation.
- To coordinate with JICA to consider and decide the utilization of the remaining fund.

(2) Ministry of Finance (MOF)

- To make payment for sub-projects.
- To make out balance sheet for the Provincial Finance Department in time.
- To conduct withdrawal from the loan account to special account.
- To repay the principal and interest as stipulated in the L/A.
- To coordinate with the PMU and the JICA in monitoring and evaluation of the SPL Project.

(3) Commercial Bank for Foreign Trade of Vietnam (Vietcombank)

- To make a disbursement in accordance with the methods stipulated in the L/A at the request of the MOF and to notify to the relevant authorities as stipulated in the Circular on mechanism for debt management of the SPL.
- To monitor and report to the MOF and PMU the special account balance after each disbursement and withdrawal to special account.

(4) Provincial People's Committee (PPC)

- To ensure the sub-project investment meeting, discussing about the objectives, plans and relevant laws.
- To ensure sufficient counterpart fund for sub-project implementation as the schedule stipulated in the L/A.
- To approve the contractors selection process for the sub-projects in accordance with current legislation on the procurement.
- To inspect and supervise the implementation of the sub-projects.
- To develop and implement the measures prescribed by the law for the prevention and fighting against corruption, delay in implementation, etc. which affect the objectives of the sub-project.
- To be responsible on the authority in accordance with current laws on violations of regulations in the process of monitoring on the implementation of the sub-project.
- To be responsible in accordance with the current legislation on the implementation of the sub-project.
- To be responsible to report and explain to the MPI and the JICA on the change of sub-project (if any) in every September.

(5) Project Management Units

1) SPLs Project Management Unit (PMU)

MPI issues the decision on the establishment of the PMU. The tasks of PMU are as follows:

- Scheduling the implementation plan for the sub-projects

- Procurement and contract management
- Finance, properties management and disbursement for the sub-projects
- Administration, coordination and accountabilities
- Monitoring, evaluation and report of implementation of the sub-projects.

2) Provincial Project Management Unit (PPMU)

PPMU is under the Department of Planning and Investment (DPI) in each province and it was established by decision of the competent authorities of the province. The tasks of PPMU are as follows:

- Acting as the focal point in planning, managing and reporting on implementation of sub-projects carried out in the province.
- Making the plan to arrange counterpart fund for sub-projects in the province and operation expenditure for PPMU, and submit it to the PPC for approval.
- To monitor the bidding activities and contract management.
- To carry out the tasks of managing financial assets and disbursements:
- To carry out the administrative tasks, coordination with parties concerned and making sub-projects accountable.
- To carry out the tasks of monitoring, evaluation and reporting of the sub-projects.

3) Sub-Project Management Unit (SPMU)

Sub- Project Management Unit is to be established by PO. Followings are the tasks of the SPMU:

- Scheduling the project implementation.
- To carry out the tasks for bidding and contract management.
- To carry out the tasks of managing financial assets and disbursements.
- To carry out the administrative tasks, coordination with parties concerned and reporting.
- To carry out the duties on the acceptance, transfer and final financial settlement of the sub-projects.

(6) Operation, Maintenance and Management Organization (OM/M organization)

The PPMU and SPMU transfer the facilities constructed under the SPL to the operation, maintenance and management (OM/M) organization in line with the related laws and decrees of Vietnam. After the transfer, the PPC takes charge of the operation, maintenance and management of the facilities.

Following Table 1.4-1 presents the examples of OM/M organizations shown in a number of provinces.

Table 1.4-1 Operation, Maintenance and Management Organizations

Sector	Organization
Road	<p>Management Unit for Transportation, DOT, Board for OM/M which invites contractor for maintenance, Road management company</p> <p>Provincial Road: PMU for Transportation, DOT or its contracted maintenance company, Joint Stock Company for OM/M, Company for transportation, construction and management belongs to DOT</p> <p>District Road: DPC, MB under DPC, District Department of Industry and Trade (or Department of Commerce), SPMU, Center for exploitation and management of public works</p> <p>Communal Road: Management Organization like Cooperative under CPC</p>
Electricity Distribution	<p>EVN, Affiliate or Subsidiary of EVN, Provincial Electricity Company under EVN, MB under PPC, Provincial Water Supply and Electricity Company, Provincial Electricity Company under Provincial Department of Industry and Trade, DPC, Management Organization like Cooperative, CPC</p>
Water Supply	<p>Branch of Provincial Water Supply Company, OM/M organization under DPC or Town PC, Independent Autonomous OM/M organization established in City, Town, etc., PCERWAS (Provincial Center for Rural Water Supply and Sanitation), Commune People's Committee, Provincial Water Supply Company</p> <p>Branch of Provincial Water Supply Undertaking such as Provincial Irrigation Service and Construction Ltd. Co. under PPC</p>
Irrigation	<p>DARD, DPC, CPC, IMC, FO (Farmers Organization)</p>

It should be noted that most of the provincial companies, which were controlled by line department of PPC, has become the “Limited Company” or “Joint Stock Company” under the direct control of PPC on the first of July, 2010 based on the Decree on Conversion of Enterprises with 100% State Owned Capital into Shareholding Companies, No. 109-2007-ND-CP.

Chapter 2 Purpose of the Survey

2.1 Outline of the Survey

The Survey covers four sectors of the road, the electricity distribution, the water supply and the irrigation and consists of the questionnaire survey and the sub-project sites visiting by the Team members to 1,115 infrastructures constructed under the sector project loans (SPL) in order to grasp the current operation, maintenance and management (OM/M) situation of them.

Though the SPLs contain the afforestation sector, because of small number of sub-projects implemented, the Survey intends to cover all the constructed facilities of road, electricity distribution, water supply and irrigation sectors.

The replies to the questionnaire provided the database, which format was elaborated by the Survey Team, with the data and information on the facilities and their OM/M situations. The database will hopefully contribute the efficient and cost effective OM/M of the facilities.

The Team members could locate the facilities and such information reflected to prepare the SPL Infrastructure Map (location map of the facilities).

The members of Survey Team prepared the final report, which includes the recommendations on the problematic conditions and points to be improved of the OM/M of the facilities, after the completion of the site visiting.

2.2 Purpose of the Survey

In accordance with the decentralization policy of the GOV, the implementation of the survey, design, construction, OM/M of the sub-projects under the SPLs are performed by the initiatives of the Vietnamese local government authorities. However, considering the possibility that the constructed facilities are not always utilized as per the initial plans, the purpose of this Survey is to analyze the shortcomings in the planning of the infrastructure development projects. In addition, considering the possibility that OM/M of the facilities are not conducted properly after the transfer, the purpose of this Survey is to develop the necessary information for the Japanese review of the SPL Projects.

For this purpose, the following tasks were carried out;

- Comprehension of the current situation of each sub-project under SPL I to V.
- Comprehension of the OM/M organization of the constructed facilities of the sub-projects and its functions.
- Constructing the database of collected information, data, etc. through the activities mentioned above. This database has the functions such as the facilities register and records of OM/M, etc. Further, database instruction manuals was prepared.
- Mapping out the location of the infrastructures (the SPL infrastructure map).

- To recommend the effective and efficient utilization measures for the parties concerned based on the outcome of the above tasks. In particular, recommendations were made on the administrative system of the sub-projects after the transfer of facilities to the OM/M organization for the Ministry of Planning and Investment (MPI) and on the infrastructure asset management for the Department of Planning and Investment of Provinces (DPI).

The activities of this Survey are summarized in following Figure 2.2-1.

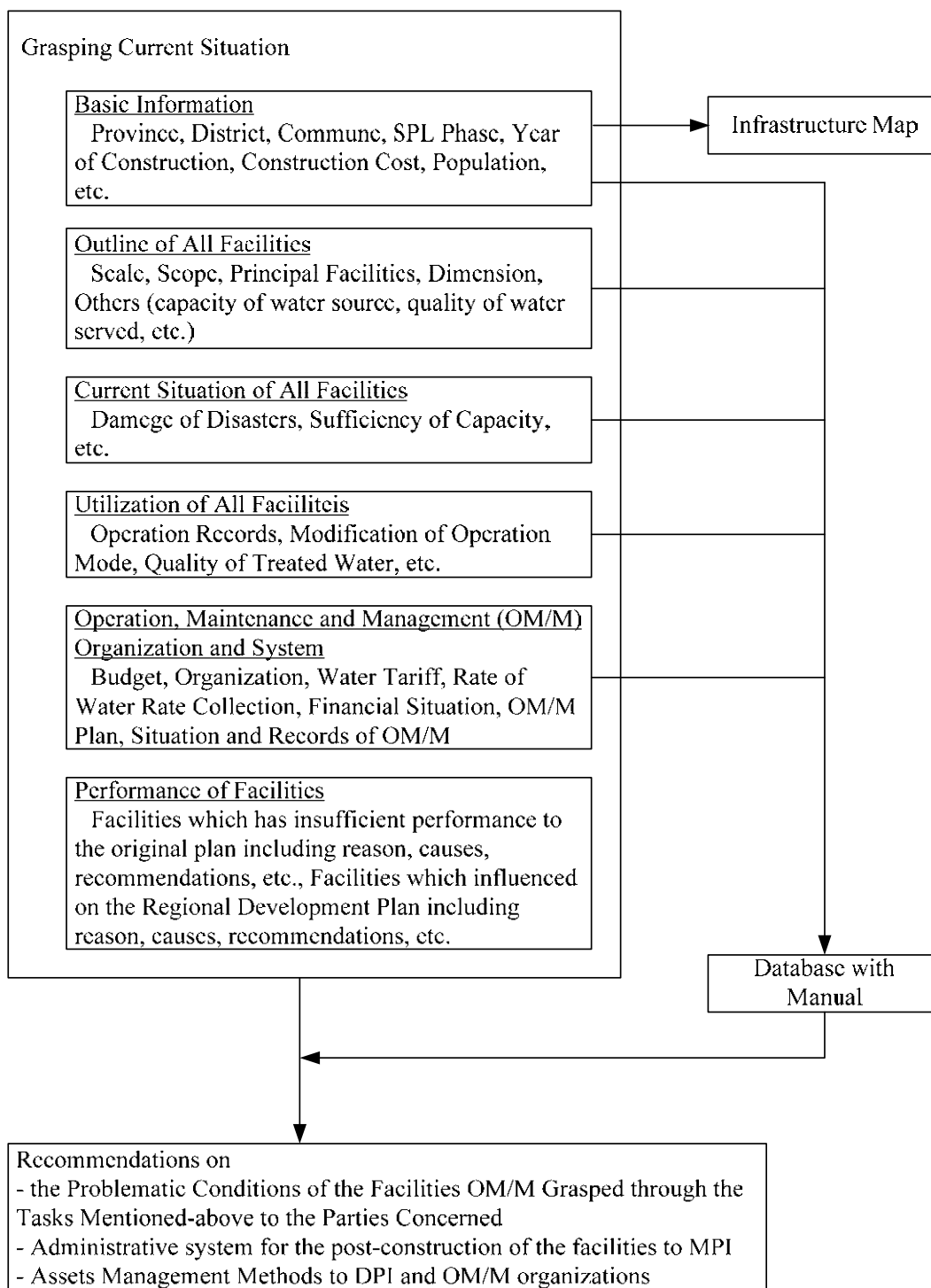


Figure 2.2-1 Main Tasks of the Survey

Chapter 3 Implementation of the Survey

As mentioned earlier, the Survey was implemented in the four sectors which mainly consist of the questionnaire survey and the site visiting by the engineers for visual confirmation on the current situation of the facilities constructed under SPL I to V.

The Survey Team had the meeting with Ministry of Planning and Investment (MPI) for the explanation of the inception report and the request to cooperate in the survey immediately after the arrival in Ha Noi followed by the survey planning, entrusting the site survey of the road and electricity distribution sectors on Vietnamese consulting firms and the delivery of the questionnaires.

After the delivery of the questionnaire at the end of April, 2010, the Survey Team started the site survey including the meeting with Provincial Department of Planning and Investment (DPI) and other parties concerned at the beginning of May, 2010.

The road sector firstly completed the site survey at the end of July and the water supply sector finally finished the survey at the beginning of September.

Regarding the questionnaire survey, the Survey Team unfortunately couldn't receive the replies to the questionnaires sufficiently though the Team had been waiting by the middle of September.

Apart from the Survey activities of four sectors, the member in charge of database management had started to prepare the database formats for the four sectors after the exchange of idea with MPI on the database as one of the outputs of the Survey. The data input was made from July to the end of September.

In the course of the data input, the Survey Team held the workshop on the database targeting the persons related to the SPL Projects with the cooperation of MPI in order to disseminate not only the database itself but also the rough concept of Assets Management making use of the database. The opinions collected at the workshop were reflected on the database format.

3.1 Setting up the Items to be Surveyed

The items to be surveyed consist of following five (5) categories:

- General Information
- Facilities
- Current Situation of Facilities
- Effectiveness of Sub-project
- Operation, Maintenance and Management (OM/M)

The details of items to be surveyed of the irrigation sector and those objectives are summarized, as follows:

Table 3.1-1 Survey Items and Objectives of Irrigation Sector

Category	Items to be Surveyed	Objectives of the Survey through the Survey Items
Facilities	<ul style="list-style-type: none"> • Dam and Reservoir • Headworks • Pump Station • Irrigation Canal • Aquaduct • Siphon • On-farm Facility • Drainage Canal • Sluiceway • Flood Dyke • Tide Gate 	<ul style="list-style-type: none"> • Facility Scale • Construction Year • Cost • Service Life
Current Situation of Facilities	<ul style="list-style-type: none"> • Problems due to Low Quality Control of Construction • Problems of On-farm Development • Shortage of Water Resources • Drought Damages • Drainage Damages • Flood Damages • Problems due to Change of Socio-Economic Conditions • Problems Relating to Water Quality 	<ul style="list-style-type: none"> • Current Conditions of Facilities • Damages Caused by Natural Disaster • Shortage of Facility Capacity
Effectiveness of Sub-project	<ul style="list-style-type: none"> • Beneficial Area • Beneficiary • Planted Area • Harvested Area • Crop Calendar • Cropping Intensity • Production Volume • Yield of Product • Typical Farm Household Economy 	<ul style="list-style-type: none"> • Facility Utilization Conditions • Farming Conditions • Sub-project Effectiveness • Necessary Technical Support
Operation, Maintenance and Management	<ul style="list-style-type: none"> • OM/M Organization (Name, Number of Staffs, Equipment, Responsibility) • OM/M Activities (Manual, OM/M Plan, Operation Records, Maintenance Records) • Irrigation Water Fee • Financial Conditions of OM/M Organization (OM/M Cost, Subsidy, Annual Expenditures, Annual Revenues) 	<ul style="list-style-type: none"> • OM/M System • Financial Conditions • State of Budget • State of OM/M Activities

3.2 Methods of the Survey

3.2.1 Survey Executed

3.2.1.1 Survey Team

The Survey Team consisted of six (6) Japanese members and four (4) Vietnamese members who worked for the Team on the contract basis.

The following Figure 3.2-1 shows the structure of the Survey Team.

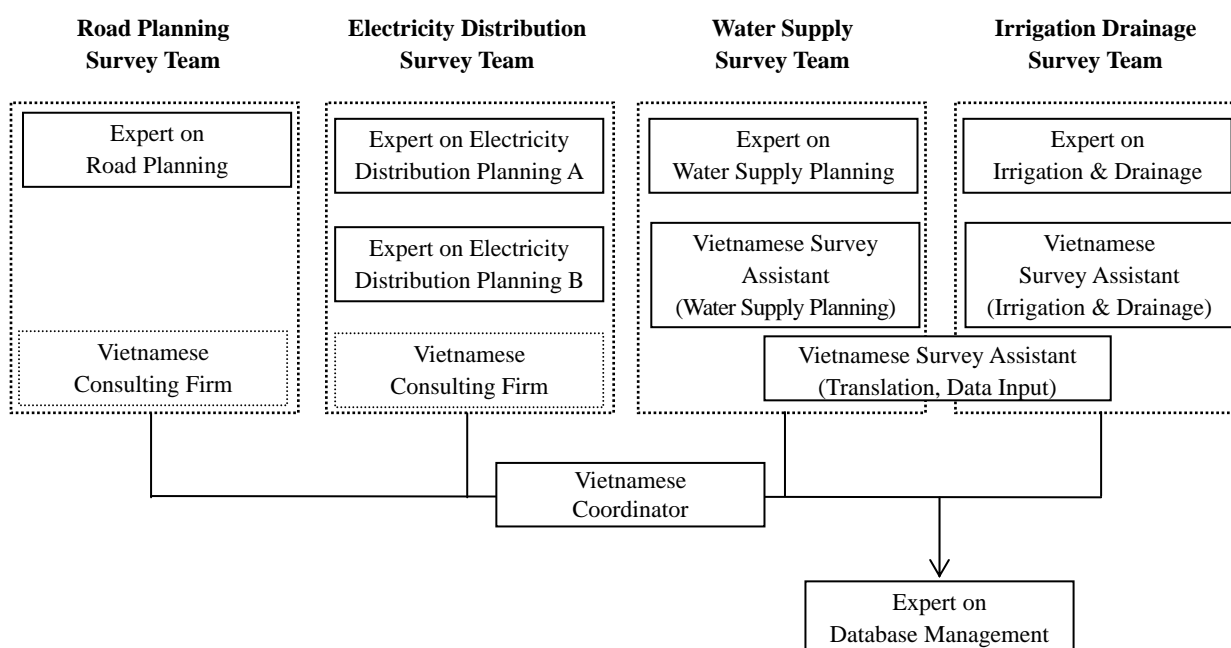


Figure 3.2-1 Structure of the Survey Team

3.2.1.2 Vietnamese Organizations Cooperated with the Survey

The General Service Department of MPI cooperated and assisted the Survey in the central level, and the Department of Planning and Investment of provinces coordinated with the Sub-project management units (SPMUs¹) and the OM/M organizations for delivery of the questionnaires and sending the replies to the Team.

Following Figure 3.2-2 shows the concept of the Vietnamese organizations concerned in the Survey.

¹ In case that the facilities constructed under the sub-project have not been transferred to the OM/M organization, SPMU still have all the data and information even after starting the operation of facilities.

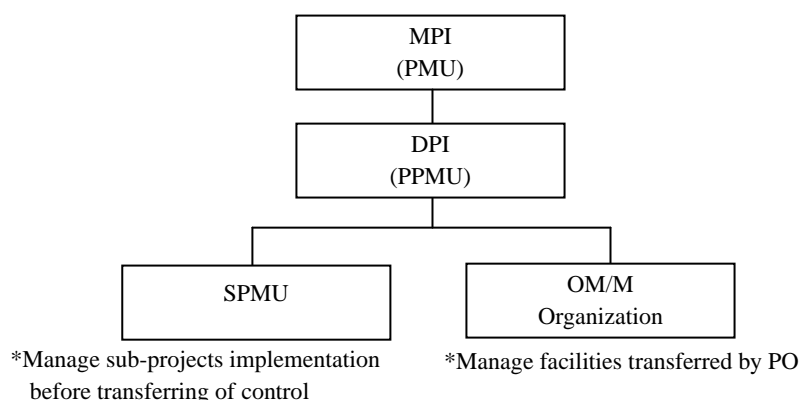


Figure 3.2-2 Concept of the Vietnamese Organizations Concerned in the Survey

3.2.1.3 Number of Infrastructures Surveyed

There is an infrastructure which was constructed through the sub-project in different phases. A number of infrastructures are/were constructed through sub-projects in different phases except the electricity distribution sector; the number of infrastructures is accordingly less than that of sub-projects. In case of water supply sector, three (3) sub-projects have the scheme to construct two (2) WSSs.

After all, the number of sub-projects surveyed is as follows:

Table 3.2-1 Number of Infrastructures

Sector	Road	Electricity Distribution	Water Supply	Irrigation	Total
No. of Sub-projects	518	526	96	85	1,225
No. of Infrastructures	408	526	97	84	1,115

The list of the infrastructures and their distribution by province are shown in Appendices 1.2, 1.3 and 3.1.

3.2.1.4 Timeline of Survey Carried Out

The Survey started its preparation on March, 2010 in Japan and the Team continued the preparation works including discussion with MPI, deliver of the questionnaires, etc. on April in Hanoi followed by the site visiting survey which took around four (4) months to complete. In parallel with the questionnaire and site surveys, the database specialist prepared the database format which would have the data and information collected through the survey. The Survey Team prepared the draft final report on September for comments from the parties concerned. After having the comments, it submitted the final report on November, 2010.

Table 3.2-2 Timeline of the Survey

	2010									
	3	4	5	6	7	8	9	10	11	
Preparation in Japan	■									
Preparation in Vietnam		■								
Delivery of Questionnaire		■								
Receiving the Replies to the Questionnaires				■	■	■	■	■	■	
Site Visiting (Road Sector)				■	■	■	■	■		
Site Visiting (Electricity Sector)				■	■	■	■	■		
Site Visiting (Water Supply Sector)				■	■	■	■	■		
Site Visiting (Irrigation Sector)				■	■	■	■	■		
Preparation of Database Format								■		
Data Input for the Database (Road and Electricity Sectors)								■		
Data Input for the Database (Water Supply and Irrigation Sectors)								■		
Workshop on Database								■		
Reporting (Inception Report)		■								
Reporting (Interim Report)										
Reporting (Draft Final Report)										
Reporting (Final Report)										

3.2.2 Questionnaire Survey

The Survey Team intended to send the questionnaires to MPI, DPIS, District People’s Committees (DPCs) and OM/M organizations of all the facilities, however, the Team excluded the OM/M organizations relative to SPL I and II after the discussion with MPI due to the difficulties to identify them of which facilities had been constructed long ago and were altered, renewed or replaced up to present.

The Survey for the facilities relative to SPL I and II and their OM/M organization were made with the visual confirmation and interview by the Survey Team members with the assistance of DPIS.

The Team sent the questionnaire at the end of April with the assistance of MPI and expected to receive the replies by the end of June at the latest, though the Team requested to reply to the questionnaires by 20th May, 2010. However, the rate of receiving the replies was quite low even at the end of June; the Team continued to make effort to receive them as much as possible with the assistance of MPI and

JICA. Appendix 3.2 shows the record on receiving the replies to the questionnaires. As shown in the Appendix 3.2, the average rate of receiving the replies to the questionnaires is less than 50%.

It might come from the complexity of the questionnaire and sending its reply. MPI sent the questionnaire by the request of the Survey Team to DPI and DPI makes copies of it to send them to the SPMUs through the DPC concerned or send it to the OM/M organizations sometimes through DPC and the replies were not necessarily sent through the opposite way to the Survey Team.

In the course of the delivery of the documents, the questionnaire might not reach the just person of the OM/M of the facilities and the reply long time after the delivery might go an inappropriate place.

The questionnaire made out for the Asset Survey is shown in the Appendix 3.3.

3.2.3 Site Survey

Appendix 3.4 shows the Progress Record of the Survey.

3.2.3.1 Survey Personnel

One (1) team was arranged for the survey and data collection considering the survey period of within four (4) months. One (1) team consists of two (2) members, the member of the Survey Team in charge of irrigation and drainage and an Vietnamese engineer.

3.2.3.2 Activities at the Site

The irrigation site survey team conducted: 1) interview survey and 2) facilities survey.

In the facilities survey, the direct observation was conducted to grasp following items at the sites as much as possible:

- Conditions of Facilities
- Conditions of Irrigation Water Utilization
- Location of Major Facilities (Using GPS or Map)

3.2.3.3 Survey Schedule

The sub-projects of the irrigation sector are located throughout the country. Considering the accessibility to the objective facilities during the rainy season, the survey was conducted from the south to north. The conducted survey schedule is shown Table 3.2-3 below.

Table 3.2-3 Conducted Survey Schedule

Item	Unit	Q'ty	Apr	May	June	Jul	Aug	Sep
Preparation	L.S.	1	■					
Site Survey	Site	85		■■■■■	■■■■■	■■■■■	■■■■■	
Report	L.S.	1			■			■

Chapter 4 Outline, Current Situation and Utilization of the Facilities Constructed under SPL

4.1 Outline of Facilities

4.1.1 Outline of Facilities

Outline of the facilities (systems) constructed under the SPL Projects can be grasped from the viewpoints of 1) location, 2) PO, 3) major components, 4) beneficial area, 5) year of construction and SPL phase and 6) current conditions. Each facility has different combination of these aspects, as shown in Appendix 4.1 and 4.3.

4.1.1.1 Location (Province)

The facilities of the irrigation sector are located from the south to north (Appendix 3.1), and the total numbers of the provinces and facilities are 36 and 84, respectively. Table 4.1-1 shows the number of facilities by each province. Ha Tinh province shows the maximum number of seven (7).

Table 4.1-1 Location of Facilities

Province	No. of Facilities	Province	No. of Facilities
Bac Giang	1	Lao Cai	2
Bac Kan	3	Nghe An	4
Bac Lieu	1	Ninh Binh	1
Binh Dinh	4	Ninh Thuan	3
Ca Mau	1	Phu Tho	5
Cao Bang	1	Phu Yen	3
Dak Lak	5	Quang Binh	1
Dak Nong	2	Quang Nam	1
Dien Bien	1	Quang Ngai	4
Dong Thap	1	Quang Tri	3
Gia Lai	3	Thai Nguyen	3
Ha Giang	1	Thanh Hoa	6
Ha Tinh	7	Thua Thien Hue	2
Hoa Binh	2	Tra Vinh	2
Kon Tum	2	Tuyen Quang	2
Lai Chau	1	Vinh Long	1
Lam Dong	2	Vinh Phuc	1
Lang Son	1	Yen Bai	1
			84

4.1.1.2 Project Owner (PO)

The POs are PPC, DARD, DPC and IMC (Irrigation Management Company). The POs are mainly DPC and DARD with the percentage of 50% and 36% of facility number, respectively. The details of the project owners are shown in Table 4.1-2.

Table 4.1-2 Project Owner of Facilities

Project Owner	No. of facilities	No. of Facilities (%)
PPC	3	4
DARD	30	36
DPC	42	50
IMC	8	9
DARD and DPC	1	1
Total	84	100

4.1.1.3 Major Components

The major components of the facilities constructed under SPL are classified into eight (8) patterns, 1) dam, pump station and canal, 2) dam and canal, 3) dam, 4) pump station and canal, 5) pump station, 6) canal, 7) sluiceway and 8) river improvement and riverbank protection. The word of “canal” in this clause includes irrigation, drainage and irrigation-cum-drainage canals, and the word of “dam” also includes head works². As shown in Table 4.1-3, the main component patterns are “dam and canal”, “canal” and “pump station and canal” accounting for 42%, 19% and 18% of facility number, respectively.

Table 4.1-3 Major Components

Major Components of Facility	No. of Facilities				
	SPL III	SPL IV	SPL V	Total	Total (%)
Dam, Pump Station, Canal	1	1	2	4	5
Dam, Canal	6	13	16	35	42
Dam	3	2	4	9	11
Pump Station, Canal	3	5	7	15	18
Pump Station	1	0	0	1	1
Canal	4	6	6	16	19
Sluiceway	0	0	1	1	1
River Improvement and Riverbank Protection	2	0	1	3	4
Total	20	27	37	84	100

² Dam and head works are treated as facilities of same category in Vietnam.

4.1.1.4 Beneficiary Area

The beneficiary areas of the SPL facilities range from 2.2 ha to 18,020 ha. The total area is around 107 thousands ha, and the average is 1,300 ha. As shown in the following table, the facilities with the area more than 1,000 ha, 100-200 ha and those less than 100 ha account for 23%, 22% and 20% of facility number, respectively.

Table 4.1-4 Beneficiary Area of SPL Facilities

Beneficial Area (ha)	Number of Facilities	Number of Facilities (%)
~100 (including 100)	16	20
100~200	18	22
200~300	11	13
300~400	2	2
400~500	4	5
500~1,000	12	15
1,000~	19	23
Total (106,608.4 ha)	82*	100

* Excluding 2 flood control facilities.

The following table shows regional distribution of facilities by beneficiary area. Based on the table, there does not seem to have any remarkable tendency in the distribution.

Table 4.1-5 Regional Distribution of Facilities by Beneficiary Area

Beneficiary Area (ha)	North East	North West	Red River Delta	North Central Coast	South Central Coast	Central Highland	South East	Mekong Delta	Total
-100	4			3	2	5	1	1	16
100-200	5	2		5	3	3			18
200-300	2			2	4	3			11
300-400				2					2
400-500		1		1	1		1		4
500-1,000	3	1	1	5	1	1			12
1,000-	6		1	5	1	1		5	19
Total	20	4	2	23	12	13	2	6	82

4.1.1.5 Year of Construction and SPL Phase

All facilities were/are constructed in SPL III, IV and V, and the construction periods of all the facilities range from 2000 to 2011. The facilities which were / will be completed at year 2001-2005 and 2006-2010 account for 39% and 57% of the number of facilities, respectively. The details of the construction completion year and SPL phase are shown in Table 4.1-6.

Table 4.1-6 Construction Completion Year and SPL Phase

Construction Completion Year	No. of Facilities	No. of Facilities (%)	SPL Phase (No. of Facilities)
2001-2005	33	39	III (18), IV (15)
2006-2010	48	57	III (2), IV (12), V (34)
2011	3	4	V (3)
Total	84	100	84

4.1.1.6 Current Conditions

Current conditions of the facilities are classified into four (4) categories, 1) under D/D, 2) under construction, 3) completed and 4) completed (some portions not yet constructed). Completed facilities account for 86% of facility number, as shown in Table 4.1-7.

Table 4.1-7 Current Conditions of Facilities

Current Conditions	No. of Facilities	No. of Facilities (%)
Under D/D	2	2
Under Construction	9	11
Completed	72	86
Completed (some portions not yet constructed)	1	1
Total	84	100

4.1.2 Components of Facility

The most dominant components of the facilities constructed under the SPL Projects are dam, head works, pumping stations and canals. Main features of these facilities are tabulated in Appendix 4.2. The summary of the major components are described below.

4.1.2.1 Dam

The Dams are classified into two (2) types, 1) earth fill dam and 2) concrete dam. Table 4.1-8 shows the number of dams, ranges of height and crest length and reservoir capacity by each type. Main and secondary dams are counted independently for these features. There are facilities with plural dams as shown in Appendix 4.2. The total number of dams and the total reservoir capacity are 49 and around 113 MCM (million cubic meters)³, respectively.

Table 4.1-8 Summary of Dams

Dam Type	Height (m)	Crest Length (m)	Reservoir Capacity (MCM)
Earth Fill Dam	3.0-43.8	30.5-1,352	0.03-9.0
Concrete Dam	10.0	30	56.0
Total	-	-	112.8

The highest Dam is Phuong Mao Dam (Phu Tho province) constructed under SPL IV. Its height is 43.8 m, beneficiary area is 928 ha, beneficiary population is 17,500 and JBIC fund allocated is 16.21 BVND.

4.1.2.2 Head Works

Head works are classified into three (3) types, 1) concrete weirs, 2) earth weirs (protected with concrete, etc.) and 3) a rubber dam⁴. Table 4.1-9 shows the number of head works, ranges of height and crest length by each type. The total number of head works is 44.

Table 4.1-9 Summary of Head Works

Type of Head Works	No.	Height (m)	Crest Length (m)
Concrete Weir	42	0.5-7.4	3-220
Earth Weir (Protected with concrete, etc.)	1	2.6	2,163
Rubber Dam	1	2.0	18
Total	44	-	-

³ Main and secondary dams form reservoir. Therefore, the secondary dams are not considered in summing up the reservoir capacity.

⁴ Rise and fall weir made of cloth and rubber mobilized by air or water.

4.1.2.3 Pumping Station

The objectives of pumping stations are classified into three (3); irrigation, drainage and irrigation-cum-drainage, and pump types are three (3); horizontal shaft, vertical shaft and submersible⁵. Based on the combination of these, pumping stations can be classified into seven (7) types; 1) irrigation-horizontal shaft pump, 2) irrigation-vertical shaft pump, 3) irrigation-submersible pump, 4) drainage-horizontal shaft pump, 5) drainage-vertical shaft pump, 6) irrigation-cum-drainage - horizontal shaft pump and 7) irrigation-cum-drainage - vertical shaft pump. Table 4.1-10 shows the numbers of pump stations and pumps and range of pump capacity of each type. The total numbers of pumping stations and pumps are 51 and 120, respectively.

Table 4.1-10 Summary of Pump Stations

Objectives of Pumping Station (No. of Pump Stations)	Pump Construction	No. of Pumping Stations	No. of Pumps	Pump Capacity (m ³ /hr)
Irrigation (39)	Horizontal	21	51	270-1,500
	Vertical	13	29	190-1,500
	Submersible	5	11	108-450
Drainage (10)	Horizontal	9	12	290-4,000
	Vertical	1	6	4,000
Irrigation-cum-Drainage (2)	Horizontal	1	4	1,000
	Vertical	1	7	1,500-2,500
Total	-	51	120	-

4.1.2.4 Canal

Canals are classified into three (3) types; 1) irrigation canals⁶, 2) drainage canals⁷ and 3) irrigation-cum-drainage canals⁸. Table 4.1-11 shows the total canal length and major canal types.. The total canal length is around 1,420 km.

Table 4.1-11 Summary of Canals

Objectives of Canal	Total Canal Length (km)	Major Canal Type
Irrigation	1,264.6	Concrete Flume, Brick, Concrete Block, Earth Lining
Drainage	22.5	Earth Lining

⁵ Horizontal and vertical shaft are classification from the viewpoint of direction of pump main shaft.

⁶ Canal conveys and distributes irrigation water to fields.

⁷ Canal collects drainage from the drainage area, and discharges collected drainage into river.

⁸ Canal that is used for irrigation and drainage canals simultaneously.

Objectives of Canal	Total Canal Length (km)	Major Canal Type
Irrigation-cum-Drainage	134.8	Earth Lining
Total	1,421.9	-

4.2 State of Utilization of Facilities

4.2.1 General

The major components of the facilities are dams, head works, pump stations and canals.

Utilization of facility was grasped based on the farm area which was cultivated with irrigation water from the facility constructed under the SPL Projects (irrigated cultivation area). The data on the irrigated cultivation area was collected from the PO and/or OM/M organization in the interview survey because they grasped roughly the area in every years based on the harvest condition of crops, etc. Since the survey year (2010) was judged to be extraordinary drought year⁹, the area of 2010 was not applied.

4.2.2 Facilities with Problem

The utilization of facilities is evaluated based on the conditions of the completed facilities (include those completed but some portions have not been yet constructed). In the evaluation, “the ratio of irrigated cultivation area to irrigation beneficiary area¹⁰” was used as the indicator. As a result of the evaluation, five (5) facilities show the ratios less than 100% and these facilities were judged to have problems. The state of facility utilization is described below. Appendix 4.3 shows relevant basic data, i.e. the ratio of irrigated cultivation area to irrigation beneficiary area, number of beneficiaries, main crops, yield of rice, etc.

(1) Ea Yeng Reservoir, Dak Lak Province

The irrigation beneficiary area is 50 ha with main crop of paddy.

Under the SPL III, the Ea Yeng Dam (earth fill type) was constructed in 2001 with the storage capacity of 0.910 MCM, and the dam height and length are 10.0 m and 420 m, respectively. Main canal of 1.5 km was also rehabilitated from earth lining to concrete block canal.

Under these conditions, the secondary and tertiary canals are earth lining ones which locate in the downstream of the main canal constructed under the sub-project. Since there was water leakage, etc. from the secondary and tertiary canals, 92% of the irrigation beneficiary area is only irrigated.

⁹ In extraordinary drought year, irrigation beneficial area is not ensured.

¹⁰ Planned cultivated area benefited by irrigation project.



Ea Yeng Dam and Reservoir



SPL Main Canal and Irrigation Area

Figure 4.2-1 Conditions of Ea Yeng Reservoir

(2) An Hung Dam, Ha Tinh Province

The irrigation beneficiary area is 219 ha with main crops of paddy, groundnuts and maize.

The An Hung Dam (earth fill type) was constructed by the GOV (under own budget) in 1978. Its basin area is 140 ha. Under the SPL IV, the An Hung Dam was rehabilitated with the storage capacity of 1.06 MCM, and the dam height and length are 25.0 m and 460 m, respectively. In addition, two (2) main canals were rehabilitated from earth lining to concrete flume canal, namely West Main Canal with 2,980 m and South Main Canal with 800 m.

Under these conditions, the natural mixed trees in a forest of private land of around 30 ha in the dam basin was changed to rubber tree before one (1) year of the commencement of the rehabilitation. Due to the influence of this change, the runoff of water from the dam basin was reduced by around 10 %. As a result, 90% of the irrigation beneficiary area is currently irrigated. (information from relating personnel).



An Hung Dam and Reservoir



Vegetation of Dam Basin

Figure 4.2-2 Conditions of An Hung Dam

(3) Khe Coi Dam, Ha Tinh Province

The irrigation beneficiary area is 80 ha with main crops of paddy, groundnuts and potatoes.

Khe Coi Dam (earth fill type) was constructed in 1956, and main canal of 2.0 km and secondary canal of 2.5 km were also constructed by the GOV (under own budget). Its canal type was earth lining. Under SPL IV, Khe Coi Dam was rehabilitated with the storage capacity of 0.682 MCM, and the dam height and length are 10.0 m and 400 m, respectively. Main canal of total 2.0 km was also rehabilitated from earth lining to brick canal, namely North Main Canal with 1,400 m and South Main Canal with 600 m.

Under these conditions, 88% of the irrigation beneficiary area is irrigated because a siphon¹¹ of the main canal has not been yet constructed. This siphon will be constructed under the GOV budget after five (5) years (PO will be DPC). In addition, deterioration of the intake facility at the north of dam due to a gate trouble, deformation of the north main canal (length 200 m) due to released water from the said un-controllable dam intake facility, and deformation of the south main canal (length 5 m) due to low construction quality were observed. These parts will be repaired until 2011.



North Intake Facility of Dam



Deformation of North Main Canal

Figure 4.2-3 Conditions of Khe Coi Dam

(4) Song Rac Irrigation, Ha Tinh Province

The total beneficiary area is 8,190 ha including 40 ha of fisheries.

Song Rac Dam (earth fill type), and main canal of 18.2 km, secondary canal of 40.0 km and tertiary canal of 95.0 km were constructed by the GOV (under own budget) during 1986-1994. The storage capacity of the dam is 125.5 MCM, and the dam height and length are 26.8 m and 1,263 m, respectively. Major canal type is earth lining.

Under these conditions, 7.9 km of secondary canals and 3.8 km of tertiary canals, which located in the end of the area, were rehabilitated from earth lining to brick, stone and concrete flume canal under the

¹¹ Canal constructed under a river, a lake and a depression in order to cross these obstacles.

SPL III. The irrigation beneficiary area relating the SPL Project is 1,490 ha with main crops of paddy, groundnuts and maize.

Because the main and secondary canals, located in the upstream of the SPL portions, are earth lining type constructed during 1986-1994, there were water leakages, etc. from these canals. Since the canals constructed under the SPL Projects are located in the downstream of the earth lining canals, the irrigation water of the downstream canals results in insufficient sometimes. As a result, 90% of the irrigation beneficiary area is currently irrigated.



Earth Lining Canal Located in the Upstream of SPL Canal



Division Works to SPL Canal

Figure 4.2-4 Conditions of Song Rac Irrigation

(5) Quang Xuong Irrigation, Thanh Hoa Province

The irrigation beneficiary area is 1,023 ha with main crops of paddy, groundnuts and maize.

Quang Tam Pumping Station, with four (4) pumps of each 1,400 m³/hr capacity, was constructed in 1995, and main canal of 7.4 km and secondary canal of 6.5 km were constructed with earth lining in 1998. These facilities were constructed by the GOV (under own budget).

Under these conditions, 6.3 km of main canals and 4.45 km of secondary were rehabilitated under the SPL III. The major canal types are concrete block and brick.

However, these rehabilitated canals, especially located in/around residential areas with length of around 0.4 km, were deformed remarkably by scoring of sands behind concrete blocks due to low construction quality. In addition, these canals were deteriorated due to the disposal of household solid waste. 80% of the irrigation beneficiary area is currently irrigated. In addition, the pumps were deteriorated, and their electricity charges increased. It was also observed the reaching time of irrigation water to the end of facility increased.



Deformation of Main Canal and Disposal of Solid Waste



Deformation of Secondary Canal and Disposal of Solid Waste

Figure 4.2-5 Conditions of Quang Xuong Irrigation

4.3 Current Conditions of Facilities

4.3.1 Damages Affected by Disasters

Among natural and man-made disasters, only flood damages were reported and recognized during the site survey. The number of affected facilities is three (3). Table 4.3-1 shows these facilities and relevant information.

Table 4.3-1 Facilities Affected by Flood

Province	Facility Name	Affected Facilities and Length under the SPL Project	Conditions
Lao Cai	Sin Chai Irrigation System	Main Canal (L=1 km, Concrete Flume and Earth Lining)	Destruction of the canal, which is constructed on the steep slopes of the mountain, caused by floods and falling rocks. These damages are repaired after each time of occurrence.
Nghe An	Khe Ngang Reservoir	Secondary Canal (L=1 km, Earth Lining)	Destruction of the canal caused by floods during a rainy season. These damages are repaired after each time of occurrence.
Phu Yen	La Bach Reservoir (Stage 2)	Main and Secondary Canal (L=0.4 km, Earth Lining)	Destruction of the canal caused by floods (this canal was completed in 2006). These are damages during the construction of the dam.



Destructed Canal Caused by Floods



Destructed Canal Caused by Falling Rocks

Figure 4.3-1 Conditions of Sin Chai Irrigation System



Khe Ngang Dam and Reservoir



Main Concrete Flume Canal

Figure 4.3-2 Conditions of Khe Ngang Reservoir



Dam under Construction



Destructed Canal Caused by Floods

Figure 4.3-3 Conditions of La Bach Reservoir (Stage 2)

4.3.2 Capacity

Any damages are not observed and reported regarding the capacity of facility.

4.3.3 Deterioration by Aging and Insufficient Maintenance and Management

Deterioration by aging and insufficient maintenance and management were confirmed and reported at two (2) facilities during the site survey. The Table 4.3-2 shows conditions of these facilities.

Table 4.3-2 Facilities with Deterioration

Province	Facility Name	Deteriorated Facilities under the SPL Projects and Length	Remarks
Ha Tinh	Khe Coi Dam	Dam Intake Facility and Main Canal (L=205 m, Brick)	Facility conditions are described at 4.2.2 (3).
Thanh Hoa	Quang Xuong Irrigation	Main and Secondary Canal (L=400 m, Concrete Block)	Facility conditions are described at 4.2.2 (5).

4.3.4 Alteration

Any alteration were not observed and reported.

Chapter 5 Operation, Maintenance and Management of the Facilities

5.1 Conditions of Operation, Maintenance and Management of the Facilities

(1) General

Main components of the facilities (dams, head works, pumping stations, main canals, etc.) are operated, maintained and managed by DARD, DPC, CPC, IMC (Irrigation Management Company) and FO (Farmers' Organization)¹², and on-farm canals, etc. are maintained by farmers without compensation. On the other hand, the asset management is implemented based on the ministerial ordinance of MOF. The maintenance and management of the flood control structures are not implemented.

(2) OM/M Regulation

IMC (if IMC is the OM/M organization) establishes its regulation based on the 1) ministerial ordinances of MARD, i.e., "Ordinance on Irrigation Facility Protection and Development" and "Ordinance on Dyke and Dam", 2) provincial ordinances and 3) relevant correspondences, etc. For other cases (if IMC is not OM/M organization), a local consultant prepares a manual/regulation based on the same ordinances, etc.

(3) Existence of OM/M Plan and Record

As shown in Appendix 5.1, 53 facilities prepare OM/M plan (82% of 65 facilities of answered), and 12 facilities do not schedule to prepare (remainings are under design stage). On the other hand, 50 facilities prepare OM/M records (75% of 67 facilities of answered), and 17 facilities do not schedule to prepare (remainings are under design stage). In many cases, the facilities having OM/M plan prepare OM/M record.

5.1.1 Operation

5.1.1.1 Operation Plan

For the facilities having OM/M plan, the OM/M organization prepares an operation plan under the support of relating government institutions usually. The main contents of the operation plan are an irrigation schedule, an irrigation area, an operation cost and electricity charges of pumping stations, etc. On the other hand, for the facilities not having OM/M plan, the beneficiary area is small and the facility is simple in many cases, and the OM/M organization operates facilities based on the reality of production and experience.

Case studies of operation planning are, as follows:

¹² A section in charge of the OM/M within these organizations implements the OM/M of facility.

(1) IMC Case

- (i) DARD decides the irrigation area, and estimates irrigation water demand based on a DARD guideline.
- (ii) IMC prepares the operation plan based on the irrigation area and irrigation water demand decided by DARD.
- (iii) IMC submits the operation plan to DPI and DOF.
- (iv) DPI, DOF and DARD appraise the operation plan.
- (v) After the appraisal, IMC submits the operation plan to PPC for a budget.

(2) FO Case

- (i) DPC prepares the general plan of irrigation schedule.
- (ii) CPC (Steering Production Board) prepares the detailed plan of irrigation schedule.
- (iii) CPC prepares the seasonal plan of irrigation schedule including irrigation water demand, and CPC disseminates the irrigation schedule to farmers.
- (iv) FO prepares the operation plan based on the above mentioned schedule and water demand, and submits the plan to CPC, and informs to DPC.
- (v) DPC makes a field inspection and a recommendation on operation plan to FO.
- (vi) FO submits the record of inspection conducted by DPC to CPC for budget procurement.

5.1.1.2 Operation Conditions

For the facilities having OM/M record, the OM/M organization prepares an operation record of dams, head works and pumping stations, however, does not prepare the operation record of canal gate in many cases. The main items of the operation record are ratio of gate opening and relating water level, and the operation record is tabulated.

5.1.2 Maintenance

5.1.2.1 Maintenance Plan

The OM/M organization prepares a maintenance plan based on the inspection and examination. The main contents of the maintenance plan are a repair and maintenance schedule, and a maintenance cost, etc. On the other hand, for the facilities not having the OM/M plan, facilities are maintained based on the reality of production and experience.

5.1.2.2 Maintenance Conditions

As a result of the site survey, basic maintenance activities are commonly executed in every facility, although frequencies of activities are different. The basic maintenance activities are summarized below.

(1) Dam

- (i) Protect a dam and appurtenant structures
- (ii) Cut grass and trees on and around the dam
- (iii) Dredge deposition around an intake facility
- (iv) Inform problems to an upper organization
- (v) Execute small scale repairs (for example, < soils 2 m³, < repair materials 0.5 m³)
- (vi) Execute large scale repairs (carried out by upper organization)

(2) Head Works

- (i) Cut grass and trees around head works
- (ii) Dredge deposition in front of intake gates
- (iii) Execute small scale repairs (for example, < soils 2 m³, < repair materials 0.5 m³)
- (iv) Execute large scale repairs (carried out by the upper organization)

(3) Pumping Station

- (i) Maintain pumps (lubrication and easy maintenance and repairs, etc.)
- (ii) Cut grass and trees around a pumping station
- (iii) Dredge deposition in and around suction and discharge sumps
- (iv) Execute all repairs by the OM/M organization

(4) Canal

- (i) Cut grass and trees around canals
- (ii) Dredge deposition in the canals
- (iii) Execute small scale repairs (for example, < soils 2 m³, < repair materials 0.5 m³)
- (iv) Implement large scale repair (implemented by upper organization)

For the facilities having an OM/M record, the OM/M organization prepares a maintenance record of the above activities. Most of maintenance records have diary style showing daily maintenance activities.

5.1.3 Management

Irrigation assets are managed in accordance with the ministerial ordinances of MOF. Therefore, in every province, the DOF is responsible for the management of the irrigation assets. Although all relating personnel do not know the ministerial ordinances, all provinces implement the asset management in accordance with the ministerial ordinances. The standard procedure of the management is, as follows:

- 1) A PO prepares the inventory of assets, and submits the inventory to the organization PO belongs. This inventory includes the scale, value, land area, persons in charge, year of construction and type of assets.
- 2) The PO hands over the assets and the inventory to the OM/M organization.
- 3) The OM/M organization submits the inventory to the DOF.
- 4) The OM/M organization calculates the depreciation of the assets, and submits it to the DOF. The service life of each item of the asset is determined based on the ministerial ordinance of MOF.
- 5) DOF assesses the deprecation based on the MOF ordinance, and informs to PPC annually.

5.2 Organization and System for Operation, Maintenance and Management of the Facilities

5.2.1 Operation, Maintenance and Management Organization

5.2.1.1 OM/M Organization

The OM/M organization is determined by PPC based on the provincial ordinances, ministerial ordinances of MARD or Law on Construction, etc. Although actual selection is different from province to province, the typical pattern of selecting is described below.

Table 5.2-1 Selecting Pattern of OM/M Organization

Selected Organization	Typical Pattern
CPC	Facility exists in one (1) commune, and so forth.
DPC	Facility exists in several communes which belongs to one (1) district, and so forth.
DARD, IMC	Facility with large scale and complicated exists in several districts, and so forth.
FO	Facility with small scale and simple exists in one (1) commune, and so forth.

After the decision of OM/M organization by the PPC, it authorizes the DPI to carry out the OM/M of the facilities. Then, the DPI authorizes the selected organization responsible for the OM/M of the facilities. In some cases, the authorized organization authorizes a lower organization, like DPC to CPC, and CPC to FO. The authorized organization must establish the OM/M post based on the provincial ordinance, and others. The component of the OM/M post is also stipulated.

The OM/M organizations of irrigation facilities are 1) DARD, 2) DPC, 3) CPC, 4) IMC and 5) FO in general. However, some facilities are operated, maintained and managed by several organizations¹³. Table 5.2-2 shows the number of facilities by OM/M organization types. The organization corresponds to the biggest number of facilities is IMC accounting for 40% (refer to Appendix 5.1).

Table 5.2-2 OM/M Organization

OM/M Organization	No. of Facilities	No. of Facilities (%)	Beneficiary Area per Facility ¹⁾ (ha)	Remarks
DARD	3	4	2.2-2,200	
DPC	9	11	53-10,900	
CPC	9	11	70-650	Including one (1) flood control facility
IMC	34	40	45-18,020	Including one (1) flood control facility
FO	15	18	29-600	
DPC and CPC	2	3	90-92	DPC: Repair of dam and canal CPC: OM/M of dam and canal
IMC, DPC and Town PC	1	1	650	IMC: OM/M of dam DPC, TPC: OM/M of canal
IMC and FO	1	1	5,950	IMC: OM/M of one (1) head works and one (1) pumping station (one (1) area each, total two (2) areas) FO: OM/M of one (1) pumping station (one (1) area)
Not Yet Decided	10	12	-	In cases of under D/D or construction, or right after the completion of construction
Total	84	100		

Note:

1) Sum of irrigation and drainage beneficiary areas.

5.2.1.2 Numbers of Personnel of OM/M Organization and OM/M Post

Table 5.2-3 shows the numbers of personnel of OM/M organization and OM/M post. For DARD and IMC, the numbers of personnel range from 20 to more than 150 persons, and for DPC, CPC and FO, from 2 to 80 persons. This shows DARD and IMC are comparatively bigger organizations than DPC, CPC and FO. On the other hand, the number of persons of OM/M post is subject to a condition of beneficial area and facility type, etc. For IMC, it is less than 60 persons, and for the others, less than 20 persons (for details, refer to Appendix 5.1 and 5.2).

¹³ Plural organizations operate, maintain and manage one (1) facility by components, areas and roles (refer to Table 5.2-2).

Table 5.2-3 Number of Personnel of OM/M Organization and OM/M Post

OM/M Organization	No. of Personnel of OM/M Organization (person per organization)	No. of Persons of OM/M Post (person per facility) ¹⁾	Remarks
DARD	60-148	1-20	
DPC	17-78	0-7	No OM/M post for “Irrigation in 30/4 Area of Chua Phat” (Sea Water Utilization for Fishponds, Bac Lieu Province)
CPC	7-36	0-17	No OM/M post for “Dakpoko Irrigation” (Flood Control, Kon Tum Province)
IMC	23-980	0-60	No OM/M post for “Ninh Phuoc Irrigation” (Flood Control, Ninh Thuan Province)
FO	2-47	1-52 ²⁾	
DPC and CPC	DPC: 22, 100 CPC: 22, 30	3-5	
IMC, DPC and Town PC	IMC: 257 DPC: 106 TPC: 25	10	
IMC and FO	IMC: 150 FO: 9	18	

Note:

- 1) Excluded from the table, when number of persons cannot be identified.
- 2) One facility (Lien Minh-Tung Chau Irrigation System, Ha Tinh Province) is operated, maintained and managed by four (4) FO. Total number of staffs in the posts of 4 FOs is 52 and it is accordingly 13 staffs per one FO.

5.2.2 Operation, Maintenance and Management System

5.2.2.1 Source of OM/M Budget

Collection of irrigation water fee was abolished in 2008 (Decree 115/2008/CP). After the abolition, the central government bears the OM/M cost of the facilities.

Based on the site survey in 36 provinces, seven (7) provinces reported that the subsidy from GOV did not cover all the OM/M costs. As for the remaining 29 provinces, they did not report the shortage of subsidy.

The OM/M organization prepares the expenditure plan, and after the approval of all relating PCs (Figure 5.2-1), the budget is determined. Considering this system, in general, it takes time to disburse the budget to the OM/M organizations.

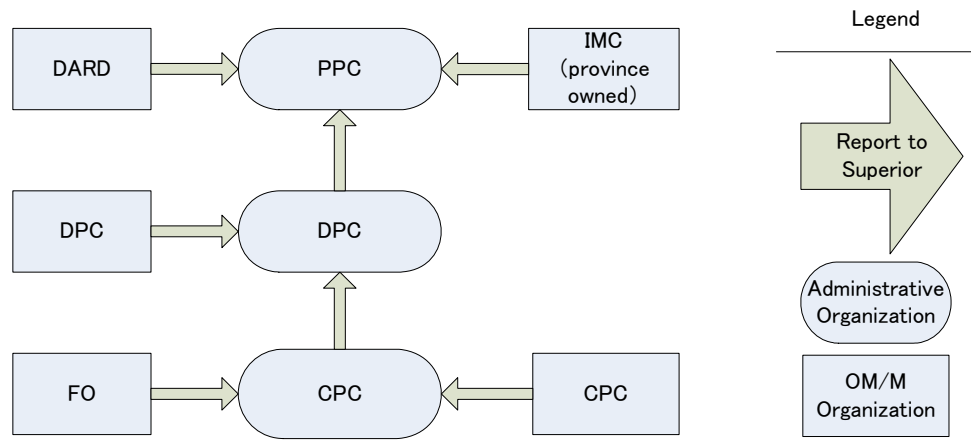


Figure 5.2-1 People's Committees Approving Budget

Under these conditions, two (2) IMCs make effort, as follows:

1) Developing of Irrigation Limited Liability Company of Thai Nguyen Province

70% of OM/M budget is raised from GOV, and 30% is from a hydroelectric joint stock company which is affiliated company with the OM/M organization.

2) Management and Operation of Irrigation Schemes of Tra Vinh Province

75% of the OM/M budget is raised from GOV, and remaining 25% is from the fee for consulting services which are rendered by this company.

Chapter 6 Impact and Effectiveness of SPL Projects

6.1 Sub-Projects with Less Effectiveness

Considering this survey is one for grasping the current conditions of infrastructure, effects of sub-project was grasped based on the farm area, which was cultivated with irrigation water from facility constructed or rehabilitated under SPL, instead of the increase of production volume of crops and annual farm income, etc. which were primarily used to grasp the said effects.

It is assumed that “the ratio of irrigated cultivation area to irrigation beneficiary area” indicates the level of achievement of sub-project benefit which farm households receive. Based on this idea, it is considered that the ratio can be the substitution of the indicator to evaluate the effectiveness of sub-project. On the other hand, this ratio is applied as the indicator to evaluate the utilization of facilities, and the following five (5) sub-projects indicate the ratios less than 100%. Therefore, these sub-projects are regarded as those with less effective. The conditions of these facilities are described in the section 4.2.2.

- (1) Ea Yeng Reservoir , Dak Lak Province
- (2) An Hung Dam, Ha Tinh Province
- (3) Khe Coi Dam, Ha Tinh Province
- (4) Song Rac Irrigation, Ha Tinh Province
- (5) Quang Xuong Irrigation, Thanh Hoa Province

6.2 Sub-Projects with Impact on the Regional Development Plan

There are no sub-projects with impact on the regional development plan. On the other hand, there are other effects of the sub-projects as described below.

Based on the interview survey from farmers, etc., it was confirmed that the number of cropping times and the yield of rice had been increased as the effects of irrigation which were derived from the facilities constructed or rehabilitated under the SPL Projects, as follows:

Table 6.2-1 Effect on Production Increase of Rice of SPL Facilities

Effect on Production Increase of Rice	Facility Name
Increase from Single to Double Cropping	Dak Nong Province, Electric Pumping Station in Choah Village Lam Dong Province, Bo Kabang Irrigation Lam Dong Province, Da-Don Dam Ninh Binh Province, Dong Dinh Pump Station Ninh Thuan Province, Bau Ngu Reservoir Thua-Thien-Hue Province, Dien Hoa-Dien Hai Irrigation System
Increase from Double to Triple Cropping	Vinh Long province, Rach Tra-Thien My Irrigation Canal
Increase of Yield	Binh Dinh Province, Tam Son Irrigation System (from 3.0 to 5.0 ton/ha) Binh Dinh Province, Tan An-Dap Da Irrigation System (30% Increase) Lam Dong Province, Da-Don Dam (from 3.5 to 4.0 ton/ha) Vinh Long Province, Rach Tra-Thien My Irrigation Canal (from 4.9 to 6.9 ton/ha)

Chapter 7 Subjects to be Discussed

7.1 Operation

In the site survey, with the rate of one (1) facility or more per 10 facilities, it was observed stones were placed in canals to take water into own paddy fields, and holes were dug in canal walls to take water at convenient time ignoring irrigation rotation. In addition, it was observed canals were deteriorated due to disposed garbage in canals (such as Quang Xuong Irrigation, Thanh Hoa province). It was considered the number of canals with these conditions would increase from the viewpoint of the entire canal observation, because only a few parts of the canals were observed in the site survey.

It was found that problem was lack of recognition of current conditions and issues on insufficient sharing of information among farm households, difficulty of transmission of water distribution schedule from a facility manager to farm households, and holes in canal walls and disposal of garbage into canals, etc.

7.2 Maintenance

The GOV developed irrigation projects in the past, and these facilities are forming enormous assets (DPMU, Binh Dinh province). It is mentioned in the MOF DECISION (No: 32/2008/QD-BTC) that these assets should be managed strictly and the effectiveness in utilization¹⁴ of the assets should be improved. In order to follow this, POs (DPC, DARD, IMC, PPC, etc.) prepared assets list, and the OM/M organizations (IMC, FO, DPC, CPC, etc.) calculated the depreciation. These organizations are requested to manage the facilities constructed under the SPL Projects year by year.

Under these conditions, based on the site survey, it was found that problems were requiring long time to draw out information/data of the sub-projects in some cases, and lost and hoarded storing away of information/data¹⁵, since POs and OM/M organizations preserve SPL information/data with paper medium in many cases although they use computers.

7.3 Management

In the site survey, there were reports expressing that monitoring and evaluation of FO is necessary (Quang Ngai DPI, July 5, 2010), and strengthening of monitoring and evaluation is required through authorizing POs (Thua-Thien-Hue DPI, July 9, 2010).

On the other hand, in the SPL III, IV and V, the Consultants conducted monitoring and evaluation on the effects, implementation and OM/M of the sub-projects using survey sheets. Regarding this monitoring and evaluation, various problems were pointed out, such as difficulty in data collection, clarification of implementing body of monitoring, update of data, etc. (The Report on SAPROF for

¹⁴ In the first page of DECISION, it is mentioned as “in order to manage strictly and improve the effectiveness in using assets of the state agencies, non-profit public and organizations using the state budget.”

¹⁵ Lost and hoarded storing are mostly observed in the information/data regarding figure and drawing.

SPL 6, August 2008).

It is considered that the monitoring and evaluation system is under arrangements at present. The monitoring and evaluation is desired to be implemented periodically, however, the current system is not suitable for periodic monitoring and evaluation, etc.

7.4 Organization

Within the sphere of site survey, thick weed and trees were not observed in the facilities operated, maintained and managed by the DARD, the DPC and the IMC, although some farmers dug holes in canal walls. In addition, it was considered that they kept data in good condition in general, because they could provide the survey team with necessary data in a relatively short time in many cases. Therefore, it seemed that there were no serious problems in their OM/M.

On the other hand, through the site survey, there were reports expressing that a technical guidance was necessary (from the CPC, the OM/M organization of Khe Ngang Reservoir, Nghe An province), and a technical training was necessary (from the FO, the OM/M organization of Buon Chao Dam, Phu Yen province). In addition, through the facility survey, the following cases were observed in the facilities of the CPC and the FO:

- It was considered the inspection of a dam would be difficult since weed and trees were growing thickly on the downstream of the dam body (Nam Kar Dam, Dak Lak province), and so on.
- It was considered that the inspection, operation and repair of canals would be difficult since weed and trees were covering thickly on the canals (Nam Chay Irrigation, Lao Cai province), and so on.

Since above cases were observed and providing necessary data from the CPC and the FO took long time in many cases, it was considered that there was necessity of technical capacity development for the CPC and the FO (there were nine (9) facilities whose OM/M organization was the CPC, and 15 facilities of the FO).

7.5 Sub-Project Implementation

7.5.1 Planning and Design

In the site survey, there were reports expressing that farmers' intension was to be reflected in the planning and design (Quang Ngai DPI, July 5, 2010), and the DPC and the CPC were desirable to participate in the planning and design (Nghe An DPI, July 22, 2010). In addition, it was also reported that canal alignment was re-designed because it was not fitted to site topography (Trieu Duong Reservoir, Nghe An province).

In the past SPL Project, the District Development Boards (DDBs) were established in the pilot provinces and districts (five (5) provinces and 22 districts), as shown in Table 7.5-1 (15 irrigation

sub-projects were in 10 districts of five (5) provinces.). The objectives of the DDBs are to reflect residents' intension properly in sub-projects implementation, and to raise residents' ownership of sub-projects to ensure the effectiveness and sustainability of sub-projects effectiveness. The DDB comprises representatives of communes and public organizations (a women's association, a youth association, etc.). The DDB participates in sub-project preparation, planning, implementation, monitoring and evaluation, and facility OM/M, etc. (Executive Committee Appraisal Report (SPL V), JICA, 2006).

Table 7.5-1 Pilot Provinces and Districts

Province	DDB Established District (I and II)	Additional DDB Established District (II)	No. of Districts	No. of Irrigation Sub-Projects
<u>Ha Tinh</u>	<u>Cam Xuyen, Can Loc</u>	<u>Huong Son, Huong Khe</u> , Thach Ha, <u>Ky Anh</u> , Hong Linh	7 (5)	6
<u>Hoa Binh</u>	-	Da Bac, <u>Yen Thuy</u> , Tan Lac	3 (1)	1
<u>Ninh Thuan</u>	-	Bac Ai, <u>Ninh Phuoc</u> , Ninh Son, Ninh Hai	4 (1)	3
<u>Phu Tho</u>	<u>Tam Nong</u> , Song Thao	Thanh Son, <u>Cam Khe</u> , Yen Lap	5 (2)	3
<u>Phu Yen</u>	<u>Song Hinh</u> , Phu Hoa	Son Hoa	3 (1)	2
5 (5) Provinces	6 (4) Districts	16 (6) Districts	22 (10) Districts	15

Note: Provinces and districts with underline have irrigation sub-projects, and their numbers are indicated in parentheses.

It is considered that the participation in planning and design, etc. was not executed for 69 facilities located in the areas other than the pilot areas, because Quang Ngai and Nghe An provinces who reported the necessity of the participation in planning and design, etc. are not included in the pilot areas.

As mentioned in the section 4.2.2, among 84 facilities, there were two (2) facilities which have problem regarding earth lining canals (constructed by the GOV budget). The problem was that the irrigated cultivation area became less than the irrigation beneficiary area due to water leakage, etc. from earth lining canals. As shown below, there are two types of problem from the viewpoint of location of the canals constructed under the sub-projects and earth lining canals. They present questions in the validity of sub-project planning.

Table 7.5-2 Problems Regarding Earth Lining Canal

Facilities with Problems	Problems
Ea Yeng Reservoir, Dak Lak province	This is small scale irrigation sub-project with the beneficiary area of 50 ha and JBIC fund of 3.0 BVND. The concrete block canal constructed under the sub-project locates in the upstream area, and the earth lining canal locates in the downstream area. The irrigated cultivation area

Facilities with Problems	Problems
	becomes less than irrigation beneficial area due to water leakage, etc. from the earth lining canal in the downstream area(refer to 4.2.2 (1)).
Song Rac Irrigation, Ha Tinh province	This is large scale irrigation sub-project with the beneficiary area of 8,190 ha and JBIC fund of 7.0 BVND. The earth lining canal locates in the upstream area (about 20 km length of the main and secondary canals), and the brick, stone and concrete block canals constructed under the sub-project locates in the downstream area. The irrigated cultivation area becomes less than irrigation beneficial area due to water leakage, etc. from the earth lining canal in the upstream area (refer to 4.2.2 (4)).

7.5.2 Facility Construction

In the site survey, gully erosions were observed in a few facilities, and these gullies were to be repaired by maintenance works (Cho Moi Irrigation System, Bac Kan province, etc.). In addition, as mentioned in the section 4.3.3, at the following two (2) facilities among 84 facilities, canals, etc. were deformed greatly due to the low construction quality. The problem was found in the construction quality management.

Table 7.5-3 Problems Regarding Facility Construction

Facilities with Problems	Condition
Khe Coi Dam, Ha Tinh province	For details, refer to 4.2.2 (3)
Quang Xuong Irrigation, Thanh Hoa province	For details, refer to 4.2.2 (5)

Chapter 8 Sustainability of SPL Projects

8.1 Project Planning and Design

8.1.1 Planning and Design

8.1.1.1 Earth Lining Canal

The following items are hopefully to be considered in the facilities planning and design of the SPL Projects including two (2) facilities which currently have problem that the irrigated cultivation area becomes less than the irrigation beneficiary area due to water leakage, etc. from earth lining canal.

It is important to reduce the irrigation water loss regarding earth lining canals. So as to reduce the loss, it is necessary to make efforts to raise the irrigation efficiency¹⁶. The following countermeasures are applicable in order to raise the irrigation efficiency:

- To share the information on problems regarding water distribution and facilities, etc. among farm households.
- To disseminate the water distribution schedule to farmers, and consequently to raise the water application efficiency¹⁷ of farm level by following the water rotation.
- To improve division works and water measurement facilities¹⁸, etc. to raise the water management efficiency.
- To improve earth lining canals to concrete flumes, etc. to raise the conveyance efficiency¹⁹.
- To formulate an irrigation plan with integrity of technical and economic aspects considering a financial plan including donors. The irrigation plan should especially formulated based on the survey of irrigation efficiency for the rehabilitation planning of earth lining canal and dam, etc.

8.1.1.2 Participatory Planning and Design

In order to ensure the effectiveness and sustainability of the sub-projects, it is desirable that residents' intension is reflected properly in the sub-projects implementation, and residents' ownership of sub-projects is raised. Based on this idea, it is desired that the persons in charge of the irrigation of DPC and CPC, and farmers participate in the planning and design of the facilities to be constructed under the SPL Projects.

¹⁶ Ratio of water stored in farm field (effective soil layer) to volume of intake water to system.

¹⁷ Ratio of water stored in farm field (effective soil layer) to volume of intake water to farm field.

¹⁸ Division works are facilities which divert water into designated area with designated discharge. Water measurement facility is one which measures designated discharges of intake, diverted and conveyed water.

¹⁹ Efficiency taking into accounts the water loss in water conveyance along canal.

8.2 Facilities Construction

Due to low quality of construction, deformed canals, etc. were observed in the site survey. It is required to construct appropriate facilities which correspond with the specification and quality indicated in design drawings, following the construction law and DOC guidelines, etc. which regulate construction quality, etc. The desired countermeasures are shown below.

- To carry out physical, chemical and mechanical tests based on the construction law and DOC guideline, etc.
- To record the results of tests in a control chart and a summary table, etc., and to give a decision on the results by statistical methods.
- To help preventing any defective works, and identifying any problems and improving measures.
- To conduct quality control in combination with progress control and output control for the purpose of securing stable quality and progress of the construction.

8.3 Administrative System of the Constructed Facilities

It is considered that development of technical capacity, etc. is desired for CPC and FO. On the other hand relating to the sub-projects, there are two (2) ways of capacity development, as follows:

- 1) In SPL III, VI and V, the development of human resources and strengthening of organization was executed through consulting services and cooperation with NGO in order to improve the capacity of sub-project implementation and supervision of PMU, PPMU and SPMU (Executive Committee Appraisal Report, JICA, 1999, 2003 and 2006).
- 2) JICA projects for the capacity development on PIM (refer to 8.4.2).

It is considered above-mentioned JICA projects will develop the capacity of FO. However, as developing method of CPC seems to be not clear, the following discussion on this issue is desired to be discussed among relevant organizations:

- The DPC conducts the capacity development of CPC based on the development of human resources and the strengthening of organizations at district level executed under the SPL Project implementation, or
- CPC is also targeted together with FO when the capacity development under the JICA project is executed.

8.4 Operation, Maintenance and Management

8.4.1 Monitoring and Evaluation

It is desirable to solve problems regarding the monitoring and evaluation, such as difficulty in data collection, unclearness of implementation body, and updating of data, etc. It is necessary to discuss this issue continuously among relevant organizations. In addition, the environmental conservation and the watershed management seem to be important for the facility management. Therefore, inclusion of the following items is desired:

- Environmental Conservation: Water quality problems, waste management problems, etc.
- Watershed Management: Upstream and downstream problems, problems regarding water utilization, problems regarding land utilization, minority race problems, etc.

8.4.2 Farm Household Education

It is desirable to promote the Participatory Irrigation Management (PIM) in order to recognize for farm households current conditions and issues regarding insufficient information sharing among farm households, difficulty with the transmission of water distribution schedule from facility manager to farm households, digging holes in canal walls, and the disposal of garbage into canals, etc. Based on these ideas, it is preferable to apply the outputs of the following JICA projects which are instances of this attempt:

- (1) “The Project for Capacity Development of Participatory Irrigation Management System through Vietnam Academy for Water Resources for Improvement of Agricultural Productivity in Vietnam”, June 2005 – June 2010

The outputs are to strengthen the function of the PIM Center of VAWR, to acquire the knowledge, technology and experience of water management for IMC engineers, and to improve the water management of farmers’ organization at the model site (Quang Ninh and Hai Duong provinces) and to diversify agricultural products.

- (2) “Project for Promotion of Participatory Irrigation Management for Sustainable Small-Scale Pro Poor Infrastructure Development”, 2010 – three years (plan)

The contents are to disseminate the outputs of the above JICA project to the SPL sub-project areas. The outputs are to carry out effective PIM at the project site, to improve the capacity of provincial irrigation engineers concerned with PIM, and to utilize effectively the irrigation facilities constructed/rehabilitated under international yen loan, etc.

In the application of the outputs, it is desirable to plan that the farm household education is executed in the all SPL sub-project areas. Support from the relevant personnel of the projects is desired on this

point.

8.5 Method of Infrastructure Assets Management

Information arrangement will be required through recording daily maintenance in order to manage infrastructure assets. To cope with this, it is considered that preparation of a database of which information easily can be updated, referred and edited at any time, and its manual is effective.

In order to accumulate, arrange and analyze the items of information, data, etc. that are desired to be input into database are shown below, and Figure 8.5-1 shows the diagram of database utilization (Guideline of Function Preservation of Irrigation Facilities, Council of Food, Agriculture and Farm Village Policy, March 2007).

- 1) Specification of facilities, and inspection and repair in daily management, etc. executed by a facility manager.
- 2) Periodic diagnostic function survey and evaluation to grasp facility conditions continuously.
- 3) Classification of facilities based on the survey results and deterioration prediction, and comparison study on effective countermeasures.
- 4) Sharing information among relevant organizations, and implementation of necessary countermeasure works by role-sharing.

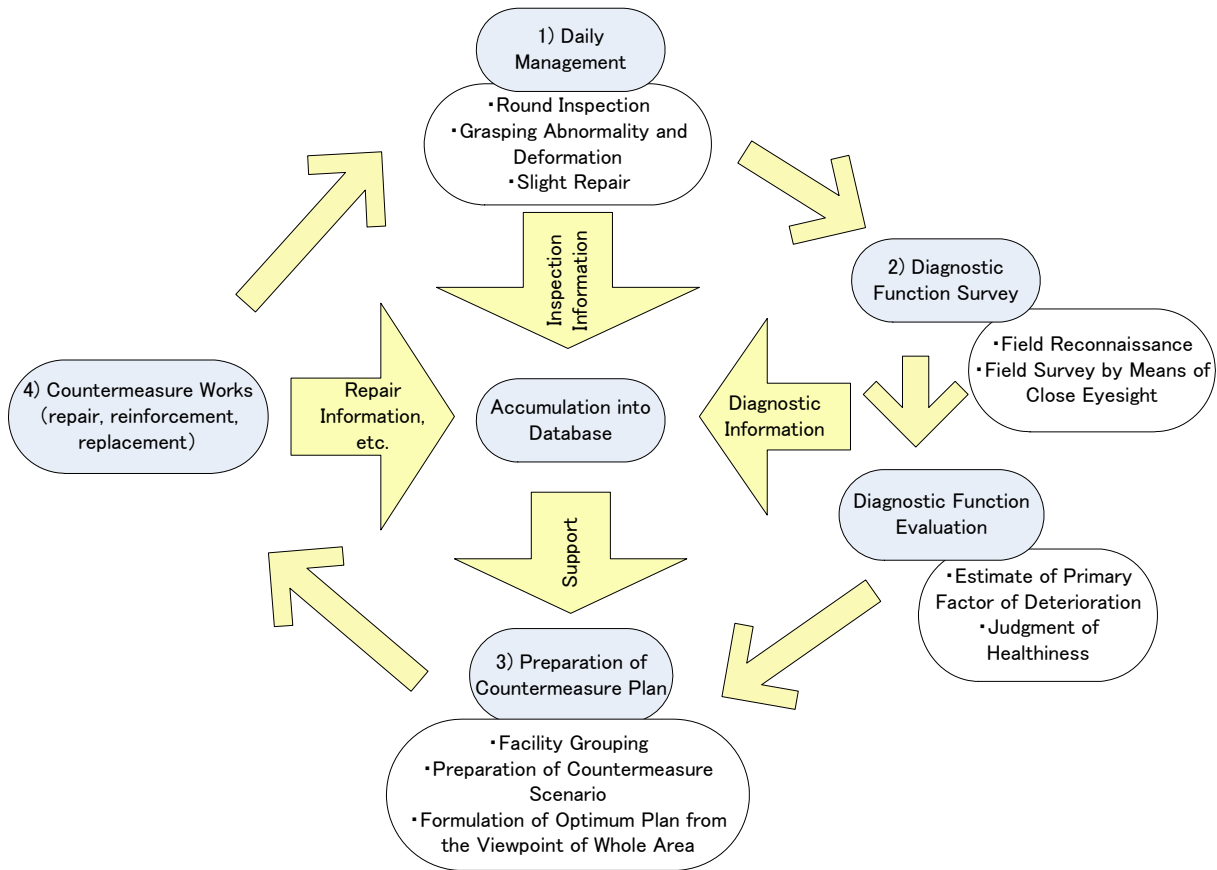


Figure 8.5-1 Flow Chart of Database Utilization

Asset Survey for Small Scale Pro-Poor Infrastructure in Vietnam

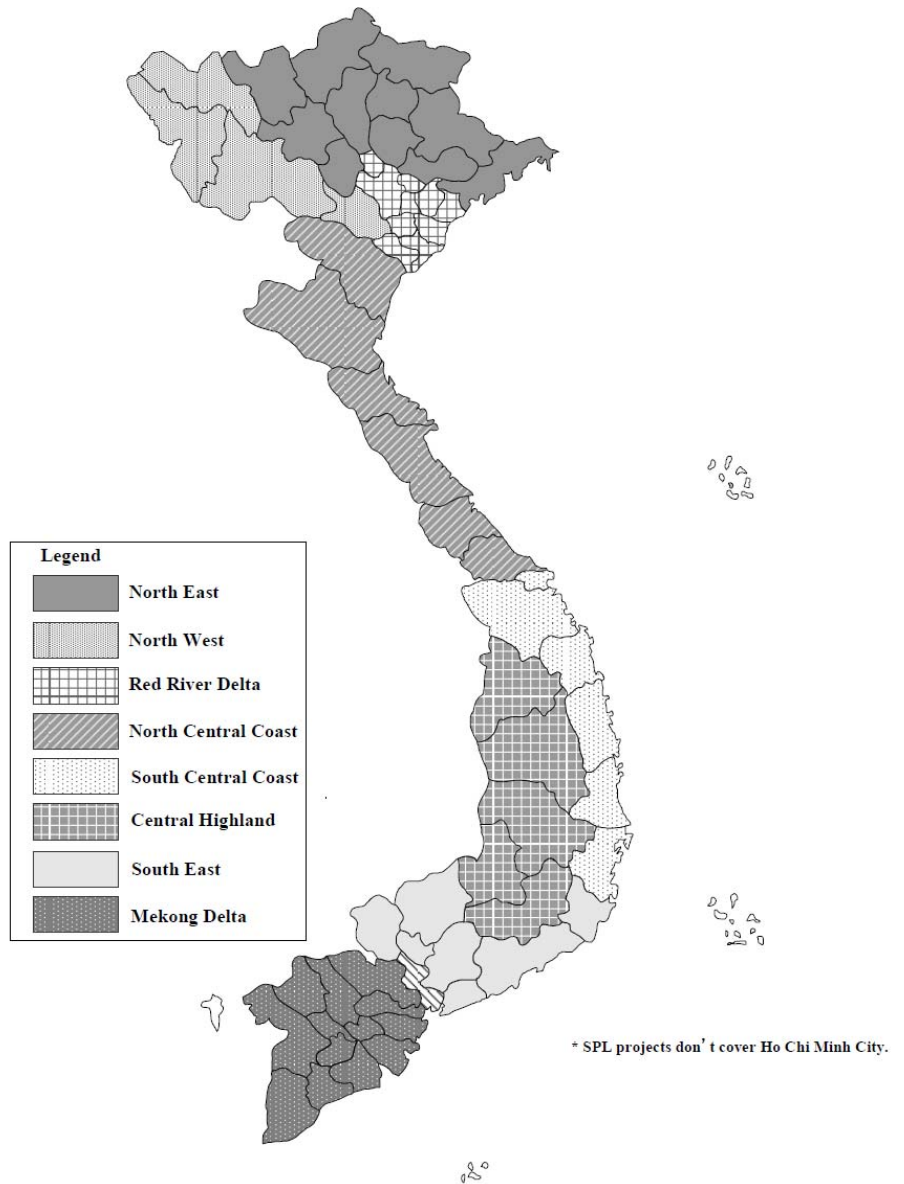
Irrigation Sector Report

Appendix

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Appendix 1.1 Region and Provinces

Region	Province	
North East	Ha Giang	
	Cao Bang	
	Lao Cai	
	Tuyen Quang	
	Bac Kan	
	Lang Son	
	Yen Bai	
	Thai Nguyen	
	Phu Tho	
	Bac Giang	
	Quang Ninh	
	North West	Lai Chau
		Dien Bien
Son La		
Hoa Binh		
Red River Delta	Vinh Phuc	
	Bac Ninh	
	Ha Noi	
	Hai Duong	
	Hung Yen	
	Hai Phong	
	Thai Binh	
	Ha Nam	
	Nam Dinh	
	Ninh Binh	
North Central Coast	Thanh Hoa	
	Nghe An	
	Ha Tinh	
	Quang Binh	
	Quang Tri	
	Thua-Thien Hue	
South Central Coast	Da Nang	
	Quang Nam	
	Quang Ngai	
	Binh Dinh	
	Phu Yen	
	Khanh Hoa	
Central Highland	Kon Tum	
	Gia Lai	
	Dac Lak	
	Dak Nong	
	Lam Dong	
South East	Ninh Thuan	
	Binh Thuan	
	Binh Phuoc	
	Dong Nai	
	Ba Ria Vung Tau	
	Binh Duong	
	Tay Ninh	
Mekong Delta	Long An	
	Tien Giang	
	Ben Tre	
	Dong Thap	
	Vinh Long	
	Tra Vinh	
	An Giang	
	Can Tho	
	Hau Giang	
	Soc Trang	
	Kien Giang	
	Bac Lieu	
	Ca Mau	



Appendix 1.2 Sub-Project (Infrastructure) List

(1/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
1	MD	An Giang	NA	Road	SPL I	Provincial Road No.956
2	MD	An Giang	NA	Road	SPL I	Le Hong Phong Street
3	MD	An Giang	NA	Road	SPL II	Provincial Road No.941
4	MD	An Giang	Tri Ton	Road	SPL III	Road 17
5	MD	An Giang	Phu Tan	Electricity	SPL I	Hoa Lac-Phu Hiep Commune Electric
6	MD	An Giang	Phu Tan	Electricity	SPL I	Phu Thanh-Phu Long Electric Network
7	MD	An Giang	An Phu	Electricity	SPL I	Da Phuoc-Phuoc Quan Electric Network
8	MD	An Giang	An Phu	Electricity	SPL I	Khanh Binh-Nga 3 Dinh Electric Network
9	MD	An Giang	An Phu	Electricity	SPL I	Nhon Hoi-Ca Coi Electric Network
10	MD	An Giang	Thoai Son	Electricity	SPL I	Nui Sap Electric Network
11	MD	An Giang	Thoai Son	Electricity	SPL II	Vinh Thang-Vinh Khanh Commune Electric Line
12	MD	An Giang	Phu Tan	Electricity	SPL II	Binh Thanh Dong-Tay Commune Electric Line
13	MD	An Giang	An Phu	Electricity	SPL II	15-22KV, Phuoc Hung-Chua Co-Cau 9
14	MD	An Giang	Chau Thanh	Electricity	SPL II	Vinh Loi-Vinh Thuan Electric Network
15	MD	An Giang	Cho Moi	Electricity	SPL II	Long Thuong-Kien An Commune Electric Line
16	MD	An Giang	Cho Moi	Electricity	SPL II	15-22KV Kien An
17	MD	An Giang	Thoai Son	Electricity	SPL III	Vinh Khanh-Kenh Dao Commune Electric Line
18	MD	An Giang	Phu Tan	Electricity	SPL III	Kenh K16-Phu Thanh Commune Electric Line
19	MD	An Giang	An Phu	Electricity	SPL III	Nga 3 Dinh Ca Coi Commune Electric Line
20	MD	An Giang	Phu Tan	Electricity	SPL III	Phu An-Phu Xuan Commune Electric Line
21	MD	An Giang	Tri Ton	Water Supply	SPL III	Tri Ton WSS
22	SE	Ba Ria Vung Tau	NA	Road	SPL II	Road No.329
23	SE	Ba Ria Vung Tau	Chau Duc	Road	SPL II SPL III	Provincial Road No.765 Road 765
24	SE	Ba Ria Vung Tau	Long Dat	Electricity	SPL III	Long Dat Distric Electric Line
25	SE	Ba Ria Vung Tau	Chau Duc	Electricity	SPL III	Chau Duc Distric Electric Line
26	SE	Ba Ria Vung Tau	Xuyen Moc	Electricity	SPL III	Xuyen Moc Distric Electric Line
27	SE	Ba Ria Vung Tau	Tan Thanh	Electricity	SPL III	Tan Thanh Distric Electric Line
28	NE	Bac Giang	Bac Giang City	Road	SPL I	Urban Road of Bac Giang, 10 Roads
29	NE	Bac Giang	Hiep Hoa	Road	SPL I	Road No.296 (Thang - Vat)
30	NE	Bac Giang	Yen The	Road	SPL I SPL I	Road No.268 (Bo Ha - Mo Tang) Road No.268 (Mo Tang - Bo Ha)
31	NE	Bac Giang	Bac Giang City	Road	SPL II	Bac Giang Town Road, 2 Streets
32	NE	Bac Giang	NA	Road	SPL II	Vat Bridge
33	NE	Bac Giang	NA	Road	SPL II	Provincial Road No.284
34	NE	Bac Giang	Bac Giang City	Road	SPL II	Bac Giang Town Road, 3 Streets
35	NE	Bac Giang	Son Dong	Road	SPL III SPL V	Yen Dinh-Thanh Luan Road Yen Dinh - Thanh Luan Road
36	NE	Bac Giang	Son Dong	Electricity	SPL I	Tuan Dao Commune Electric Commune
37	NE	Bac Giang	Yen The	Electricity	SPL I	Tuan Soi Commune Electric Commune
38	NE	Bac Giang	Hiep Hoa	Electricity	SPL I	Danh Thang Commune Electric Commune
39	NE	Bac Giang	Yen Dung	Electricity	SPL I	Dong Phuc Commune Electric Commune
40	NE	Bac Giang	Luc Ngan	Electricity	SPL I	Phuong Son Commune Electric Commune
41	NE	Bac Giang	Luc Nam	Electricity	SPL I	Kham Lang Commune Electric Commune
42	NE	Bac Giang	Luc Nam	Electricity	SPL I	Dan Hoi Commune Electric Commune
43	NE	Bac Giang	Yen The	Electricity	SPL I	Tam Tien Commune Electric Commune
44	NE	Bac Giang	Yen The	Electricity	SPL I	Canh Nau Commune Electric Commune
45	NE	Bac Giang	Lang Giang	Electricity	SPL I	Quang Thinh Commune Electric Commune
46	NE	Bac Giang	Tan Yen	Electricity	SPL I	Lien Son Commune Electric Commune
47	NE	Bac Giang	Yen Dung	Electricity	SPL I	Neo Town Commune Electric Commune
48	NE	Bac Giang	Hiep Hoa	Electricity	SPL I	Huong Lam Commune Electric Commune
49	NE	Bac Giang	Yen The	Electricity	SPL II	Dong Vuong Commune Electric Line
50	NE	Bac Giang	Luc Ngan	Electricity	SPL II	Tan Moc Commune Electric Line
51	NE	Bac Giang	Son Dong	Electricity	SPL II	An Chau Commune Electric Line
52	NE	Bac Giang	Viet Yen	Electricity	SPL II	Van Ha Commune Electric Line
53	NE	Bac Giang	Luc Nam	Electricity	SPL II	Yen Son Commune Electric Line
54	NE	Bac Giang	Luc Nam	Electricity	SPL III	Truong Son Commune Electric Line
55	NE	Bac Giang	Yen Dung	Electricity	SPL III	Tan Lieu Commune Electric Line
56	NE	Bac Giang	Luc Ngan	Electricity	SPL III	Tam Lap Commune Electric Line
57	NE	Bac Giang	Son Dong	Electricity	SPL III	Que Son Commune Electric Line
58	NE	Bac Giang	Luc Nam	Electricity	SPL V	Truong Son Commune Electric Line
59	NE	Bac Giang	Son Dong	Water Supply	SPL V	An Chau Town WSS

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(2/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
60	NE	Bac Giang	Luc Ngan	Irrigation	SPL V	Khuon Than Reservoir
61	NE	Bac Kan	Bac Kan Town	Road	SPL I	Urban Road in Bac Kan Town
62	NE	Bac Kan	Na Ri	Road	SPL I	Road No.256 (km19-km38)
					SPL II	Road No.256
63	NE	Bac Kan	NA	Road	SPL I	Pho Moi Road
64	NE	Bac Kan	Ba Be	Road	SPL II	Road No.258, Bach Thong-Ba Be Road
65	NE	Bac Kan	Pac Nam	Road	SPL II	Boc Bo-Cong Bang Road
					SPL III	Boc Bo-Cong Bang Road
66	NE	Bac Kan	Na Ri	Road	SPL III	Quang Phong-Dong Xa Road
67	NE	Bac Kan	Pac Nam	Road	SPL III	Ban Khua - Ban Man Road
68	NE	Bac Kan	Bac Kan, Cho Moi	Road	SPL IV	Nong Ha - Thanh Van Road
69	NE	Bac Kan	Ngan Son	Road	SPL IV	Van Tung- Thuan Mang Road
70	NE	Bac Kan	Pac Nam	Road	SPL V	Cong Bang - Co Linh Road
71	NE	Bac Kan	Cho Don	Road	SPL V	Bang Lung - Dai Sao Road
72	NE	Bac Kan	Na Ri	Electricity	SPL I	Kim Lu-Na Ri Commune Electric Line
73	NE	Bac Kan	Cho Don	Electricity	SPL II	6 Communes in Cho Don Town Electric Line
74	NE	Bac Kan	Cho Don	Electricity	SPL III	Electric Network in Southern of Cho Don Distric
75	NE	Bac Kan	Cho Don	Electricity	SPL III	Phuong Vien-Ra Ban Commune Electric Line
76	NE	Bac Kan	Pac Nam	Electricity	SPL V	Pac Nam Commune Electric Network
77	NE	Bac Kan	Cho Moi	Water Supply	SPL IV	Yen Han WSS
78	NE	Bac Kan	Pac Nam	Irrigation	SPL IV	Phieng Luong Irrigation System
79	NE	Bac Kan	Cho Don	Irrigation	SPL IV	Cho Don Distric Irrigation System
80	NE	Bac Kan	Cho Moi	Irrigation	SPL V	Cho Moi Irrigation System
81	MD	Bac Lieu	Bac Lieu Town	Road	SPL I	Hiep Thanh - Xiem Can Road
					SPL II	Hiep Thanh - Xiem Can Road
82	MD	Bac Lieu	Vinh Loi	Road	SPL III	National Road No.1A-Chau Thoi Road
83	MD	Bac Lieu	Hong Dan	Road	SPL IV	Xeo Quao - Thong Nhat Road
84	MD	Bac Lieu	Hong Dan	Road	SPL V	Thong Nhat Road No II
85	MD	Bac Lieu	Gia Rai	Electricity	SPL I	Phong Thanh Dong Commune Electric
86	MD	Bac Lieu	Vinh Loi	Electricity	SPL II	Chau Thoi Commune Electric Line
87	MD	Bac Lieu	Vinh Loi	Electricity	SPL III	Vinh Thinh Commune Electric Line
88	MD	Bac Lieu	Bac Lieu Town	Electricity	SPL III	Vinh Trach Commune Electric Line
89	MD	Bac Lieu	Hong Dan	Electricity	SPL III	Vinh Phu Tay Commune Electric Line
90	MD	Bac Lieu	Hong Dan	Electricity	SPL III	Ninh Hoa Commune Electric Line
91	MD	Bac Lieu	Hong Dan	Water Supply	SPL V	Ngan Dua WSS
92	MD	Bac Lieu	Vinh Loi	Irrigation	SPL V	Irrigation in 30/4 Area of Chua Phat
93	RRD	Bac Ninh	Bac Ninh City	Road	SPL I	Urban Road (Bac Ninh Town)
94	RRD	Bac Ninh	Tam Giang	Road	SPL I	Cho - Tam Giang Road
95	RRD	Bac Ninh	Gia Binh	Road	SPL I	Lang Ngan - Van Thai Road
96	RRD	Bac Ninh	Que Vo	Road	SPL I	Road No.291 (Pho Moi)
97	RRD	Bac Ninh	Bac Ninh City	Road	SPL II	Central Road in Bac Ninh Town
98	RRD	Bac Ninh	NA	Road	SPL II	Road No.270, Tien Son
99	RRD	Bac Ninh	NA	Road	SPL II	Road No.286
100	RRD	Bac Ninh	Gia Binh, Luong Tai	Road	SPL II	Bach Mon-Lac Ve Road
					SPL III	Bach Mon-Lac Ve Road
101	RRD	Bac Ninh	Tien Du	Road	SPL III	Provincial Road No.280 (Nui Dong Binh, Thua-C.Giang)
102	RRD	Bac Ninh	Yen Phong	Electricity	SPL I	Yen Phong Electric Line
103	RRD	Bac Ninh	Yen Phong	Electricity	SPL I	Phong Khe Electric Line
104	RRD	Bac Ninh	Gia Binh	Electricity	SPL I	Giang Son Electric Line
105	RRD	Bac Ninh	Que Vo	Electricity	SPL II	Pho Moi Electric Network
106	RRD	Bac Ninh	NA	Electricity	SPL II	Van Tuong Commune Electric Commune
107	RRD	Bac Ninh	Luong Tai	Electricity	SPL II	Trung Xa Commune Electric Commune
108	RRD	Bac Ninh	NA	Electricity	SPL II	Vu Ninh Commune Electric Commune
109	RRD	Bac Ninh	Thuan Thanh	Electricity	SPL II	Ho Town Commune Electric Commune
110	RRD	Bac Ninh	Luong Tai	Water Supply	SPL III	Luong Tai WSS
111	MD	Ben Tre	NA	Road	SPL I	Provincial Road No.884
					SPL I	Provincial Road No.884
					SPL II	Provincial Road No.884
112	MD	Ben Tre	Ba Tri	Road	SPL III	Provincial Road No.885
113	MD	Ben Tre	Binh Dai	Road	SPL IV	Provincial Road No.883
114	MD	Ben Tre	Thanh Phu	Electricity	SPL I	An Diem Electric Network
115	MD	Ben Tre	NA	Electricity	SPL II	Con Linh Commune Electric Network

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(3/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
116	MD	Ben Tre	Cho Lach	Electricity	SPL III	Phu Da Commune Electric Line
117	MD	Ben Tre	Chau Thanh	Electricity	SPL III	Con Tien Loi Commune Electric Line
118	MD	Ben Tre	Binh Dai	Electricity	SPL III	Long Hoa Commune Electric Line
119	SCC	Binh Dinh	Binh Dinh City	Road	SPL I	Urban Road (Tang Bat Ho Road)
120	SCC	Binh Dinh	Binh Dinh City	Road	SPL I	Urban Road (Ngo Gia Tu Road, Binh Dinh Town)
121	SCC	Binh Dinh	Binh Dinh City	Road	SPL I	Nguyen Hue A Road
122	SCC	Binh Dinh	NA	Road	SPL II	Quy Nhon - Song Cau Road
123	SCC	Binh Dinh	NA	Road	SPL II	Kien My Bridge
124	SCC	Binh Dinh	Phu My	Road	SPL V	Van An - Phu Thu Road
125	SCC	Binh Dinh	Van Canh	Electricity	SPL I	Canh Nghiep-Canh Hoa-Canh Thuan Commune Electric
126	SCC	Binh Dinh	Tay Son	Electricity	SPL I	Vinh An Commune Electric
127	SCC	Binh Dinh	Phu Cat	Electricity	SPL I	Cat Lam-Cat Nghiep Electric
128	SCC	Binh Dinh	Phu Cat	Electricity	SPL II	Cat Thanh Commune Electric Line
129	SCC	Binh Dinh	Hoai An	Electricity	SPL II	An Hao Commune Electric Line
130	SCC	Binh Dinh	Hoai Nhon	Electricity	SPL II	Hoai Hai Commune Electric Line
131	SCC	Binh Dinh	Phu Cat	Electricity	SPL III	Cat Hai Commune Electric Line
132	SCC	Binh Dinh	Tay Son	Electricity	SPL III	Binh Thuan Commune Electric Line
133	SCC	Binh Dinh	Phu My	Electricity	SPL III	My Tai Commune Electric Line
134	SCC	Binh Dinh	Tay Son	Electricity	SPL III	Tay Phu Commune Electric Line
135	SCC	Binh Dinh	Vân Canh	Electricity	SPL V	Medium and low voltage electrical line in Canh Lien Commune
136	SCC	Binh Dinh	Tay Son	Water Supply	SPL V	Phu Phong Town WSS
137	SCC	Binh Dinh	An Nhon	Irrigation	SPL III	Tan An-Dap Da Irrigation System
138	SCC	Binh Dinh	Phu Cat	Irrigation	SPL V	Upgrade Tam Son Reservoir
139	SCC	Binh Dinh	Phu My	Irrigation	SPL V	Suoi So Reservoir
140	SCC	Binh Dinh	Phu My	Irrigation	SPL V	Chi Hoa 2 Reservoir
141	SE	Binh Duong	Tan Uyen	Road	SPL II	Provincial Road 742, Phu Chanh - Cong Xanh Road
142	SE	Binh Duong	Dau Tieng	Electricity	SPL II	Thanh An-Dinh Hiep Electric Network
143	SE	Binh Duong	Tan Uyen	Electricity	SPL II	Tan Phuoc Khanh Town Electric Line
144	SE	Binh Duong	Dau Tieng	Electricity	SPL III	Long Tan Commune Electric Line
145	SE	Binh Duong	Dah Hoai	Electricity	SPL III	Da Ton Commune Electric Line
146	SE	Binh Phuoc	NA	Road	SPL I	Road No.741
					SPL II	Road No.741, Dong Xoai - Thuan Loi
147	SE	Binh Phuoc	Phuoc Long	Road	SPL II	Town Road Phuoc Long District (Thac Mo Town)
					SPL II	Song Be Bridge on PR 749 Road
						SPL III
148	SE	Binh Phuoc	Phuoc Long	Road	SPL III	Song Be Bridge on PR 749 Road
					SPL III	Provincial Road No.749
						SPL III
149	SE	Binh Phuoc	Dong Phu, Binh Long	Road	SPL V	Dong Phu - Binh Long Road
150	SE	Binh Phuoc	Phuoc Long	Electricity	SPL I	Dinh Thang Electric
151	SE	Binh Phuoc	Phuoc Long	Electricity	SPL II	Binh Thang Commune Electric Line
152	SE	Binh Phuoc	Loc Ninh	Electricity	SPL II	Loc Tan-Thanh Luong Commune Electric Line
153	SE	Binh Phuoc	Du Dang	Electricity	SPL III	Duc Lieu Commune Electric Line (stage 1)
154	SE	Binh Phuoc	Binh Long	Electricity	SPL III	Phuoc An Commune Electric Line (Stage1)
155	SE	Binh Phuoc	Binh Long	Electricity	SPL III	Thanh Luong Commune Electric Line
156	SE	Binh Phuoc	Phuoc Long	Electricity	SPL V	Long Hung Commune Electric Line
157	SE	Binh Thuan	Tanh Linh	Road	SPL I	Ba Ta - Gia Huynh Road
158	SE	Binh Thuan	Ham Thuan Bac	Road	SPL I	An Lam - Dong Giang - La Da Road
					SPL I	Lien Son - Phan Dung Road
					SPL III	Phong Phu-Phan Dung Road
159	SE	Binh Thuan	Tuy Phong	Road	SPL III	Lien Huong-Phan Dung Road
					SPL III	Phong Phu-Phan Dung Road
					SPL III	Lien Huong-Phan Dung Road
160	SE	Binh Thuan	Tanh Linh, Duc Linh	Road	SPL II	Lac Tanh - Vo Xu Road
161	SE	Binh Thuan	Phan Thiet	Road	SPL II	Phan Thiet - Ke Ga Road
162	SE	Binh Thuan	Phan Thiet	Electricity	SPL I	Long Son-Suoi Nuoc Electric Network
163	SE	Binh Thuan	Ham Tan	Electricity	SPL I	46-Song Han Electric Network
164	SE	Binh Thuan	NA	Electricity	SPL I	Km32-Ta Mon Electric Network
165	SE	Binh Thuan	NA	Electricity	SPL I	Thon 1-Co Khe-Trade Center Electric Network
166	SE	Binh Thuan	Phan Thiet	Electricity	SPL II	Long Son-Suoi Nuoc Electric Network
167	SE	Binh Thuan	Ham Tan	Electricity	SPL II	Nga Ba 46-Song Phan Electric Line
168	SE	Binh Thuan	NA	Electricity	SPL II	Tra Mon Km32 Electric Line
169	SE	Binh Thuan	NA	Electricity	SPL II	Koke-KTM Electric Line
170	SE	Binh Thuan	Phan Thiet	Electricity	SPL II	Ham Tien-Bau Me Commune Electric Line
171	SE	Binh Thuan	NA	Electricity	SPL II	Bau Me-Bau Tang Commune Electric Line
172	SE	Binh Thuan	Ham Tan	Electricity	SPL II	Tan Thang Commune Electric Line

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(4/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
173	SE	Binh Thuan	Ham Tan	Electricity	SPL III	Can Cu 6-Ham Tan Electric Line 22KV
174	SE	Binh Thuan	Phan Thiet	Electricity	SPL III	Long Sim-Suoi Nuoc Electric Line 22KV
175	SE	Binh Thuan	Ham Tan	Electricity	SPL III	Tan Thang KTM Commune Electric Line
176	SE	Binh Thuan	Ham Thuan Bac	Electricity	SPL III	Ham Duc-Duong Tieu Electric Line 22KV
177	MD	Ca Mau	Ca Mau City	Road	SPL I	Urban Road (Phuong Tam)
178	MD	Ca Mau	Ca Mau City	Road	SPL I	Phan Boi Chau Road
179	MD	Ca Mau	Ca Mau City, Tac Thu	Road	SPL II	Ngo Quyen Road (Ca Mau - Tac Thu)
180	MD	Ca Mau	Tran Van Thoi	Road	SPL III	Tac Thu-Rach Rang Road
					SPL III	Nong Truong Bridge (Tac Thu - Rach Rang Road)
					SPL V	Bridges & culvert on Tac Thu - Rach Rang Road
181	MD	Ca Mau	Cai Nuoc	Electricity	SPL I	Cai Nuoc-Dam Thi Tuong Electric Network
182	MD	Ca Mau	U Minh, Khanh Hoi	Electricity	SPL II	Khanh Lam Commune Electric Line
183	MD	Ca Mau	Dam Doi	Electricity	SPL III	Tan Thuan Commune Electric Line
184	MD	Ca Mau	Phu Tan	Electricity	SPL III	Phu My Commune Electric Line
185	MD	Ca Mau	Nam Can	Electricity	SPL III	Dat Moi Commune Electric Line
186	MD	Ca Mau	Thoi Binh, Ung Minh,	Electricity	SPL V	Electric Network in Ca Mau Forest and Fishing Ground
187	MD	Ca Mau	Tram Van Thoi	Water Supply	SPL V	Song Doc WSS (South)
188	MD	Ca Mau	Tram Van Thoi	Water Supply	SPL V	Song Doc WSS (North)
189	MD	Ca Mau	Phu Tan	Water Supply	SPL V	Cai Doi Vam Town WSS (South)
190	MD	Ca Mau	Phu Tan	Water Supply	SPL V	Cai Doi Vam Town WSS (North)
191	MD	Ca Mau	U Minh	Irrigation	SPL V	Lung Ranh Irrigation System
192	MD	Can Tho	Can Tho	Road	SPL I	Mau Than Road Upgrading
193	MD	Can Tho	Can Tho	Road	SPL I	Thirty April Road(Hoa Binh-Dau Sau)
					SPL II	Thirty April Road(Cau Tham Tuong-Duong Lao)
194	MD	Can Tho	Can Tho	Road	SPL I	Urban Road of Can Tho city(15,000m2)
195	NE	Cao Bang	Ha Quang	Road	SPL I	Road No.203
196	NE	Cao Bang	Thong Nong	Road	SPL II	Road No.204
			Hoa An		SPL II	Mo Sat Bridge (Road No.204)
197	NE	Cao Bang	Ha Lang	Road	SPL II	Road No.207
			Quang Uyen-Ha Lang		SPL III	Road 207 (Quang Yen-Ha Lang)
			Ha Lang		SPL IV	Provincial Road No.207 (Ha Lang-Bang Ca-Ly Van)
198	NE	Cao Bang	Bao Lac	Road	SPL III	Ban Nga - Xuan Truong Commune Road
199	NE	Cao Bang	Trung Khanh	Road	SPL IV	Provincial Road No.213 (Trung Khanh - Po Peo)
200	NE	Cao Bang	Trung Khanh	Road	SPL IV	Trung Khanh - Kham Thanh - Phong Nam
201	NE	Cao Bang	Nguyen Binh	Road	SPL V	Hoa Tham - National Road No. 3
202	NE	Cao Bang	Thach An	Road	SPL V	Kim Dong - Duc Thong Road
203	NE	Cao Bang	Hoa An	Electricity	SPL I	Be Trieu Electric Network
204	NE	Cao Bang	Hoa An	Electricity	SPL II	Be Trieu Electric Network
205	NE	Cao Bang	Tra Linh	Electricity	SPL II	Hung Quocs Electric Network
206	NE	Cao Bang	Quang Hoa	Electricity	SPL III	Ta Lung Electric Network
207	NE	Cao Bang	Trung Khanh	Electricity	SPL III	Dam Thuy Electric Network
208	NE	Cao Bang	Trung Khanh	Electricity	SPL IV	Kham Thanh Commune Electric Line
209	NE	Cao Bang	Quang Hoa	Electricity	SPL IV	Phuc Xen Commune Electric Line
210	NE	Cao Bang	Thach An	Electricity	SPL IV	Quang Trong-Canh Tan Commune Electric Network
211	NE	Cao Bang	Nguyen Binh	Electricity	SPL IV	Minh Tam Commune Electric Line
212	NE	Cao Bang	Hoa An	Electricity	SPL IV	Hong Viet Commune Electric Line
213	NE	Cao Bang	Hoa An	Electricity	SPL IV	Hung Dao Commune Electric Line
214	NE	Cao Bang	Hoa An	Electricity	SPL IV	Nguyen Hue Commune Electric Line
215	NE	Cao Bang	Phuc Hoa	Electricity	SPL V	Cat Dinh-Hong Dai Communes Electricity System
216	NE	Cao Bang	Thong Nong	Irrigation	SPL V	Luong Thong Irrigation System
217	SCC	Da Nang	Da Nang City	Road	SPL I	Tieu La Road
218	SCC	Da Nang	Da Nang City	Road	SPL II	Tran Cao Van Road
219	SCC	Da Nang	Hoa Vang	Electricity	SPL I	Hoa Phong Commune Electric
220	SCC	Da Nang	Hoa Vang	Electricity	SPL II	Hoa Phu Commune Electric Line
221	SCC	Da Nang	Hoa Vang	Electricity	SPL II	Hoa Phong Commune Electric
222	SCC	Da Nang	Hoa Vang	Electricity	SPL III	Hoa Phat Commune Electric Line
223	SCC	Da Nang	Hoa Son	Electricity	SPL III	Electric Network and Transformer in Hoa Hai Ward
224	SCC	Da Nang	Hoa Son	Electricity	SPL III	Electric Network and Transformer in Hoa Son Ward
225	SCC	Da Nang	Hoa Vang	Electricity	SPL III	Hoa Phong Commune Electric
226	CH	Dac Lak	NA	Road	SPL I	Road No.9
					SPL III	Province Road 9
227	CH	Dac Lak	Krong Pak	Road	SPL II	Phuoc An - Khue Ngoc Dien Road

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(5/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
228	CH	Dac Lak	Ea Sup	Road	SPL II	Urban Road Ea Soup Town
229	CH	Dac Lak	Buon Don	Road	SPL II	Central Road Buon Don District
230	CH	Dac Lak	Eah Leo	Road	SPL III	Ea Khal - Ea Nam - Ea Wy Road
231	CH	Dac Lak	Krong Nang	Road	SPL IV	Krong Nang District to Phu Xuan Commune
232	CH	Dac Lak	M'Drak	Road	SPL IV	Road D22
233	CH	Dac Lak	Ea H'leo	Road	SPL V	Ea Wy - Cu Mot - Ea Khal Road
234	CH	Dac Lak	Ea H'leo	Road	SPL V	Dliayang - Eahiao Inter-commune Road
235	CH	Dac Lak	Krong Buk	Electricity	SPL I	Ea-Drong Electric Network
236	CH	Dac Lak	NA	Electricity	SPL I	Dak-Rong Electric Network
237	CH	Dac Lak	Eah Leo	Electricity	SPL II	Eam Nang Commune Electric Line
238	CH	Dac Lak	Krong Bong	Electricity	SPL II	Hoa Le Commune Electric Line
239	CH	Dac Lak	Buon Don	Electricity	SPL II	Krong Na Commune Electric Line
240	CH	Dac Lak	Krong Nang	Electricity	SPL II	Phu Xuan Commune Electric Line
241	CH	Dac Lak	Krong Bong	Electricity	SPL III	Hoa Thanh Commune Electric Line
242	CH	Dac Lak	M'Drak	Electricity	SPL IV	Ia Rieng Commune Electric Line
243	CH	Dac Lak	Cu M'Gar	Electricity	SPL V	Electric Line in Highland Village Win Ea Kiet
244	CH	Dac Lak	Krong Buk	Water Supply	SPL I	Buon Ho Water Supply System
245	CH	Dac Lak	Cu M'Gar	Water Supply	SPL IV	Quang Phu WSS
246	CH	Dac Lak	Lak	Irrigation	SPL III	Buon Chua Irrigation System
247	CH	Dac Lak	Lak	Irrigation	SPL III	Nam Kar Dam
248	CH	Dac Lak	Krong Pak	Irrigation	SPL III	Ea Yeng Reservoir
249	CH	Dac Lak	Krong Ana	Irrigation	SPL IV	Ea Bin Irrigation System
250	CH	Dac Lak	NA	Irrigation	SPL V	Ho Ke Reservoir
251	CH	Dak Nong	Dak Nong Town	Road	SPL III	Gia Nghia - Quang Thanh Road
252	CH	Dak Nong	Dak Song	Road	SPL IV	Road No 6
253	CH	Dak Nong	Dak Nong	Road	SPL V	Quang Khe - Dak Rmang Road
254	CH	Dak Nong	Dak Mil	Road	SPL V	Dak Mam - 7 station (PR No.3)
255	CH	Dak Nong	Buon Don	Electricity	SPL I	Buon Don Electric Network
256	CH	Dak Nong	Dak Mil	Electricity	SPL II	Dak Gan Commune Electric Line
257	CH	Dak Nong	Dak Nong	Electricity	SPL III	Truong Xuan Commune Electric Line
258	CH	Dak Nong	Dak Rlap	Electricity	SPL III	Nhon Co Commune Electric Line
259	CH	Dak Nong	Dak Nong	Irrigation	SPL III	Dak Mam Reservoir
260	CH	Dak Nong	Krong No	Irrigation	SPL V	Electric Pumping Station in Choah Village
261	NW	Dien Bien	Dien Bien	Road	SPL I	Road in East of Dien Bien
					SPL II	East Road of Dien Bien District
					SPL III	East Dien Bien Road
262	NW	Dien Bien	Dien Bien	Road	SPL II	West Road of Nam Rom River
					SPL III	Road in West of Nam Ron River
263	NW	Dien Bien	Dien Bien Dong	Road	SPL III	Na Son - Xa Dung Road
264	NW	Dien Bien	Dien Bien Dong	Road	SPL IV	Pu Nhi - Na Son Road
265	NW	Dien Bien	Tuan Giao	Road	SPL IV	Na Say - Muong Mun Road
					SPL IV	Na Say - Muong Thin - Muong Mun Road
266	NW	Dien Bien	Dien Bien Dong	Road	SPL IV	Phi Nhu - Xa Dung Road
267	NW	Dien Bien	Dien Bien Dong	Road	SPL V	Phi Nhu - Chieng So Road
268	NW	Dien Bien	Dien Bien	Electricity	SPL I	Dien Bien Electric Network
269	NW	Dien Bien	Tuan Giao	Water Supply	SPL III	Tuan Giao Water Supply System
270	NW	Dien Bien	Tua Chua	Water Supply	SPL IV	Tua Chua WSS
271	NW	Dien Bien	Muong Cha	Water Supply	SPL V	Muong Cha WSS
272	NW	Dien Bien	Dien Bien	Irrigation	SPL V	Huoi Un Irrigation System
273	SE	Dong Nai	NA	Road	SPL II	Intercommune Road No.16
274	SE	Dong Nai	Dinh Quan	Road	SPL III	Traffic System NR20-Dong Nai River, Phu Loi-Phu Hoa Road
275	MD	Dong Thap	NA	Road	SPL I	PR No.847(Thet - My An - Bang Lang Rd.)
276	MD	Dong Thap	Tam Nonh, Thanh Binh	Road	SPL II	Tam Nong - Thanh Binh Road
277	MD	Dong Thap	Lai Vung	Road	SPL III	Road No.851
					SPL V	Provincial Road No. 851 (Km2 - Km8+332)
278	MD	Dong Thap	Binh Thanh	Electricity	SPL I	Binh Thanh Electric
279	MD	Dong Thap	Thap Muoi	Electricity	SPL I	Thanh My Electric Network
280	MD	Dong Thap	Lai Vung	Electricity	SPL II	Long Thang Commune Electric Line
281	MD	Dong Thap	Hong Ngu	Electricity	SPL II	Thuong Thoi Tuyen Commune Electric Line
282	MD	Dong Thap	Tam Nong	Electricity	SPL III	Phu Ninh Commune Electric Line
283	MD	Dong Thap	Lap Vo	Electricity	SPL III	Long Hung A Commune Electric Line
284	MD	Dong Thap	Tan Hong	Electricity	SPL III	Tan Thanh Commune Electric Line

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(6/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
285	MD	Dong Thap	Chau Thanh	Electricity	SPL V	Electric Network in Tan Thuan Dong, Tan Phu, Tan Phu Trung, Phu Long Communes
286	MD	Dong Thap	Tam Nong	Water Supply	SPL V	An Long WSS
287	MD	Dong Thap	Tam Nong	Irrigation	SPL V	Upgrade Tam Nong Irrigation System
288	CH	Gia Lai	Gia Lai Town	Road	SPL I	Nguyen Trai - Nguyen Thai Hoc Road
289	CH	Gia Lai	An Khe, K bang	Road	SPL I	Provincial Road No.669
					SPL II	Provincial Road No.669(An Khe - K.Bang)
290	CH	Gia Lai	Ayunpa	Road	SPL III	Ben Mong Bridge
291	CH	Gia Lai	Phu Thien/ Ia Pa	Road	SPL V	Chu A Thai - Ia - Ieng - Ia Pa Road
292	CH	Gia Lai	Dak Doa	Road	SPL V	Nam Yang - kon Gang Road
293	CH	Gia Lai	Chu Prong	Road	SPL V	Province Road 675(Km0-Km20)
294	CH	Gia Lai	Ia Pa	Road	SPL V	Inter-commune Road of Eastern of Ben Mong bridge
295	CH	Gia Lai	Duc Co	Electricity	SPL I	Ia-Doom Electric
296	CH	Gia Lai	Chu Se	Electricity	SPL I	Ia Blang Electric
297	CH	Gia Lai	Chu Prong	Electricity	SPL I	Ia Bang Electric
298	CH	Gia Lai	Chu Pah	Electricity	SPL II	Ia Phi Commune Electric Line
299	CH	Gia Lai	Chu Se	Electricity	SPL II	Ia Hop (Chu Se) Commune Electric Line
300	CH	Gia Lai	K Bang	Electricity	SPL II	Dakhlo (Kbang) Commune Electric Line
301	CH	Gia Lai	A Yun Pa	Electricity	SPL II	Chu Drang (Ayunpa) Commune Electric Line
302	CH	Gia Lai	Krongpa	Electricity	SPL III	Ea-Dreh Commune Electric Line
303	CH	Gia Lai	Duc Co	Electricity	SPL III	Eadok Commune Electric Line
304	CH	Gia Lai	Chu Prong	Electricity	SPL III	Ia Lau Commune Electric Line
305	CH	Gia Lai	Chu Prong	Electricity	SPL V	La Me Commune Electric Network
306	CH	Gia Lai	Chu Pah	Water Supply	SPL I	Chu Pah Water Supply System
307	CH	Gia Lai	Ia Grai	Water Supply	SPL V	Ia Kha Town WSS
308	CH	Gia Lai	Krongpa	Irrigation	SPL III	Cau hai Pump Station
309	CH	Gia Lai	Krongpa	Irrigation	SPL III	EaRsai Irrigation
310	CH	Gia Lai	Dak Doa	Irrigation	SPL V	Dak So Mei Irrigation
311	NE	Ha Giang	Ha Giang Town	Road	SPL I	Nguyen Thai Hoc Road
					SPL II	Nguyen Thai Hoc Road
312	NE	Ha Giang	Yen Minh-Meo Vac	Road	SPL I	Yen Minh - Mau Due - Meo Vac Road
					SPL II	Yen Minh - Mau Due - Meo Vac Road
313	NE	Ha Giang	Ha Giang Town	Road	SPL I	Ha Giang Town - Phu Linh Road
314	NE	Ha Giang	Ha Giang Town	Road	SPL II	Tran Phu Road
315	NE	Ha Giang	Bac Quang-Quang Binh	Road	SPL III	Vinh Tuy-Xuang Giang Road
316	NE	Ha Giang	Vi Xuyen-Bac Quang	Road	SPL IV	Bach Ngoc - Trung Thanh Triway - Dong Tam Intercommune Road
			Vi Xuyen		SPL IV	Km 27 (NR 2) to Trung Thanh Bach Ngoc Triway and Trung Thanh Bridge
317	NE	Ha Giang	Vi Xuyen	Road	SPL V	Road from Km21 bridge to crossing Bach Ngoc - Trung Thanh
318	NE	Ha Giang	Vi Xuyen-Bac Quang	Road	SPL V	Upgrade and Pavement road from Trung Thanh to Tan Quang bridge
319	NE	Ha Giang	Dong Van-Meo Vac	Electricity	SPL II	Dong Van-Meo Vac Electric Line
320	NE	Ha Giang	Dong Van	Electricity	SPL II	Ma So-Lung Tao Commune Electric Line
321	NE	Ha Giang	Ha Giang Town	Electricity	SPL III	Ligh System of Ha Giang Town
322	NE	Ha Giang	Hoang Su Phi	Electricity	SPL III	Thang Tin Commune Electric Line
323	NE	Ha Giang	Hoang Su Phi	Electricity	SPL V	Then Chu Phin commune Electric Line
324	NE	Ha Giang	Bac Quang	Water Supply	SPL I	Bac Quang Water Supply
325	NE	Ha Giang	Vi Xuyen	Water Supply	SPL IV	Vi Xuyen Water Supply System
326	NE	Ha Giang	Hoang Su Phi	Water Supply	SPL V	Vinh Quang Town Water Supply System
327	NE	Ha Giang	Vi Xuyen	Irrigation	SPL V	Khuoi Lam-Khuoi Lac Irrigation System
328	RRD	Ha Nam	NA	Road	SPL I	Road No.63A
329	RRD	Ha Nam	NA	Road	SPL I	Road No.64
					SPL II	Road No.64
330	RRD	Ha Nam	NA	Road	SPL I	Road No.57A(485 Road)
331	RRD	Ha Nam	NA	Road	SPL I	Road No.62
332	RRD	Ha Nam	NA	Road	SPL II	Chau Giang Bridge
333	RRD	Ha Nam	Thanh Liem	Road	SPL II	Road No.484, Thanh Liem
					SPL III	Road No.63B
334	RRD	Ha Nam	NA	Road	SPL II	Provincial Road No.9715
					SPL III	Road No.9715
335	RRD	Ha Nam	Thanh Liem	Road	SPL II	Road No.63C
336	RRD	Ha Nam	Binh Luc	Road	SPL III	Road No.63C
337	RRD	Ha Nam	NA	Electricity	SPL I	Vinh Tru Commune Electric Line
338	RRD	Ha Nam	Duy Tien	Electricity	SPL I	Hoa Mac Commune Electric Line
339	RRD	Ha Nam	Vu Ban,	Electricity	SPL I	Vu Ban Commune Electric Line

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(7/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
340	RRD	Ha Nam	Thanh Liem	Electricity	SPL I	Kien Khe Commune Electric Line
341	RRD	Ha Nam	Binh Luc	Electricity	SPL I	Binh My Commune Electric Line
342	RRD	Ha Nam	Kim Bang	Electricity	SPL I	Nhat Tan Commune Electric Line
343	RRD	Ha Nam	Ly Nhan	Electricity	SPL II	Duc Ly Commune Electric
344	RRD	Ha Nam	Duy Tien	Electricity	SPL II	Chau Son Commune Electric
345	RRD	Ha Nam	Binh Luc	Electricity	SPL II	Hung Cong Commune Electric
346	RRD	Ha Nam	Ly Nhan	Electricity	SPL II	Dong Ly Commune Electric
347	RRD	Ha Nam	Kim Bang	Electricity	SPL II	Thuy Loi Commune Electric
348	RRD	Ha Noi (Ha Tay)	NA	Road	SPL I	Road No.89A (Da Chong - Che)
					SPL II	Road No.89A
349	RRD	Ha Noi (Ha Tay)	Phuc Tho	Road	SPL I	Cam Binh - Sen Chieu Road
350	RRD	Ha Noi (Ha Tay)	Quoc Oai	Road	SPL I	Quoc Oai - Hoa Thach Road
					SPL II	Quoc Oai - Hoa Thach Road
351	RRD	Ha Noi (Ha Tay)	Phuc Tho	Road	SPL I	Tho Loc Road
352	RRD	Ha Noi (Ha Tay)	NA	Road	SPL II	Road No.430
353	RRD	Ha Noi (Ha Tay)	Dan Phuong	Road	SPL II	Tho An - Dan Phuong Road
354	RRD	Ha Noi (Ha Tay)	Dan Phuong	Road	SPL II	Provincial Road No.79
					SPL III	Provincial Road No.79
355	RRD	Ha Noi (Ha Tay)	Thanh Oai	Road	SPL III	Dan Hoa-Thanh Van Road
356	RRD	Ha Noi (Ha Tay)	Quoc Oai	Electricity	SPL I	Phu Man Commune Electric Line
357	RRD	Ha Noi (Ha Tay)	Son Tay Township	Electricity	SPL I	Duong Lam Commune Electric Line
358	RRD	Ha Noi (Ha Tay)	Than Uyen	Electricity	SPL I	Van Hoa Commune Electric Line
359	RRD	Ha Noi (Ha Tay)	Chuong My	Electricity	SPL I	Nam Phuong Tien Commune Electric Line
360	RRD	Ha Noi (Ha Tay)	Ba Vi	Electricity	SPL II	Ba Vi Commune Electric Line
361	RRD	Ha Noi (Ha Tay)	Chuong My	Electricity	SPL II	Nam Phuong Tien Commune Electric Line
362	RRD	Ha Noi (Ha Tay)	Thach That	Electricity	SPL II	Lien Quan Town Electric Line
363	RRD	Ha Noi (Ha Tay)	Thuong Tin	Electricity	SPL II	Hien Giang Electric Line
364	RRD	Ha Noi (Ha Tay)	Phu Xuyen	Water Supply	SPL III	Phu Xuyen WSS
365	NCC	Ha Tinh	NA	Road	SPL I	Provincial Road No.3
366	NCC	Ha Tinh	NA	Road	SPL I	Xuan Hai - Xuan Hoi Road
367	NCC	Ha Tinh	Thach Ha	Road	SPL I	Provincial Road No.7
					SPL II	Provincial Road No.7
368	NCC	Ha Tinh	Huong Son	Road	SPL I	Nam - Son Tien Road
					SPL I	Nam - Son Tien Road
					SPL II	Nam - Son Tien Road
369	NCC	Ha Tinh	Ha Tinh Town	Road	SPL I	Urban Road 26/3 - Ha Tinh Town
370	NCC	Ha Tinh	Thach Ha	Road	SPL II	Thach Mon - Thach Dinh Road
371	NCC	Ha Tinh	Huong Son	Road	SPL III	Son Binh - Son Thuy - Son Mai Road
372	NCC	Ha Tinh	Cam Xuyen	Road	SPL IV	Cam Thach - Cam Thanh - Cam Binh - Thach Hoi Inter District Road
373	NCC	Ha Tinh	Ky Anh	Road	SPL IV	Lam - Son-Thuong Road
374	NCC	Ha Tinh	Huong Khe	Road	SPL IV	Provincial Road No.18
375	NCC	Ha Tinh	Duc Tho	Road	SPL IV	Road No. 28
376	NCC	Ha Tinh	Huong Son	Road	SPL V	Son Phu - Son Phuc - Son An - Son Tien transport system
377	NCC	Ha Tinh	Hong Linh	Road	SPL V	Road, bridge for Trung Luong cottage village (Pilot Subproject)
378	NCC	Ha Tinh	Huong Son	Road	SPL V	Son Tra - Son Long Road
379	NCC	Ha Tinh	Huong Khe	Electricity	SPL I	Huong Khe Distric Electric Network
380	NCC	Ha Tinh	Huong Son	Electricity	SPL I	Huong Son Distric Electric Network
381	NCC	Ha Tinh	Thach Ha	Electricity	SPL I	Thach Ha Distric Electric Network
382	NCC	Ha Tinh	Thach Ha	Electricity	SPL I	Dai Nai-Ha Tinh Town Electric
383	NCC	Ha Tinh	Hong Linh	Electricity	SPL I	Hong Linh Electric
384	NCC	Ha Tinh	Ky Anh	Electricity	SPL I	Ky Tan-Ky Ha Electric
385	NCC	Ha Tinh	Duc Tho	Electricity	SPL I	Duc Tho Distric Electric Network
386	NCC	Ha Tinh	Can Loc	Electricity	SPL I	Can Loc Distric Electric Network
387	NCC	Ha Tinh	Cam Xuyen	Electricity	SPL I	Cam Xuyen Distric Electric Network
388	NCC	Ha Tinh	Nghi Xuan	Electricity	SPL I	Nghi Xuan Distric Electric Network
389	NCC	Ha Tinh	Thai Yen	Electricity	SPL I	Thai Yen Distric Electric Network
390	NCC	Ha Tinh	Huong Khe	Electricity	SPL II	Transformer 10KV Huong Xuan-Huong Lien
391	NCC	Ha Tinh	Can Loc	Electricity	SPL II	Transformer 10KV Binh Loc-Thinh Loc
392	NCC	Ha Tinh	NA	Electricity	SPL II	Son Truong Commune Electric Line
393	NCC	Ha Tinh	Thach Ha	Electricity	SPL II	Thach Vinh Commune Electric Line
394	NCC	Ha Tinh	Thai Yen	Electricity	SPL II	Thai Yen Distric Electric Network
395	NCC	Ha Tinh	NA	Electricity	SPL II	Cay Town Electric Network

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(8/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
396	NCC	Ha Tinh	Hong Linh	Electricity	SPL II	Hong Linh Commune Electric Line
397	NCC	Ha Tinh	Huong Son	Electricity	SPL II	Son Thuy-Le Thuy Commune Electric Line
398	NCC	Ha Tinh	Nghi Xuan	Electricity	SPL II	Xuan Thanh Commune Electric Line
399	NCC	Ha Tinh	Huong Son	Electricity	SPL II	Son Mai-Thanh Mai Electric Network
400	NCC	Ha Tinh	Ky Anh	Electricity	SPL IV	Ky Lam-Ky Thinh Commune Electric Network
401	NCC	Ha Tinh	Huong Son	Electricity	SPL IV	Son Bang-Son Thinh Commune Electric Network
402	NCC	Ha Tinh	Can Loc	Electricity	SPL IV	Quang Loc-My Loc Commune Electric Network
403	NCC	Ha Tinh	Cam Xuyen	Electricity	SPL IV	Cam Nhuong-Cam Due Commune Electric Network
404	NCC	Ha Tinh	Thach Ha	Electricity	SPL V	Thach Ha Distric Electric Network
405	NCC	Ha Tinh	Ky Anh	Water Supply	SPL I	Ky Anh Water Supply System
406	NCC	Ha Tinh	Ky Anh	Water Supply	SPL III	Vung An WSS
					SPL V	Ky Anh WSS
407	NCC	Ha Tinh	Vu Quang	Water Supply	SPL III	Vu Quang
408	NCC	Ha Tinh	Can Loc	Water Supply	SPL IV	Nghen Town WSS
409	NCC	Ha Tinh	Hong Linh	Water Supply	SPL V	Trung Luong Commune WSS (Pilot Subproject)
410	NCC	Ha Tinh	Ky Anh	Irrigation	SPL III	Song Rac Irrigation
411	NCC	Ha Tinh	Can Loc	Irrigation	SPL IV	An Hung Dam
412	NCC	Ha Tinh	Huong Son	Irrigation	SPL IV	Cau Ke Dam
413	NCC	Ha Tinh	Ky Anh	Irrigation	SPL IV	Khe Coi Dam
414	NCC	Ha Tinh	Cam Xuyen	Irrigation	SPL IV	19/5 Dam
415	NCC	Ha Tinh	Duc Tho	Irrigation	SPL IV	Lien Minh-Tung Chau Irrigation System
416	NCC	Ha Tinh	Huong Khe	Irrigation	SPL V	Huong Long-Huong Binh-Hoa Hai-Phu Gia-Huong Vinh-Huong Xuan Irrigation System
417	RRD	Hai Duong	NA	Road	SPL I	Road No.191
					SPL II	Road No.191, Tu Ky Road
418	RRD	Hai Duong	Gia Loc, Ninh Giang	Road	SPL I	Road No.17A (Gia Loc - Ninh Giang)
419	RRD	Hai Duong	NA	Road	SPL I	Road No.20B
420	RRD	Hai Duong	Kinh Mon	Road	SPL I	Phung Khac Road
					SPL III	Phung Khac Road
421	RRD	Hai Duong	Hai Duong City	Road	SPL II	Road in west of Hai Duong City
422	RRD	Hai Duong	Ninh Giang	Road	SPL II	Road No.210, Tu Giang
423	RRD	Hai Duong	Hai Duong City	Electricity	SPL I	Hai Duong Town Electric Network
424	RRD	Hai Duong	Ninh Giang	Electricity	SPL I	Ninh Giang District Electric Network
425	RRD	Hai Duong	Tu Ky	Electricity	SPL I	Tu Ky District Electric Network
426	RRD	Hai Duong	Thanh Ha	Electricity	SPL II	Thanh Ha District Electric Line
427	RRD	Hai Duong	Ninh Giang	Electricity	SPL II	Ninh Giang District Electric Line
428	RRD	Hai Duong	Binh Giang	Electricity	SPL II	Binh Giang District Electric Line
429	RRD	Hai Duong	Kinh Mon	Electricity	SPL II	Kinh Mon District Electric Line
430	RRD	Hai Duong	Hai Duong City	Electricity	SPL II	Light System of Hai Duong City
431	RRD	Hai Duong	Chi Linh	Water Supply	SPL III	Sao Do WSS
432	RRD	Hai Phong	Hai Phong City	Road	SPL I	Nguyen Trai Street (Hai Phong City)
433	RRD	Hai Phong	Kien Thuy, Do Son	Road	SPL I	Road No.401 (Kien Thuy - Do Son)
434	RRD	Hai Phong	Hai Phong City	Road	SPL I	Lach Tray Street (Hai Phong City)
435	RRD	Hai Phong	Vinh Bao	Road	SPL I	Road No.17
436	RRD	Hai Phong	NA	Road	SPL I	Road No.404
437	RRD	Hai Phong	NA	Road	SPL I	Road No.301
438	RRD	Hai Phong	Kien Thuy	Road	SPL II	Provincial Road No.402
					SPL III	Road No.402
439	RRD	Hai Phong	Vinh Bao	Road	SPL III	Road No.17B
440	RRD	Hai Phong	Vinh Bao	Electricity	SPL II	Vinh Bao Town Electric Line
441	RRD	Hai Phong	Vinh Bao	Water Supply	SPL III	Vinh Bao WSS
442	MD	Hau Giang	Long My	Road	SPL V	Cao Hot Be Road
443	MD	Hau Giang	Long My	Electricity	SPL I	Vinh Vien Electric
444	MD	Hau Giang	Long My	Electricity	SPL II	Vinh Vien Electric
445	MD	Hau Giang	Long My	Electricity	SPL II	Long Binh Commune Electric Line
446	MD	Hau Giang	Long My	Electricity	SPL V	Electric Network in Long Phu-Phu Tri-Thuan Hung Communes
447	MD	Hau Giang	Vi Thanh	Water Supply	SPL III	Vi Thanh WSS
448	NW	Hoa Binh	Da Bac	Road	SPL I	Road No.433
					SPL II	Road No.433
					SPL III	Road 433
					SPL IV	Road 433
					SPL V	Road 433 (Km55-Km84)
449	NW	Hoa Binh	Hoa Binh City	Road	SPL I	Urban Road (Hoa Binh Town), 21Roads

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(9/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
450	NW	Hoa Binh	Hoa Binh City	Road	SPL II	Hoa Binh Town Road
451	NW	Hoa Binh	Tan Lac	Road	SPL V	Tu Ne - Lo Son Road
452	NW	Hoa Binh	Mai Chau	Electricity	SPL I	Tan My Commune Electric Line
453	NW	Hoa Binh	NA	Electricity	SPL I	Lac Thinh Commune Electric Line
454	NW	Hoa Binh	Tan Lac	Electricity	SPL II	Phu Cuong Commune Electric Line
455	NW	Hoa Binh	Mai Chau	Electricity	SPL II	Tan My Commune Electric Line
456	NW	Hoa Binh	Luong Son	Electricity	SPL II	Nhan Trach Commune Electric Line
457	NW	Hoa Binh	Ky Son	Electricity	SPL II	Hop Thinh Commune Electric Line
458	NW	Hoa Binh	NA	Electricity	SPL II	Lac Thinh Commune Electric Line
459	NW	Hoa Binh	Tan Lac	Electricity	SPL III	Phu Cuong Commune Electric Line
460	NW	Hoa Binh	Lac Son	Electricity	SPL III	Van Son Commune Electric Line
461	NW	Hoa Binh	Kim Boi	Electricity	SPL III	Hop Kim Commune Electric Line
462	NW	Hoa Binh	Lac Son	Electricity	SPL V	Thien Chi-Lac Son Commune Electric Line
463	NW	Hoa Binh	Lac Thuy	Irrigation	SPL III	Phu Lao Reservoir
464	NW	Hoa Binh	Yen Thuy	Irrigation	SPL V	Ngoc Luong Reservoir
465	RRD	Hung Yen	NA	Road	SPL I	Road No.202
466	RRD	Hung Yen	NA	Road	SPL I	Road No.205
467	RRD	Hung Yen	An Thi, Tien Lu	Road	SPL I	Road No.200(My Van, An Thi, Tien Lu)
468	RRD	Hung Yen	Kim Dong, Khoai Chau	Road	SPL II	Road No.208A
469	RRD	Hung Yen	NA	Road	SPL II	Road No.203B, Cau Cap - Quan Thu Road
			Phu Cu, Tien Lu		SPL III	Road No.203B
470	RRD	Hung Yen	NA	Road	SPL II	Road No.196
471	RRD	Hung Yen	NA	Road	SPL II	Road No.195
472	RRD	Hung Yen	Kim Dong, Khoai Chau	Road	SPL III	Road No.208
473	RRD	Hung Yen	Kim Dong	Road	SPL III	Road No.61
474	RRD	Hung Yen	NA	Road	SPL III	Road No.195, 201, 204
475	RRD	Hung Yen	An Thi	Electricity	SPL I	An Thi Electric Line
476	RRD	Hung Yen	Phu Cu	Electricity	SPL I	Phu Cu Electric Line
477	RRD	Hung Yen	Tien Lu	Electricity	SPL II	Dien Vuong-Tien Lu Electric System
478	RRD	Hung Yen	Khoai Chau	Electricity	SPL II	Khoai Chau Town Electric Line
479	RRD	Hung Yen	Kim Dong	Electricity	SPL II	Luong Bang-Kim Dong Electric Network
480	RRD	Hung Yen	My Hao	Electricity	SPL II	My Hao Commune Electric Line
481	RRD	Hung Yen	An Thi	Electricity	SPL II	Ha Le-An Thi Electric Network
482	SCC	Khanh Hoa	Nha Trang	Road	SPL I	Road to Nha Trang Sea Port
483	SCC	Khanh Hoa	NA	Road	SPL I	Provincial Road No.9
484	SCC	Khanh Hoa	Ninh Hoa	Electricity	SPL I	Ninh An Commune Electric
485	SCC	Khanh Hoa	Dien Khanh	Electricity	SPL I	Suoi Cat Commune Electric
486	SCC	Khanh Hoa	Ninh Hoa	Electricity	SPL II	Ninh Binh Commune Electric Line
487	SCC	Khanh Hoa	Dien Khanh	Electricity	SPL II	Dien Lam Commune Electric Line
488	SCC	Khanh Hoa	NA	Electricity	SPL II	Doc Da Trang Commune Electric Line
489	SCC	Khanh Hoa	Van Ninh	Electricity	SPL III	Van Thanh Commune Electric Line
490	SCC	Khanh Hoa	Khanh Vinh	Electricity	SPL III	Khanh Vinh Commune Electric Line
491	SCC	Khanh Hoa	Nha Trang	Electricity	SPL III	Phuoc Dong Commune Electric Line
492	MD	Kien Giang	An Bien	Road	SPL I	Nam Ky Khoi Nghia Road
493	MD	Kien Giang	Rach Gia	Road	SPL I	Urban Road (Ngo Quyen Rd. Rach Gia Town)
494	MD	Kien Giang	Giong Gieng	Road	SPL II	Ngoc Chuc-Hoa Thuan-Hoa Hung-Hoa Loi-Hoa An, 5 Bridges only
495	MD	Kien Giang	Tan Hiep	Road	SPL III	Giong Rieng-Go Quao Inter-Commune Road
496	MD	Kien Giang	Vinh Thuan	Road	SPL V	Vinh Thuan - Tan Thuan - Minh Thuan Inter-commune Road
497	MD	Kien Giang	Phu Quoc	Electricity	SPL I	Duong Dong Electric Line
498	MD	Kien Giang	Kien Hai	Electricity	SPL I	Lai Son Commune Electric Line
499	MD	Kien Giang	Phu Quoc	Electricity	SPL II	Duong To-An Thoi Electric Network
500	MD	Kien Giang	Giong Gieng	Electricity	SPL V	Electric Line and Transformer in buffer Zone of U Minh Thuong National Garden
501	MD	Kien Giang	Giong Gieng	Water Supply	SPL III	Giong Gieng WSS
502	CH	Kon Tum	Kon Tum town	Road	SPL I	Quang Trung Road
503	CH	Kon Tum	Ngoc Hoi	Road	SPL I	Ngoc Hoi Township Road
504	CH	Kon Tum	Kon Plong	Road	SPL I	Road Ngoc Tem
			Ngoc Hoi		SPL II	Road to Ngoc Tem Commune
			Ngoc Hoi		SPL III	Road to Ngoc Tem Commune
505	CH	Kon Tum	Ngoc Hoi	Road	SPL V	Inter-commune Road and Dak Ang Bridge
506	CH	Kon Tum	Dak Glei	Electricity	SPL I	Thuy Dien-Ngoc Linh Electric Network
507	CH	Kon Tum	Dak Rong	Electricity	SPL I	Dak Mon-Dak Loong Electric Network
508	CH	Kon Tum	Dac Ha	Electricity	SPL II	Dac Uy (Dac Ha) Electric Network

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(10/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
509	CH	Kon Tum	Dak Ha	Electricity	SPL III	Ngoc Wang Commune Electric Line
510	CH	Kon Tum	Kon Tum town	Electricity	SPL III	Ia-Chim Commune Electric Line
511	CH	Kon Tum	Kon Ray	Electricity	SPL III	Dak-koi Commune Electric Line
512	CH	Kon Tum	Dak To	Electricity	SPL V	Dak Ha Commune Electric Network
513	CH	Kon Tum	Konplong	Water Supply	SPL III	Kon Plong WSS
514	CH	Kon Tum	Ngoc Hoi	Water Supply	SPL V	WSS in Bo Y Boder Gate
515	CH	Kon Tum	Dak Ha	Water Supply	SPL V	Dak Ha Town WSS
516	CH	Kon Tum	Dak Glei	Irrigation	SPL III	Dakpoko Irrigation
517	CH	Kon Tum	Sa Thay	Irrigation	SPL V	Dak Sia 1 Irrigation System
518	NW	Lai Chau	Tam Duong	Road	SPL I	Tam Duong-Ban Giang-Ban Hon Road
					SPL II	Tam Duong-Ban Giang-Ban Hon Road
519	NW	Lai Chau	Muong Te	Road	SPL III	Bun Nua - Pa Ve Su Road
520	NW	Lai Chau	Phong Tho	Road	SPL IV	Nam Cay - Sin Cai Road
521	NW	Lai Chau	Tam Duong	Road	SPL IV	Tam Duong - Then Xin - Ban Man Road
522	NW	Lai Chau	Phong Tho	Road	SPL V	Dao San - Pa Vay Su Road
523	NW	Lai Chau	Phong Tho	Road	SPL V	Nam Xe - Sin Suoi Ho Road
524	NE	Lai Chau	Than Uyen	Electricity	SPL I	Van Hoa Commune Electric Line
525	NE	Lai Chau	Than Uyen	Electricity	SPL I	Muong Khoa Commune Electric Line
526	NE	Lai Chau	Than Uyen	Electricity	SPL I	Minh Thanh Commune Electric Line
527	NW	Lai Chau	Phong Tho	Electricity	SPL I	Binh Lu Electric Network (stage 1 and 2)
528	NW	Lai Chau	Phong Tho	Electricity	SPL I	Ban Bo Commune Electric Line
529	NW	Lai Chau	Than Uyen	Electricity	SPL IV	Than Thuoc Commune Electric Line
530	NW	Lai Chau	Than Uyen	Electricity	SPL V	Nam Can-Bac Ta Electric Network
531	NW	Lai Chau	Binh Lu	Water Supply	SPL III	Binh Lu Water Supply System
532	NW	Lai Chau	Than Uyen	Water Supply	SPL IV	Than Uyen WSS
533	NW	Lai Chau	Phong Tho	Water Supply	SPL V	Phong Tho WSS (West)
534	NW	Lai Chau	Phong Tho	Water Supply	SPL V	Phong Tho WSS (East)
535	NW	Lai Chau	Tam Duong	Irrigation	SPL V	Khu Ha Irrigation System
536	CH	Lam Dong	NA	Road	SPL I	Yersin - Quang Trung - Phan Chu Trinh Road
537	CH	Lam Dong	Cat Tien	Road	SPL I	Road No.721(from Madagui to Cat Tien)
538	CH	Lam Dong	NA	Road	SPL II	Provincial Road No.725
539	CH	Lam Dong	Dat Lat City	Road	SPL II	Tran Phu - Hoang Van Thu Road
540	CH	Lam Dong	Di Linh	Road	SPL II	Hoa Ninh - Hoa Nam Road
					SPL III	Hoa Ninh-Hoa Nam-Dinh Thang Hoa Road
541	CH	Lam Dong	Lam Ha	Road	SPL V	Tan Van - Phuc Tho Road
542	CH	Lam Dong	Dam Rong	Road	SPL V	Phi Lieng Center Commune Road
543	CH	Lam Dong	Lam Ha	Electricity	SPL I	Dinh Van-Phu Son Electric Network
544	CH	Lam Dong	Cat Tien	Electricity	SPL I	Dong Nai-Gia Vien-Tien Hoang Electric
545	CH	Lam Dong	Da Terh	Electricity	SPL I	Da The-Trieu Hai Electric
546	CH	Lam Dong	Bao Loc	Electricity	SPL I	Madagui-Ha Lam-Dam Bri Electric Network
547	CH	Lam Dong	Cat Tien	Electricity	SPL II	Phuoc Cat 2 Commune Electric Line
548	CH	Lam Dong	Cung Re	Electricity	SPL II	Cung Re Commune Electric Line
549	CH	Lam Dong	Lam Ha	Electricity	SPL II	22KV Madagui-Da Hoai
550	CH	Lam Dong	Bao Lam	Electricity	SPL III	Loc Ngai Commune Electric Line 22KV
551	CH	Lam Dong	Bao Lam	Electricity	SPL III	Loc Tan Commune Electric Line
552	CH	Lam Dong	Dah Hoai	Electricity	SPL III	Da Ton Commune Electric Line
553	CH	Lam Dong	Lam Ha	Electricity	SPL V	Da Don Commune Electric Line
554	CH	Lam Dong	Bao Loc	Water Supply	SPL I	Bao Loc Water Supply System
555	CH	Lam Dong	Bao Lam	Water Supply	SPL V	Loc Thang Town WSS
556	CH	Lam Dong	Lam Ha	Irrigation	SPL III	Da-Don Dam
557	CH	Lam Dong	Lac Duong	Irrigation	SPL V	Bokabang Water Reservoir
558	NE	Lang Son	Lang Son City	Road	SPL I	Ly Thai To - Chu Van An Road
559	NE	Lang Son	Trang Dinh	Road	SPL I	That Khe - Quoc Khanh Road (PR No.228)
					SPL II	That Khe - Quoc Khanh Road
560	NE	Lang Son	Lang Son City	Road	SPL I	Dinh Tien Hoang Road
561	NE	Lang Son	Van lang	Road	SPL III	Na Sam-Na Hinh Road
562	NE	Lang Son	Binh Gia	Road	SPL III	Hoa Binh - Binh La Road
			Van Quan, Van Lang,	Road	SPL IV	Hoa Binh - Binh La - Gia Mien road (Km 20-26)
			Van Quan, Binh Gia,	Road	SPL V	Hoa Binh - Binh La - Gia Mien Road
563	NE	Lang Son	Loc Binh	Road	SPL IV	Provincial Road No.237C
564	NE	Lang Son	Van Quan	Electricity	SPL I	Dong Giap Electric Network
565	NE	Lang Son	Chi Lang	Electricity	SPL I	Yen Tich Electric Network

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(11/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
566	NE	Lang Son	Huu Lung	Electricity	SPL II	Hoa Lac-Hoa Son-Tan Thanh Electric Line
567	NE	Lang Son	Binh Gia	Electricity	SPL II	Binh Gia-Pac Thuong Electric Line
568	NE	Lang Son	Chi Lang	Electricity	SPL III	Chien Thang Transfomer and Electric Line
569	NE	Lang Son	Loc Binh	Electricity	SPL III	Southern of Loc Binh Transfomer and Electric Line
570	NE	Lang Son	Van lang	Electricity	SPL III	Hoi Hoan Transfomer and Electric Line
571	NE	Lang Son	Binh Gia, Bac Son	Electricity	SPL V	0.4KV Electric Line in Binh Gia, Bac Son Distric
572	NE	Lang Son	Van Lang	Water Supply	SPL V	Na Sam Town WSS
573	NE	Lang Son	Huu Lung	Irrigation	SPL V	Thien Ky Irrigation System
574	NE	Lao Cai	Bao Thang, Van Ban	Road	SPL I	Tang Long - Khe Lech Road(PR No.79)
			Bao Thang		SPL II	Road No.79, Tang Long - Khe Lech Road
			Van ban		SPL III	Provincial Road 79
575	NE	Lao Cai	Sa Pa	Road	SPL I	Pho Moi - Sa Pa Road
576	NE	Lao Cai	Lao Cai	Road	SPL I	Pho Moi - Phong Hai Road
					SPL II	Pho Moi - Phong Hai Road
					SPL III	Pho Moi - Phong Hai Road
577	NE	Lao Cai	Bao Uyen	Road	SPL III	Bao Ha - Kim Son Road
					SPL IV	Bao Ha - Kim Son Road
578	NE	Lao Cai	Muong Khuong, Bac	Road	SPL IV	Hoang Lien Son II Road
579	NE	Lao Cai	Bac Ha	Road	SPL V	Bac Ngam - Bac Ha Road
580	NE	Lao Cai	Van Bao	Electricity	SPL I	Vo Lao Commune Electric Line
581	NE	Lao Cai	Bao Yen	Electricity	SPL I	Minh Tan Commune Electric Line
582	NE	Lao Cai	Bao Yen	Electricity	SPL I	Dien Quan Commune Electric Line
583	NE	Lao Cai	Bao Thang	Electricity	SPL II	Gia Phu Commune Electric
584	NE	Lao Cai	Bao Thang	Electricity	SPL II	Ban Phiet Commune Electric
585	NE	Lao Cai	Lao Cai	Electricity	SPL II	Dong Tuyen Commune Electric
586	NE	Lao Cai	Muong Khuong	Electricity	SPL II	Ban Lau Commune Electric
587	NE	Lao Cai	Bao Thang	Electricity	SPL II	Phong Hai Commune Electric
588	NE	Lao Cai	Bao Thang	Electricity	SPL II	Tang Loong Commune Electric
589	NE	Lao Cai	Bac Ha	Electricity	SPL III	Bao Nhai Electric Network
590	NE	Lao Cai	Cam Duong	Electricity	SPL III	Ta Phoi Electric Network
591	NE	Lao Cai	Bat Xat	Electricity	SPL III	Muon Vi Electric Network
592	NE	Lao Cai	Van ban	Electricity	SPL IV	Nam Ma Commune Electric Line
593	NE	Lao Cai	Bao Yen	Electricity	SPL IV	Xuan Hoa Commune Electric Line
594	NE	Lao Cai	Muong Khuong	Water Supply	SPL III	Muon Khuong Water Supply System
595	NE	Lao Cai	Bac Ha	Water Supply	SPL IV	Bac Ha WSS
596	NE	Lao Cai	Bat Xat	Irrigation	SPL IV	Sin Chai Irrigation System
597	NE	Lao Cai	Muong Khuong	Irrigation	SPL V	Nam Chay Irrigation System
598	MD	Long An	Tan An	Road	SPL I	Road No.6 (Tan An Town)
					SPL II	Road No.6 (Extension)
599	MD	Long An	Tan An	Road	SPL I	Road No.5 (Tan An Town)
600	MD	Long An	Can Duoc	Road	SPL III	Provincial Road 835 Section 1 Go Den - Xoai Doi
601	MD	Long An	Thu Thua	Electricity	SPL I	My An Electric
602	MD	Long An	Duc Hoa	Electricity	SPL I	An Ninh Tay Electric
603	MD	Long An	Can Giuoc	Electricity	SPL II	Phuoc Vinh Dong Commune Electric Line
604	RRD	Nam Dinh	Nam Dinh City	Road	SPL I	Nam Dinh - Quan Vinh Road
605	RRD	Nam Dinh	NA	Road	SPL I	Bo Song Road
					SPL II	Bo Song Road(Road around Nam Dinh River)
606	RRD	Nam Dinh	Y Yen	Road	SPL I	Road No.12A (Y Yen)
					SPL I	Road No.12A (Vu Ban)
607	RRD	Nam Dinh	Nam Dinh City	Road	SPL I	Urban Road of Nam Dinh Town
608	RRD	Nam Dinh	NA	Road	SPL I	Provincial Road No.57A
609	RRD	Nam Dinh	NA	Road	SPL II	Provincial Road No.490 (Old Road No.55)
610	RRD	Nam Dinh	Vu Ban, Y Yen	Road	SPL II	Road No.12, Vu Ban - Y.Yen Road
611	RRD	Nam Dinh	NA	Road	SPL II	West Muc River Road
612	RRD	Nam Dinh	Xuan Truong	Road	SPL II	Road 489
					SPL III	Province Road 489
613	RRD	Nam Dinh	Nam Dinh City	Road	SPL III	Tran Nhan Tong Road (Extension)
614	RRD	Nam Dinh	Vu Ban, Y Yen	Road	SPL III	Provincial Road No.56
615	RRD	Nam Dinh	Nam Truc	Electricity	SPL I	Nam My Commune Electric Line
616	RRD	Nam Dinh	Vu Ban	Electricity	SPL I	Tam Thanh Commune Electric Line
617	RRD	Nam Dinh	Giao Thuy	Electricity	SPL I	Hong Thuan Commune Electric Line
618	RRD	Nam Dinh	NA	Electricity	SPL I	Thinh Long Commune Electric Line

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(12/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
619	RRD	Nam Dinh	Nam Truc	Electricity	SPL I	Nam Thuong-Dong Long Commune Electric Line
620	RRD	Nam Dinh	NA	Electricity	SPL I	Yen Trinh Commune Electric Line
621	RRD	Nam Dinh	Hai Hau	Electricity	SPL I	Hai Trieu Commune Electric Line
622	RRD	Nam Dinh	Xuan Truong	Electricity	SPL II	Xuan Chau Commune Electric Line
623	RRD	Nam Dinh	NA	Electricity	SPL II	Hop Hung Commune Electric Line
624	RRD	Nam Dinh	Hai Hau	Electricity	SPL II	Hai Son Commune Electric Line
625	RRD	Nam Dinh	Giao Thuy	Electricity	SPL II	Giao Hai Commune Electric Line
626	RRD	Nam Dinh	Y Yen	Electricity	SPL II	Lam Town Electric Line
627	RRD	Nam Dinh	Xuan Truong	Electricity	SPL II	Xuan Tien Commune Electric Line
628	RRD	Nam Dinh	Van Chan	Electricity	SPL II	Tan Thinh Commune Electric Line
629	RRD	Nam Dinh	Hai Hau	Electricity	SPL II	Hai Minh Commune Electric Line
630	NCC	Nghe An	Vinh Loc	Road	SPL I	Vinh - Cua Hoi Road (PR No.535)
					SPL II	Vinh - Cua Hoi Road,PR535 (Ascon. Only)
631	NCC	Nghe An	Nghi Loc	Road	SPL I	Nghi Thu - Cua Lo Road
632	NCC	Nghe An	Vinh City	Road	SPL I	Le Hong Phong - Nguyen Thai Hoc Road
633	NCC	Nghe An	Vinh City	Road	SPL I	Tran Hung Dao - Truong Chinh Road
					SPL II	Tran Hung Dao Road
634	NCC	Nghe An	Vinh City	Road	SPL II	Binh Minh Road
635	NCC	Nghe An	Quy Chau	Road	SPL III	Quy Chau-Chau Phong Township Road
636	NCC	Nghe An	Con Cuong	Road	SPL III	Bong Khe-Mon Son Road
637	NCC	Nghe An	Nghi Loc	Road	SPL III	Nghi Duc-Nghi Thiet Road
638	NCC	Nghe An	Que Phong	Road	SPL IV	Hanh Dich - Muong Don Road
639	NCC	Nghe An	Tuong Duong	Road	SPL IV	Ve - Nga My Road
640	NCC	Nghe An	Thanh Chuong	Road	SPL IV	Song Giang Bridge
641	NCC	Nghe An	Ky Son	Road	SPL V	Ta Ca - Huu Kien Road
642	NCC	Nghe An	Anh Son	Road	SPL V	Duc Son - Binh Son commune Road
643	NCC	Nghe An	Tan Ky	Electricity	SPL I	Giai Xuan Electric Network
644	NCC	Nghe An	Thanh Chuong	Electricity	SPL I	Thanh Hung Electric Network
645	NCC	Nghe An	Tan Ky	Electricity	SPL I	Cao Son Electric Network
646	NCC	Nghe An	Tan Ky	Electricity	SPL II	Nghia Phuc Commune Electric Line
647	NCC	Nghe An	Thanh Chuong	Electricity	SPL II	Thanh Ngoc Commune Electric Line
648	NCC	Nghe An	Anh Son	Electricity	SPL II	Vinh Son Commune Electric Line
649	NCC	Nghe An	Nghi Loc	Electricity	SPL III	Nghi Van Commune Electric Line
650	NCC	Nghe An	Quang Phong	Electricity	SPL III	Muong Noc Commune Electric Line
651	NCC	Nghe An	Tuong Duong	Electricity	SPL III	Yen Tinh Commune Electric Line
652	NCC	Nghe An	Thanh Chuong	Electricity	SPL IV	Thanh An Commune Electric Line
653	NCC	Nghe An	Con Cuong	Electricity	SPL IV	Thach Ngan Commune Electric Line
654	NCC	Nghe An	Tan Ky	Electricity	SPL V	Nghia Thanh Commune Electric Line
655	NCC	Nghe An	Con Cuong	Electricity	SPL V	Binh Chuan Commune Electric Line
656	NCC	Nghe An	Cua Lo Town	Water Supply	SPL I	Cua Lo Water Supply System
657	NCC	Nghe An	Nam Dan	Water Supply	SPL IV	Nam Dan WSS
658	NCC	Nghe An	Yen Thanh	Water Supply	SPL IV	Yen Thanh WSS
659	NCC	Nghe An	Nghia Dan	Water Supply	SPL V	Nghia Dan WSS
660	NCC	Nghe An	Hung Nguyen	Irrigation	SPL III	Khe Ngang Reservoir
661	NCC	Nghe An	Do Luon	Irrigation	SPL IV	Yen Trach-Khe Chet Dam
662	NCC	Nghe An	Quy Chau	Irrigation	SPL IV	Ke Coc-Khe Nha Irrigation Canal
663	NCC	Nghe An	Thanh Chuong	Irrigation	SPL IV	Trieu Duong Reservoir
664	RRD	Ninh Binh	NA	Road	SPL I	Road No.59B
					SPL II	Road No.59B
665	RRD	Ninh Binh	NA	Road	SPL I	Ba Vuong - Binh Dong Road
					SPL I	Thong Nhac Road (Road No.58)
666	RRD	Ninh Binh	NA	Road	SPL I	Nhac - Duc Hau Road (Road No.58)
					SPL I	Cau Dam - Khanh Thanh Road
667	RRD	Ninh Binh	NA	Road	SPL I	Cau Dam - Khanh Thanh Road
					SPL II	Cau Dam - Khanh Thanh Road
668	RRD	Ninh Binh	NA	Road	SPL I	Thong Nhat Road (Road No.58)
669	RRD	Ninh Binh	Hoa Lu	Road	SPL I	Ninh Thang - Truong Yen Road
670	RRD	Ninh Binh	NA	Road	SPL II	Cong Go - Mua Thu Road
671	RRD	Ninh Binh	NA	Road	SPL II	Qui Hau - Do Muoi Road
672	RRD	Ninh Binh	Nho Quan	Road	SPL III	Inter Commune Road (Thuong Hoa-Thanh Lac-Son Thanh)
673	RRD	Ninh Binh	Gia Vien	Road	SPL III	Road to Vua Dinh Temple
674	RRD	Ninh Binh	Nho Quan	Road	SPL III	Road No.12C
675	RRD	Ninh Binh	Yen Mo	Road	SPL V	Khanh Ninh - Long market Road (PR480B)

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(13/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
676	RRD	Ninh Binh	Nho Quan	Electricity	SPL I	Quynh Luu Commune Electric Network
677	RRD	Ninh Binh	Gia Vien	Electricity	SPL I	Khanh Van Commune Electric Line
678	RRD	Ninh Binh	Kim Son	Electricity	SPL I	Hung Tien Commune Electric Line
679	RRD	Ninh Binh	Gia Vien	Electricity	SPL I	Da Han Trade Center Electric Network
680	RRD	Ninh Binh	Nho Quan	Electricity	SPL II	Xich Tho Commune Electric
681	RRD	Ninh Binh	Yen Khanh	Electricity	SPL II	Khanh Cu Commune Electric
682	RRD	Ninh Binh	Hoa Lu	Electricity	SPL II	Ninh Khanh Commune Electric
683	RRD	Ninh Binh	Kim Son	Electricity	SPL II	Thuong Kiem Commune Electric
684	RRD	Ninh Binh	Nho Quan	Electricity	SPL II	Quynh Luu Commune Electric Network
685	RRD	Ninh Binh	Kim Son	Water Supply	SPL I	Kim Son Water Supply System
686	RRD	Ninh Binh	Nho Quan	Irrigation	SPL V	Dong Dinh Pump Station
687	SE	Ninh Thuan	Phan Thiet	Road	SPL I	Town Central Road
688	SE	Ninh Thuan	NA	Road	SPL I	Tri Thuy - Phuong Cuu Road
			Ninh Hai - Thuan Bac		SPL V	District No.6 (Tri Thuy - Binh Nghia - Xom Bang)
689	SE	Ninh Thuan	Phan Thiet	Road	SPL II	Town Central Road (Extension)
690	SE	Ninh Thuan	Phan Thiet	Road	SPL II	Phan Rang-Phap Cham Dike Road
691	SE	Ninh Thuan	Bac Ai	Road	SPL III	Ninh Binh - Phuoc Binh Road
692	SE	Ninh Thuan	Bac Ai	Road	SPL IV	Phuoc Dai - Phuoc Trung Road
					SPL V	Phuoc Dai - Phuoc Trung Road
693	SE	Ninh Thuan	Ninh Son	Electricity	SPL I	Tan Lap-Ma Noi Electric Line
694	SE	Ninh Thuan	Ninh Hai	Electricity	SPL I	Khanh Hai Electric Line
695	SE	Ninh Thuan	NA	Electricity	SPL I	Lac Tien-Tu Thien-Son Hai Electric Line
696	SE	Ninh Thuan	NA	Electricity	SPL I	Hieu Thien-Vu Bon Electric Line
697	SE	Ninh Thuan	NA	Electricity	SPL II	Phuoc Nam-Nhi Ha-Phuoc Ha Commune Electric Line
698	SE	Ninh Thuan	NA	Electricity	SPL II	Lang Me-Xom Bang Commune Electric Line
699	SE	Ninh Thuan	NA	Electricity	SPL II	Xom Chieu-Bao An-Cong Thanh-Thanh Hai Commune Electric Line
700	SE	Ninh Thuan	Ninh Son	Electricity	SPL III	Ma Noi Commune Electric Line
701	SE	Ninh Thuan	Ninh Son	Electricity	SPL III	Hoa Son-My Son Commune Electric Line
702	SE	Ninh Thuan	Ninh Hai	Electricity	SPL III	Binh Son-Dong Hai Commune Electric Line
703	SE	Ninh Thuan	Ninh Son	Electricity	SPL V	Luong Son-Lan Son Electric Network
704	SE	Ninh Thuan	Ninh Hai	Water Supply	SPL V	My Tuong WSS
705	SE	Ninh Thuan	Ninh Phuoc	Irrigation	SPL III	Ninh Phuoc Irrigation System
706	SE	Ninh Thuan	Ninh Phuoc	Irrigation	SPL IV	Bau Ngu Reservoir
707	SE	Ninh Thuan	Ninh Phuoc	Irrigation	SPL V	Ta Ranh Irrigation
708	NE	Phu Tho	Phu Tho Town	Road	SPL I	Urban Road (Phu Tho Town)
709	NE	Phu Tho	Viet Tri City	Road	SPL I	Urban Road (Viet Tri City)
710	NE	Phu Tho	NA	Road	SPL I	Road P2
711	NE	Phu Tho	Viet Tri City	Road	SPL II	Urban Road in Viet Tri City
712	NE	Phu Tho	Phu Tho Town	Road	SPL II	Road in Phu Tho Township
713	NE	Phu Tho	NA	Road	SPL II	Road P5
714	NE	Phu Tho	Tam Nong	Road	SPL II	Provincial Road No.315
					SPL III	Road 315
					SPL IV	Provincial Road No.315
715	NE	Phu Tho	Thanh Thuy, Thanh Son	Road	SPL IV	Provincial Road No.317 (La Phu - Tinh Nhue)
716	NE	Phu Tho	Ha Hoa	Road	SPL IV	Provincial Road No.312
717	NE	Phu Tho	Yen Lap	Road	SPL IV	Station 312 - Hung Long Triway Road
718	NE	Phu Tho	Tam Nong	Road	SPL IV	Te Le Commune Bridge
719	NE	Phu Tho	Thanh Son	Road	SPL V	Van Mieu - Thuong Cuu Road
720	NE	Phu Tho	Cam Khe	Road	SPL V	Road to Ngo Xa cottage village
721	NE	Phu Tho	Yen Lap	Road	SPL V	Xuan An - My Lung Road
722	NE	Phu Tho	Tam Nong	Electricity	SPL I	Huong Nha Commune Electric Line
723	NE	Phu Tho	Song Thao	Electricity	SPL I	Tinh Cuong Commune Electric Line
724	NE	Phu Tho	Viet Tri City	Electricity	SPL I	Van Phu Commune Electric Line
725	NE	Phu Tho	Phu Tho Town	Electricity	SPL I	Thanh Minh Commune Electric Line
726	NE	Phu Tho	Tam Nong	Electricity	SPL I	Hong Da Commune Electric Line
727	NE	Phu Tho	Phong Chau	Electricity	SPL I	Cao Mai Commune Electric Line
728	NE	Phu Tho	Phong Chau	Electricity	SPL I	Gia Thanh Commune Electric Line
729	NE	Phu Tho	Doan Hung	Electricity	SPL II	Phuc Lai Commune Electric Line
730	NE	Phu Tho	Phu Ninh	Electricity	SPL II	Dinh Bo Commune Electric Line
731	NE	Phu Tho	Song Thao	Electricity	SPL II	Chuong Xa Commune Electric Line
732	NE	Phu Tho	Ha Hoa	Electricity	SPL II	Phuong Vien Commune Electric Line
733	NE	Phu Tho	Tam Nong	Electricity	SPL II	Phuong Thinh Commune Electric Line

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(14/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
734	NE	Phu Tho	Phu Ninh	Electricity	SPL II	Phu Nham Commune Electric Line
735	NE	Phu Tho	Tam Nong	Electricity	SPL II	Trung Nghia Commune Electric Line
736	NE	Phu Tho	Thanh Thuy	Electricity	SPL IV	Tu Vu Commune Electric Line
737	NE	Phu Tho	Song Thao	Electricity	SPL IV	Xuong Thinh-Tung Khe Commune Electric Line
738	NE	Phu Tho	Thanh Ba	Electricity	SPL IV	Nang Yen Commune Electric Line
739	NE	Phu Tho	Thanh Son	Electricity	SPL IV	Minh Dai-Thu Cuc Commune Electric Line
740	NE	Phu Tho	Yen Lap	Electricity	SPL V	Electric Network in 8 Communes in Yen Lap District
741	NE	Phu Tho	Phu Tho Town	Water Supply	SPL I	Phu Tho Water Supply System
742	NE	Phu Tho	Ha Hoa	Water Supply	SPL III	Ha Hoa WSS
743	NE	Phu Tho	Thanh Ba	Water Supply	SPL IV	Thanh Ba WSS
744	NE	Phu Tho	Song Thao	Water Supply	SPL IV	Song Thao WSS
745	NE	Phu Tho	Thanh Son	Water Supply	SPL V	Thanh Son Town WSS
746	NE	Phu Tho	Tam Nong	Irrigation	SPL III	Tam Nong Irrigation System
747	NE	Phu Tho	Thanh Thuy	Irrigation	SPL IV	Phuong Mao Reservoir (2nd Stage)
748	NE	Phu Tho	Thanh Ba	Irrigation	SPL IV	Hoang Hanh PS
749	NE	Phu Tho	Tam Nong	Irrigation	SPL IV	Hien Quan Irrigation System
750	NE	Phu Tho	Cam Khe	Irrigation	SPL V	Irrigation and Drainage System in 16 Communes
751	SCC	Phu Yen	Song Hinh	Road	SPL I	Road No.645 (Provincial Road No.1)
					SPL II	Road No.645 (Provincial Road No.1)
752	SCC	Phu Yen	Song Cau	Road	SPL II	Tam Giang-My Hai Road
					SPL V	Tam Giang-My Hai Road
753	SCC	Phu Yen	Song Hinh	Road	SPL IV	Song Hinh Bridge
754	SCC	Phu Yen	Son Hoa	Road	SPL V	Nga Hai Bridge (Son Nguyen Commune)
755	SCC	Phu Yen	Song Hinh	Road	SPL V	Road from Hoa An mini - industrial Zone to Dong Binh Ricepaper village
756	SCC	Phu Yen	Dong Xuan	Electricity	SPL I	Xuan Phuoc Commune Electric
757	SCC	Phu Yen	Song Hinh	Electricity	SPL II	Duc Binh Tay Commune Electric Line
758	SCC	Phu Yen	Son Hoa	Electricity	SPL II	Son Hoa Commune Electric Line
759	SCC	Phu Yen	Song Cau	Electricity	SPL II	Xuan Tho 2 Commune Electric Line
760	SCC	Phu Yen	Tuy An	Electricity	SPL II	An Phu-An Chan-An My Commune Electric Line
761	SCC	Phu Yen	Tuy Hoa	Electricity	SPL II	Hoai Hoi Commune Electric Line
762	SCC	Phu Yen	Song Hinh	Electricity	SPL III	Son Gian Commune Electric Line
763	SCC	Phu Yen	Song Cau	Electricity	SPL III	Xuat Binh Commune Electric Line
764	SCC	Phu Yen	Song Cau	Electricity	SPL IV	Trung Trinh-Vung Nha-Tu Nham Commune Electric Network
765	SCC	Phu Yen	Son Hoa	Water Supply	SPL III	Cung Son-Son Hoa WSS
766	SCC	Phu Yen	Phu Hoa	Water Supply	SPL IV	Phu Hoa WSS
767	SCC	Phu Yen	Song Hinh Phu Hoa	Irrigation	SPL III	La Bach Irrigation System
					SPL V	La Bach Reservoir (Stage 2)
768	SCC	Phu Yen	Song Hinh	Irrigation	SPL IV	Buon Chao Dam
769	SCC	Phu Yen	Dong Xuan	Irrigation	SPL V	Pump and Irrigation canal of Tan Phuoc, Xuan Son Bac commune
770	NCC	Quang Binh	Dong Hoi Town	Road	SPL I	Township Road(Dong Hoi Town)
771	NCC	Quang Binh	NA	Road	SPL I	Provincial Road No.2
					SPL II	Provincial Road No.2
772	NCC	Quang Binh	NA	Road	SPL I	Road No.F325 Township
773	NCC	Quang Binh	Dong Hoi Town	Road	SPL II	Dong Hoi Township Road
774	NCC	Quang Binh	NA	Road	SPL II	Lam Nghiep & Hoi Bridges
775	NCC	Quang Binh	Dong Hoi	Road	SPL III	Urban Roads in Dong Hoi
776	NCC	Quang Binh	Quang Ninh	Road	SPL V	Hien - Xuan - An - Van Ninh Intercommune Road
777	NCC	Quang Binh	Quang Trach	Electricity	SPL I	Quang Luu Electric
778	NCC	Quang Binh	Bo Trach	Electricity	SPL I	Son Loc-Phu Dinh Electric
779	NCC	Quang Binh	Le Thuy	Electricity	SPL I	Kim Van-Truong Thuy Electric
780	NCC	Quang Binh	Quang Ninh	Electricity	SPL I	Bac Truong Xuan Electric
781	NCC	Quang Binh	Quang Trach	Electricity	SPL I	Quang Tung-Quang Chau-Quang Tien Electric
782	NCC	Quang Binh	Tuyen Hoa	Electricity	SPL I	Mai Phong-Tien Hoa Electric
783	NCC	Quang Binh	NA	Electricity	SPL II	Kim Thuy-Van Thuy-Truong Thuy Electric Network
784	NCC	Quang Binh	Quang Trach	Electricity	SPL II	Transformer 20KV of Quang Tung-Chau Tien
785	NCC	Quang Binh	Quang Trach	Electricity	SPL II	Quang Luu-Quang Trach Electric Network
786	NCC	Quang Binh	Minh Hoa	Electricity	SPL III	Dan Hoa Commune Electric Line
787	NCC	Quang Binh	Minh Hoa	Water Supply	SPL III	Minh Hoa WSS
788	NCC	Quang Binh	Bo Trach	Water Supply	SPL V	Viet Trung WSS
789	NCC	Quang Binh	Quang Ninh	Irrigation	SPL III	Upgrade Cam Li Reversoir
790	SCC	Quang Nam	Dien Ban	Road	SPL I	Road to Dien Nam-Dien Ngoc Industrial Zone
791	SCC	Quang Nam	Duy Xuyen	Road	SPL I	Kiem Lam - Can Truc Road

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(15/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
792	SCC	Quang Nam	Tan Ky	Road	SPL I	An Ha - Cay Trai An Ha Road
793	SCC	Quang Nam	Dai Loc	Road	SPL I	An Diem - A So Road
					SPL IV	An Diem - Ka Dang - A So Road
794	SCC	Quang Nam	NA	Road	SPL II	Tran Quy Cap Road
795	SCC	Quang Nam	Nui Thanh	Road	SPL II	An Tan - Ky Ha Road
796	SCC	Quang Nam	Hien	Road	SPL II	Trao - Doc Kien Road
797	SCC	Quang Nam	Tam Ky	Road	SPL III	National Road No.1-An Ha
798	SCC	Quang Nam	Phuoc Son	Road	SPL III	Phuoc Chanh - Phuoc Cong Road
799	SCC	Quang Nam	Dong Giang	Road	SPL IV	Commune road in Ba and Tu communes
800	SCC	Quang Nam	Tien Phuoc	Road	SPL V	Tien Tho - Tien Hiep Road
801	SCC	Quang Nam	Thang Binh	Electricity	SPL I	Binh Chanh Electric
802	SCC	Quang Nam	Dien Quang	Electricity	SPL I	Dien Quang Electric
803	SCC	Quang Nam	Que Son	Electricity	SPL I	Que Ninh Electric
804	SCC	Quang Nam	Dien Quang	Electricity	SPL II	Dien Quang Electric
805	SCC	Quang Nam	Thang Binh	Electricity	SPL II	Binh Duong Commune Electric Line
806	SCC	Quang Nam	Thang Binh	Electricity	SPL II	Binh Dinh Commune Electric Line
807	SCC	Quang Nam	Thang Binh	Electricity	SPL III	Binh Dinh Commune Electric Line
808	SCC	Quang Nam	Dien Ban	Electricity	SPL III	Dien Trung Commune Electric Line
809	SCC	Quang Nam	Thang Binh	Electricity	SPL III	Binh Lanh Commune Electric Line
810	SCC	Quang Nam	Thang Binh	Electricity	SPL IV	Binh Quy Commune Electric Line
811	SCC	Quang Nam	Hiep Duc	Electricity	SPL V	Hiep Duc Electric Network
812	SCC	Quang Nam	Thang Binh	Water Supply	SPL I	Thanh Binh Water Supply System
813	SCC	Quang Nam	Duy Xuyen	Water Supply	SPL IV	Nam Phuoc WSS
814	SCC	Quang Nam	Que Son	Water Supply	SPL V	Dong Phu Pump Station in Que Son and Bau Vang Reservoir
					SPL V	Dong phu - Que Son WSS (Phase II)
815	SCC	Quang Nam	Que Son, Thang Binh	Irrigation	SPL V	Ho Viet An Irrigation System
816	SCC	Quang Ngai	Son Tinh	Road	SPL I	Son Ha - Son Tay Road
817	SCC	Quang Ngai	Quang Ngai Town	Road	SPL I	La Ha - Thu Xa Road
					SPL II	La Ha - Thu Xa Road
818	SCC	Quang Ngai	NA	Road	SPL II	Quang Ngai - Co Luy Road
819	SCC	Quang Ngai	Son Tay	Road	SPL II	Ca Dao Pass
820	SCC	Quang Ngai	Nghia Hanh, Minh	Road	SPL II	Quang Ngai - Minh Long Road
821	SCC	Quang Ngai	Tra Bong	Road	SPL IV	Tra Bong - Tra Phong Road
822	SCC	Quang Ngai	Minh Long, Son Tra	Road	SPL IV	Long Mon - Son Ky Road
823	SCC	Quang Ngai	Tay Tra	Road	SPL V	Tra Phong - Tra Khe - Tra Bao Road
824	SCC	Quang Ngai	Minh Long	Road	SPL V	Long Mai - Long Hiep - Thanh An Road
825	SCC	Quang Ngai	Tu Nghia	Electricity	SPL I	Tu Nghia Electric
826	SCC	Quang Ngai	Son Tinh	Electricity	SPL I	Tinh Khe Commune Electric
827	SCC	Quang Ngai	Son Ha	Electricity	SPL I	Son Ha Distric Electric Network
828	SCC	Quang Ngai	Ly Son	Electricity	SPL II	Ly Son Island District Electric Network
829	SCC	Quang Ngai	Son Ha	Electricity	SPL II	Son Ha Distric Electric Network
830	SCC	Quang Ngai	Son Tinh	Electricity	SPL II	Tinh Tho Commune Electric Line
831	SCC	Quang Ngai	Binh Son	Electricity	SPL II	Binh Khuong Commune Electric Line
832	SCC	Quang Ngai	Duc Pho	Electricity	SPL II	Pho Cuong Commune Electric Line
833	SCC	Quang Ngai	Tra Bong	Electricity	SPL II	Tra Bong Commune Electric Line
834	SCC	Quang Ngai	Duc Pho	Water Supply	SPL III	Duc Pho WSS
835	SCC	Quang Ngai	Mo Duc	Water Supply	SPL IV	Mo Duc WSS
836	SCC	Quang Ngai	Son Ha	Irrigation	SPL III	Di Lang Irrigation
837	SCC	Quang Ngai	Nghia Hanh	Irrigation	SPL IV	Suoi Chi Irrigation System
838	SCC	Quang Ngai	Mo Duc	Irrigation	SPL IV	Ong Toi Reservoir
839	SCC	Quang Ngai	Son Ha	Irrigation	SPL V	Xa Dieu Commune Dam
840	NE	Quang Ninh	Yen Hung	Road	SPL I	Urban Road (Quang Yen Town)
841	NE	Quang Ninh	Dong Trieu	Road	SPL I	Duc Chinh - An Sinh Road
					SPL II	Duc Chinh - An Sinh Road
842	NE	Quang Ninh	Binh Lieu	Road	SPL I	Hoanh Mo - Dong Van Road
					SPL II	Hoanh Mo - Dong Van Road
					SPL III	Hoanh Mo-Dong Van Road
843	NE	Quang Ninh	Quang Uyen	Road	SPL II	Quang Yen Town Road, 5 Streets
844	NE	Quang Ninh	Quang Uyen	Road	SPL III	Quang Yen Urban Road
845	NE	Quang Ninh	Ha Long City	Electricity	SPL II	Transformer in Westen of Ha Long City
846	NE	Quang Ninh	Dong Trieu	Water Supply	SPL I	Dong Trieu Water Supply System
847	NE	Quang Ninh	Quang ha	Water Supply	SPL III	Quang Ha WSS

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(16/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
848	NCC	Quang Tri	Huong Hoa	Road	SPL I	Ta Rut - La Lay Road
					SPL II	Ta Rut - La Lay Road
849	NCC	Quang Tri	Dong Ha	Road	SPL I	Dong Ha within City Road
850	NCC	Quang Tri	NA	Road	SPL I	Provincial Road No.64
					SPL II	Provincial Road No.64
851	NCC	Quang Tri	Vinh Linh	Road	SPL I	Ho Xa - Cap Lai Road
					SPL II	Ho Xa - Cap Lai Road
852	NCC	Quang Tri	Dakrong	Road	SPL III	Central Road in Dakrong District
853	NCC	Quang Tri	Dakrong	Road	SPL IV	Ta Rut - A Vao Road
854	NCC	Quang Tri	Dakrong	Road	SPL IV	Ba Long Bridge
855	NCC	Quang Tri	Gio Linh	Road	SPL IV	Eastern 75 Provincial Road
856	NCC	Quang Tri	Gio Linh	Road	SPL IV	Provincial Road No.74
857	NCC	Quang Tri	Cam Lo	Road	SPL IV	Provincial Road No.11
858	NCC	Quang Tri	Huong Hoa	Road	SPL IV	Access road to Ba Tang commune
859	NCC	Quang Tri	Vinh Linh	Road	SPL V	Ho Xa - Vinh Tu - Vinh Thai Road
860	NCC	Quang Tri	Cam Lo	Road	SPL V	Cam An - Cam Thanh Inter-commune Road
861	NCC	Quang Tri	Vinh Linh	Electricity	SPL I	Vinh Tu Commune Electric
862	NCC	Quang Tri	Cam Lo	Electricity	SPL I	Cam Tuyen Commune Electric
863	NCC	Quang Tri	Trieu Phong	Electricity	SPL I	Trieu Lang Commune Electric
864	NCC	Quang Tri	Gio Linh	Electricity	SPL II	Gio Linh Commune Electric Line
865	NCC	Quang Tri	Huong Hoa	Electricity	SPL II	Huong Hoa Commune Electric Line
866	NCC	Quang Tri	Gio Linh	Electricity	SPL II	Ba Long Commune Electric Line
867	NCC	Quang Tri	Gio Linh	Electricity	SPL III	Gio My Commune Electric Line
868	NCC	Quang Tri	Huong Hoa	Electricity	SPL III	Thanh Commune Electric Line
869	NCC	Quang Tri	Huong Hoa	Electricity	SPL III	A Tuc Commune Electric Line
870	NCC	Quang Tri	Trieu Phong	Electricity	SPL IV	Trieu Thuong Commune Electric Line
871	NCC	Quang Tri	Vinh Linh	Electricity	SPL IV	Electric Network in New Economic area in South of Ben Hai
872	NCC	Quang Tri	Huong Hoa	Electricity	SPL IV	Huong Hung Commune Electric Line
873	NCC	Quang Tri	Vinh Linh-Cam Lo	Electricity	SPL V	Vinh Linh and Cam Lo Electric Line
874	NCC	Quang Tri	Vinh Linh	Water Supply	SPL I	Ho Xa Water Supply System
875	NCC	Quang Tri	Huong Hoa	Water Supply	SPL I	Lao Bao Water Supply System
876	NCC	Quang Tri	Hai Lang	Water Supply	SPL III	Hai Lang WSS
877	NCC	Quang Tri	Cam Lo	Water Supply	SPL IV	Cam Lo WSS
878	NCC	Quang Tri	Vinh Linh	Water Supply	SPL IV	Ben Quan WSS
879	NCC	Quang Tri	Gio Linh	Water Supply	SPL V	Gio Linh Distric WSS
880	NCC	Quang Tri	Cam Lo	Irrigation	SPL IV	Nghia Hy Reservoir
881	NCC	Quang Tri	Huong Hoa	Irrigation	SPL IV	Lia Irrigation System
882	NCC	Quang Tri	Hai Lang	Irrigation	SPL V	Thac Heo Reservoir
883	MD	Soc Trang	Soc Trang Town	Road	SPL I	Mac Dinh Chi Road
884	MD	Soc Trang	My Xuyen	Road	SPL II	Provincial Road No.8
885	MD	Soc Trang	Long Phu	Road	SPL III	An Thanh 1-An Thanh 3 Road
886	MD	Soc Trang	My Tu	Road	SPL III	Thuan Hoa - Phu Tam Road
					SPL V	Thuan Hoa - Phu Tam road
887	MD	Soc Trang	Vinh Chau	Road	SPL IV	District Road No.31
888	MD	Soc Trang	Thanh Tri	Road	SPL IV	District Road No.17
889	MD	Soc Trang	Nga Nam	Road	SPL V	My Quoi - Roc La Road
890	MD	Soc Trang	Long Phu	Road	SPL V	District Road No.9
891	MD	Soc Trang	Ke Sach	Electricity	SPL I	Cai Tau-Ba Trinh-Trinh Phu Electric Network
892	MD	Soc Trang	My Tu	Electricity	SPL I	Ho Duc Kien Electric
893	MD	Soc Trang	Ke Sach	Electricity	SPL I	An Lac Tay Commune Electric
894	MD	Soc Trang	Vinh Chau	Electricity	SPL II	Hoa Lac Electric Network
895	MD	Soc Trang	Thanh Tri	Electricity	SPL III	Vinh Loi Commune Electric Line
896	MD	Soc Trang	My Xuyen	Electricity	SPL IV	Electric Network in 9 Communes in My Xuyen Distric
897	MD	Soc Trang	Ke Sach	Electricity	SPL V	An Lac Tay Commune Electric Line
898	MD	Soc Trang	My Xuyen	Water Supply	SPL IV	My Xuyen WSS
899	MD	Soc Trang	Thanh Tri	Water Supply	SPL V	Phu Loc Town WSS
900	NW	Son La	Son La Town	Road	SPL I	Tinh Uy - Ban Mong Road
					SPL I	Tinh Uy - Ban Mong Road
901	NW	Son La	Son La Town	Road	SPL I	Quyet Thang - Na Cong Road
902	NW	Son La	Mai Son, Song Ma	Road	SPL II	Road No.105, Mai Son - Song Ma Road
903	NW	Son La	Son La Town	Road	SPL III	Inter-commune Road Ban Moong-Muong Chanh

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(17/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
904	NW	Son La	Moc Chau	Road	SPL III	Van Ho - Xuan Nha Road
					SPL V	Van Ho - Xuan Nha Road
905	NW	Son La	Moc Chau	Road	SPL IV	Xuan Nha - Tan Xuan Road
906	NW	Son La	Phu Yen	Road	SPL V	Muong Bang - Dong Nghe Road
907	NW	Son La	Son La Town	Electricity	SPL I	Phieng Tam Commune Electric Line
908	NW	Son La	Thuan Chau	Electricity	SPL I	Phieng Cha Electric Network
909	NW	Son La	Son La Town	Electricity	SPL II	Chieng Pha Commune Electric Line
910	NW	Son La	Mai Son	Electricity	SPL II	Co Noi Commune Electric Line
911	NW	Son La	Son La Town	Electricity	SPL II	Phieng Tam Commune Electric Line
912	NW	Son La	Son La Town	Electricity	SPL III	Chieng Pha Commune Electric Line
913	NW	Son La	Son La Town	Electricity	SPL III	Phieng Tam Commune Electric Line
914	NW	Son La	Thuan Chau	Electricity	SPL III	Chieng Mung-Tong Co-Phieng Tam-Phieng Pha and Co Noi Commune Electric Line
915	NW	Son La	Mai Son	Electricity	SPL III	Co Noi Commune Electric Line
916	NW	Son La	Thuan Chau	Electricity	SPL V	Co Ma Commune Electric Line
917	NW	Son La	Moc Chau	Water Supply	SPL III	Moc Chau Water Supply System
918	NW	Son La	Sop Cop	Water Supply	SPL V	Sop Cop Town WSS
919	SE	Tay Ninh	NA	Road	SPL I	Sa Mat-Military Head Quarter of the South
920	SE	Tay Ninh	Tay Ninh	Road	SPL II	Cau Gia-Binh Minh, Provincial Road No.3
921	SE	Tay Ninh	Tan Bien-Tan Chau	Road	SPL II	Road No.792
					SPL III	Road No.792 (Tan Bien-Tan Chau)
922	SE	Tay Ninh	Tan Chau	Electricity	SPL I	Tan Hoa-Suoi Ngo Electric Network
923	SE	Tay Ninh	Tay Ninh	Electricity	SPL II	Binh Minh Commune Electric Line
924	SE	Tay Ninh	Tan Bien	Electricity	SPL II	Tan Lap Commune Electric Line
925	SE	Tay Ninh	Trang Bang	Electricity	SPL II	An Thinh Commune Electric Line
926	SE	Tay Ninh	Go Dau	Water Supply	SPL III	Go Dau WSS
927	RRD	Thai Binh	NA	Road	SPL I	Road No.224
928	RRD	Thai Binh	NA	Road	SPL I	Gia Le - Ben Ho Road
929	RRD	Thai Binh	Tien Hai	Road	SPL I	Road No.39B - Tien Hai District Section
			Thai Thuy		SPL II	Road No.39B
					SPL III	Road No.39B
930	RRD	Thai Binh	Vu Thu, Hung Ha	Road	SPL II	Road No.223, Vu Thu - Hung Ha Road
					SPL II	Provincial Road No.223
			Vu Thu		SPL III	Road No.223
931	RRD	Thai Binh	Vinh Bao	Road	SPL II	Road No.17
932	RRD	Thai Binh	Vu Thu	Electricity	SPL I	Vu Thu Electric Network
933	RRD	Thai Binh	Tien Hai	Electricity	SPL I	Tien Hai Electric Network
934	RRD	Thai Binh	Kien Xuong	Electricity	SPL I	Kien Xuong Electric Network
935	RRD	Thai Binh	Tien Hai	Electricity	SPL II	Tien Hai Electric Network
936	RRD	Thai Binh	Hung Ha	Electricity	SPL II	Hung Ha Electric Network
937	RRD	Thai Binh	Thai Thuy	Electricity	SPL II	Diem Dien Electric Network
938	RRD	Thai Binh	Dong Hung	Electricity	SPL II	Dong Hung Electric Network
939	RRD	Thai Binh	Quynh Coi	Electricity	SPL II	Quynh Coi Electric Network
940	RRD	Thai Binh	Kien Xuong	Water Supply	SPL III	Kien Xuong WSS
941	NE	Thai Nguyen	Dinh Hoa	Road	SPL I	Road No.254 Cho Chu - Deo So Road
942	NE	Thai Nguyen	Thai Nguyen City	Road	SPL I	Road No.74B Phan Dinh Phung Road
943	NE	Thai Nguyen	Vo Nhai	Road	SPL I	Dinh Ca - Khuon Manh Road
944	NE	Thai Nguyen	Thai Nguyen City	Road	SPL II	CMT 8 Road
					SPL III	Cach Mang Thang Tam Road
945	NE	Thai Nguyen	Dinh Hoa	Road	SPL III	Phuc Chu - Bao Linh Road
946	NE	Thai Nguyen	Dinh Hoa	Road	SPL III	Na Guong - Dong Thinh Road
947	NE	Thai Nguyen	Dinh Hoa	Road	SPL IV	Tan Duong - Phuong Tien - Trung Hoi Road
948	NE	Thai Nguyen	Dai Tu	Road	SPL V	Hung Son - Tan Linh - Phu Lac - Duc Luong Road
949	NE	Thai Nguyen	Dai Tu	Road	SPL V	Phuc Luong - Minh Tien Inter-commune Road
950	NE	Thai Nguyen	Dinh Hoa	Electricity	SPL I	Dinh Hoa Electric Line
951	NE	Thai Nguyen	Dong Hy	Electricity	SPL I	Van Han Electric Line
952	NE	Thai Nguyen	Dinh Hoa	Electricity	SPL II	ATK Area Electric Line
953	NE	Thai Nguyen	Dai Tu	Electricity	SPL II	Ky Phu Commune Electric Line
954	NE	Thai Nguyen	Dong Hy	Electricity	SPL II	Van Han Commune Electric Line
955	NE	Thai Nguyen	Vo Nhai	Electricity	SPL II	Phu Thuong Commune Electric Line
956	NE	Thai Nguyen	Pho Yen	Electricity	SPL IV	Tan Phu Commune Electric Line
957	NE	Thai Nguyen	Phu Binh	Electricity	SPL V	Tan Khanh-Phu Binh Commune Electric Network

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(18/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
958	NE	Thai Nguyen	Dai Tu	Water Supply	SPL IV	Dai Tu WSS
959	NE	Thai Nguyen	Dong Hy	Water Supply	SPL V	Trai Cau Town WSS
960	NE	Thai Nguyen	Pho Yen, Phu Binh	Irrigation	SPL IV	Ho Nui Coc Irrigation Canal
961	NE	Thai Nguyen	Dinh Hoa	Irrigation	SPL IV	Ho Bao Linh irrigation Canal
962	NE	Thai Nguyen	Dong Hy	Irrigation	SPL V	Minh Lap-Hoa Thuong Irrigation System
963	NCC	Thanh Hoa	Ha Trung	Road	SPL I	Ha Trung - Ha Lai Road
964	NCC	Thanh Hoa	Tinh Gia	Road	SPL I	Urban Road Tinh Gia Town
965	NCC	Thanh Hoa	Quang Xuong	Road	SPL I	Quang Ngoc - Quang Vong - Quang Phuc Road
966	NCC	Thanh Hoa	NA	Road	SPL II	Phan Chu Trinh Road
967	NCC	Thanh Hoa	Quang Xuong	Road	SPL II	Dong Quang-Dong Van-Dong Vinh Roac
			Dong Son		SPL III	Dong Van-Dong Quang-Dong Vinh Roac
968	NCC	Thanh Hoa	Thieu Hoa	Road	SPL II	Thieu Phu - Thieu Quang Road
					SPL III	Thieu Phu-Thieu Quang Road
969	NCC	Thanh Hoa	Tinh Gia, Bim Son, Hoang Hoa	Road	SPL II	Tinh Gia - Bim Son - Hoang Hoa Road
970	NCC	Thanh Hoa	Yen Dinh	Road	SPL II	Dinh Lien - Yen Hung Road
					SPL III	Dinh Lien-Yen Hung Road
971	NCC	Thanh Hoa	Ha Trung	Road	SPL III	Xuan Thang - Van Xuan Road
972	NCC	Thanh Hoa	Cam Thuy	Road	SPL IV	Cam Van - Cam Yen - Cam Son Road
973	NCC	Thanh Hoa	Nhu Thanh	Road	SPL IV	Road from NR 45 to Yen Lac Commune
974	NCC	Thanh Hoa	NA	Road	SPL V	Road from Do Trap bridge to Hai Ninh Coast
975	NCC	Thanh Hoa	Quan Hoa	Road	SPL V	Hoi Xuan Town - Phu Nghiem Road
976	NCC	Thanh Hoa	Ngoc Lac	Electricity	SPL I	My Tan Ngoc Khe Electric Line
977	NCC	Thanh Hoa	Nhu Xuan	Electricity	SPL I	Hoa Quy Commune Electric Line
978	NCC	Thanh Hoa	Truong Xuan	Electricity	SPL I	Xuan Cam Electric line
979	NCC	Thanh Hoa	Thieu Hoa	Electricity	SPL II	Dong Khanh Trade Center Electric Line
980	NCC	Thanh Hoa	Yen Dinh	Electricity	SPL II	Yen Ninh Commune Electric Line
981	NCC	Thanh Hoa	Yen Dinh	Electricity	SPL II	Yen Hung Commune Electric Line
982	NCC	Thanh Hoa	Tinh Gia	Electricity	SPL II	Truong Lam Commune Electric Line
983	NCC	Thanh Hoa	Cam Thuy	Electricity	SPL II	Cam Long Commune Electric Line
984	NCC	Thanh Hoa	Tinh Gia	Electricity	SPL II	Dinh Hai Commune Electric Line
985	NCC	Thanh Hoa	Tho Xuan	Electricity	SPL IV	Quang Phu Commune Electric Line
986	NCC	Thanh Hoa	Ha Trung	Water Supply	SPL III	Ha Trung WSS
987	NCC	Thanh Hoa	Nhu Thanh	Water Supply	SPL IV	Nhu Thanh WSS
988	NCC	Thanh Hoa	Thuong Xuan	Water Supply	SPL IV	Thuong Xuan WSS
989	NCC	Thanh Hoa	Dong Son	Water Supply	SPL IV	Rung Thong WSS
990	NCC	Thanh Hoa	Tho Xuan	Water Supply	SPL IV	Tho Xuan WSS
991	NCC	Thanh Hoa	Hau Loc	Water Supply	SPL V	Hau Loc WSS
992	NCC	Thanh Hoa	Quang Xuong	Irrigation	SPL III	Quang Xuong Irrigation
993	NCC	Thanh Hoa	Hau Loc	Irrigation	SPL III	Quang Loc Irrigation
994	NCC	Thanh Hoa	Thach Thanh	Irrigation	SPL III	Vung Su Reservoir
995	NCC	Thanh Hoa	Cam Thuy	Irrigation	SPL IV	Duong Coc Reservoir
996	NCC	Thanh Hoa	Vinh Loc	Irrigation	SPL IV	Ben Da-Nui Trac PS
997	NCC	Thanh Hoa	Thach Thanh	Irrigation	SPL V	Long Dong Irrigation Canal
998	NCC	Thua-Thien Hue	NA	Road	SPL I	Provincial Road No.68B
					SPL II	Provincial Road No.68
999	NCC	Thua-Thien Hue	NA	Road	SPL I	Provincial Road No.4
					SPL II	Provincial Road No.4
1000	NCC	Thua-Thien Hue	NA	Road	SPL I	Cong Chem - Cua Hau Road
					SPL II	Cong Chem - Cua Hau Road
1001	NCC	Thua-Thien Hue	Phu Vang	Road	SPL V	Phu Xuan - Phu Da Inter-Commune Road
1002	NCC	Thua-Thien Hue	Huong Tra	Electricity	SPL I	Hai Duong Commune Electric Network
1003	NCC	Thua-Thien Hue	Phu Vang	Electricity	SPL I	Phu Dien Commune Electric Network
1004	NCC	Thua-Thien Hue	Phu Loc	Electricity	SPL I	Loc Vinh Commune Electric Network
1005	NCC	Thua-Thien Hue	Phu Vang	Electricity	SPL II	Vinh Ha Commune Electric Line
1006	NCC	Thua-Thien Hue	Huong Thuy	Electricity	SPL II	Duong Hoa War Zone Electric Line
1007	NCC	Thua-Thien Hue	Phu Vang	Electricity	SPL II	Vinh Thai Commune Electric Line
1008	NCC	Thua-Thien Hue	Huong Tra	Electricity	SPL II	Binh Dien Commune Electric Line
1009	NCC	Thua-Thien Hue	Phu Loc	Electricity	SPL II	Vinh My Commune Electric Line
1010	NCC	Thua-Thien Hue	Phong Dien	Electricity	SPL II	Bac Hien Commune Electric Line
1011	NCC	Thua-Thien Hue	Phu Loc	Electricity	SPL V	Electric Line in area 3 of Phu Loc Distric

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(19/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
1012	NCC	Thua-Thien Hue	NA	Water Supply	SPL I	Chan My Water Supply System
1013	NCC	Thua-Thien Hue	Phu Bai	Water Supply	SPL III	Phu Bai WSS
1014	NCC	Thua-Thien Hue	Nam Dong	Water Supply	SPL V	Khe Tre WSS
1015	NCC	Thua-Thien Hue	Phong Dien-Quang	Irrigation	SPL III	Phong Chuong-Cua Lac Irrigation System
1016	NCC	Thua-Thien Hue	Phong Dien	Irrigation	SPL V	Dien Hoa-Dien Hai Irrigation System
1017	MD	Tien Giang	Cho Gao Town	Road	SPL I	Cho Gao Town Road
1018	MD	Tien Giang	NA	Road	SPL I	Provincial Road No.867(Tan Phuoc-Chau Thanh)
1019	MD	Tien Giang	NA	Road	SPL II	Provincial Road No.871
1020	MD	Tien Giang	Go Cong	Road	SPL III	Provincial Road No.862
1021	MD	Tien Giang	NA	Electricity	SPL I	Phu Tan Electric
1022	MD	Tien Giang	Tan Thoi	Electricity	SPL I	Tan Thoi Electric
1023	MD	Tien Giang	NA	Electricity	SPL I	Long Hung Electric
1024	MD	Tien Giang	NA	Electricity	SPL II	Tan Thoi Commune Electric Line
1025	MD	Tien Giang	NA	Electricity	SPL II	Thanh My Commune Electric Line
1026	MD	Tien Giang	NA	Electricity	SPL II	Binh Xuan Commune Electric Line
1027	MD	Tien Giang	Cai Be	Electricity	SPL III	My Loi A Commune Electric Line
1028	MD	Tien Giang	Cai Lay	Electricity	SPL III	Tan Hoi Commune Electric Line
1029	MD	Tien Giang	Chau Thanh	Electricity	SPL III	Diem Hy Commune Electric Line
1030	MD	Tra Vinh	Tra Vinh Township	Road	SPL I	Urban Road of Tra Vinh Township, 30Rds.
1031	MD	Tra Vinh	Tra Vinh Township	Road	SPL II	Urban Road of Tra Vinh Township, 28Rds.
1032	MD	Tra Vinh	Tieu Can	Road	SPL II	Provincial Road No.912
					SPL III	Provincial Road No.912
					SPL IV	Provincial Road No.912
1033	MD	Tra Vinh	Cau Ngang	Road	SPL III	Thanh Son - Hiep My Dong Road
1034	MD	Tra Vinh	Cang Long, Chau	Road	SPL IV	District Road No.8 & At Ech Bridge
1035	MD	Tra Vinh	Cau Ke	Road	SPL IV	Bo Xe and Thanh Phu bridges in Road No. 911
1036	MD	Tra Vinh	Cang Long, Tra Cu, Tieu Can	Road	SPL V	Access roads to center of Huyen Hoi, Kim Son, Tan Hoa, Dai Phuc communes
1037	MD	Tra Vinh	NA	Electricity	SPL I	Ham Giang Electric Network
1038	MD	Tra Vinh	NA	Electricity	SPL II	Ham Giang Electric Network
1039	MD	Tra Vinh	NA	Electricity	SPL III	Cau Quan Commune Electric Line
1040	MD	Tra Vinh	Duyen Hai	Electricity	SPL III	Long Toan Commune Electric Line
1041	MD	Tra Vinh	Cau Ke	Electricity	SPL III	Hoa An Commune Electric Line
1042	MD	Tra Vinh	Cang Long	Electricity	SPL III	My Cam Commune Electric Line
1043	MD	Tra Vinh	Tieu Can	Water Supply	SPL IV	Cau Quan WSS
1044	MD	Tra Vinh	Cau Ke	Water Supply	SPL IV	Cau Ke WSS
1045	MD	Tra Vinh	Cau Ngang	Water Supply	SPL V	Widening and Upgrading Treatment Station in My Long-Cau Ngang District
1046	MD	Tra Vinh	Cang Long	Irrigation	SPL IV	Khu B1-Lang The Irrigation Canal
1047	MD	Tra Vinh	Chau Thanh	Irrigation	SPL V	Lang The Irrigation Canal
1048	NE	Tuyen Quang	Ham Yen-Chiem Hoa	Road	SPL I	Provincial Road 176 (km0-km23.5)
			Chiem Hoa-Na Hang		SPL II	Provincial Road 176 (km39-km58.055)
					SPL III	Provincial Road 176
1049	NE	Tuyen Quang	Ham Yen	Road	SPL III	Khau Lang - Cao Duong Road
1050	NE	Tuyen Quang	Chiem Hoa	Road	SPL IV	Phuc Thinh - Trung Ha Road
1051	NE	Tuyen Quang	Na Hang	Road	SPL IV	Thuong Lam - Lang Can Road
1052	NE	Tuyen Quang	Chiem Hoa	Road	SPL V	Duc Thinh - Hoa An Road
1053	NE	Tuyen Quang	Yen Son	Road	SPL V	Tu Quan Quy Quan Road
1054	NE	Tuyen Quang	Tuyen Quan Town	Electricity	SPL I	Tuyen Quang Town-Dao Vien-Dong Da Electric Network
1055	NE	Tuyen Quang	Yen Son	Electricity	SPL I	Trung Son-Trung Yen Electric Network
1056	NE	Tuyen Quang	Chiem Hoa	Electricity	SPL II	35KV-Ngoc Hoi-Kien Dai Electric Line
1057	NE	Tuyen Quang	Chiem Hoa	Electricity	SPL II	35KV-Quang Linh-Tri Phi-Linh Phu Electric Line
1058	NE	Tuyen Quang	Chiem Hoa	Electricity	SPL III	Vinh Quang -Binh Nhan Transfomer and Electric Line
1059	NE	Tuyen Quang	Ham Yen	Electricity	SPL III	Tan Yen-Bach Nha Transfomer and Electric Line
1060	NE	Tuyen Quang	Son Duong	Electricity	SPL IV	Electric Line and Transfomer in Binh Yen Commune
1061	NE	Tuyen Quang	Yen Son	Electricity	SPL V	Construction TFS Station in Hung Loi-Trung Minh Commune
1062	NE	Tuyen Quang	Tuyen Hoa	Irrigation	SPL IV	Minh An Pump Station
1063	NE	Tuyen Quang	Chiem Hoa	Irrigation	SPL V	Irrigation System in Yen Lap Commune
1064	MD	Vinh Long	NA	Road	SPL I	Mau Than Road
1065	MD	Vinh Long	NA	Road	SPL I	Hung Dao Vuong Road
1066	MD	Vinh Long	Tam Binh, Tra On	Road	SPL II	Provincial Road No.33(Tam Binh-Tra On)
1067	MD	Vinh Long	Vung Liem, Long Ho	Road	SPL II	Provincial Road No.31(Vung Liem-Long Ho)

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.2 Sub-Project (Infrastructure) List

(20/20)

No. for Infrastructure	Region	Province	District	Sector	Phase	Sub-Project
1068	MD	Vinh Long	Long Ho	Road	SPL III	Long Ho-Cai Ngang Road
1069	MD	Vinh Long	Long Ho	Electricity	SPL I	Phu Duc Electric
1070	MD	Vinh Long	Binh Minh	Electricity	SPL I	KhanhTiet-Khanh Tu-Thuan An Electric Network
1071	MD	Vinh Long	Vung Liem	Electricity	SPL II	Trung An-Aa Kinh Commune Electric Line
1072	MD	Vinh Long	Vung Liem	Electricity	SPL II	Trung An Phu Cuong Commune Electric Line
1073	MD	Vinh Long	Tra On	Water Supply	SPL III	Tra On WSS
1074	MD	Vinh Long	Tam Binh	Water Supply	SPL V	Cai Ngang WSS
1075	MD	Vinh Long	Tra On	Irrigation	SPL V	Rach Tra-Thien My Irrigation Canal
1076	RRD	Vinh Phuc	Vinh Yen City	Road	SPL I	Urban Road (Vinh Yen Town)
1077	RRD	Vinh Phuc	NA	Road	SPL I	Luc Ha - Tay Thien Road
1078	RRD	Vinh Phuc	Yen Lac	Road	SPL I	Quan Tien - Lung Ha Road
1079	RRD	Vinh Phuc	Phuc Yen	Road	SPL I	Road to Hai Ba Trung Temple
1080	RRD	Vinh Phuc	Vinh Tuong	Road	SPL II	Road No.304(Vu Di - Hoi Thinh)
					SPL III	Road No.304 (Hoi Thinh-Vu Di-Vinh Thinh)
1081	RRD	Vinh Phuc	Binh Xuyen	Road	SPL II	Road around Dai Lai Lake
1082	RRD	Vinh Phuc	Binh Xuyen	Road	SPL II	Trung My - Huong Canh Road
					SPL III	Huong Canh-Trung My Road
1083	RRD	Vinh Phuc	Lap Thach	Road	SPL II	Quang Yen - Phu Hau Road
1084	RRD	Vinh Phuc	Vinh Tuong	Road	SPL II	Vu Di-Tu Trung-Dai Tu Road
					SPL III	Vu Di-Dai Tu Road
1085	RRD	Vinh Phuc	TC-GB	Road	SPL III	Road No.303B
1086	RRD	Vinh Phuc	Lap Thach	Road	SPL IV	Ngoc My - Quang Son Road
1087	RRD	Vinh Phuc	Binh Xuyen	Road	SPL V	Thien Ke - Trung My - Thanh Lanh dike Road
1088	RRD	Vinh Phuc	Lap Thach	Electricity	SPL I	Quang Son Electric Line
1089	RRD	Vinh Phuc	Lap Thach	Electricity	SPL I	Xuan Hoa Electric Line
1090	RRD	Vinh Phuc	Yen Lac Town	Electricity	SPL I	Yen Lac Town Electric Line
1091	RRD	Vinh Phuc	Tam Dao	Electricity	SPL II	Huong Dao Commune Electric Line
1092	RRD	Vinh Phuc	Vinh Tuong	Electricity	SPL II	NguKiem-VinhThinh Commune Electric Line
1093	RRD	Vinh Phuc	Tam Dao	Electricity	SPL II	Bo Ly Commune Electric Line
1094	RRD	Vinh Phuc	Lap Thach	Electricity	SPL IV	Electric Network in 4 Communes in Lap Thach District
1095	RRD	Vinh Phuc	Tam Duong	Electricity	SPL IV	Electric Network in 6 Communes in Tam Duong District
1096	RRD	Vinh Phuc	Yen Lac	Water Supply	SPL III	Yen Lac WSS
1097	RRD	Vinh Phuc	Vinh Tuong	Water Supply	SPL V	Vinh Tuong WSS
1098	RRD	Vinh Phuc	Lap Thach	Irrigation	SPL V	Don Nhan Irrigation System
1099	NE	Yen Bai	Ha Giang Town	Road	SPL I	Nguyen Thai Hoc Road
					SPL II	Nguyen Thai Hoc Road
1100	NE	Yen Bai	Tran Yen	Road	SPL I	Yen Bai - Khe Sang Road
					SPL I	Yen Bai - Khe Sang Road
					SPL II	Yen Bai - Khe Sang(Yen Bai - Mau A)
					SPL III	Yen Bai Khe Sang Road
1101	NE	Yen Bai	Tran Yen	Road	SPL II	Huong Ly - Van Phu Road
					SPL IV	Yen Bai - Khe Sang Road
1102	NE	Yen Bai	Tram Tau	Road	SPL II	Van Chan - Tram Tau Road
1103	NE	Yen Bai	Van Yen	Road	SPL V	Dong An - Phong Du Ha Road
1104	NE	Yen Bai	Yen Binh	Road	SPL V	Hoang Thi Road
1105	NE	Yen Bai	Van Chan	Electricity	SPL I	Nghia Tam Commune Electric Line
1106	NE	Yen Bai	Van Chan	Electricity	SPL II	Nghia Tam Commune Electric Line
1107	NE	Yen Bai	Tram Tau	Electricity	SPL III	Phinh Ho Commune Electric Line
1108	NE	Yen Bai	Tran Yen	Electricity	SPL III	Cuong Thinh Commune Electric Line
1109	NE	Yen Bai	Tran Yen	Electricity	SPL III	Minh Quan Commune Electric Line
1110	NE	Yen Bai	Van Chan	Electricity	SPL III	Nghia Loi Commune Electric Line
1111	NE	Yen Bai	Van Chan	Electricity	SPL III	Tan Thinh Commune Electric Line
1112	NE	Yen Bai	Luc Yen	Electricity	SPL V	Lam Thuong Electric Network
1113	NE	Yen Bai	Van Yen	Water Supply	SPL III	Mau A Water Supply System
1114	NE	Yen Bai	Tram Tau	Water Supply	SPL V	Tram Tam Town WSS
1115	NE	Yen Bai	Van Chan	Irrigation	SPL V	Khe The Irrigation System

Region: NE-North East Mountainous, NW-North West Mountainous, RRD-Red River Delta

NCC-North Central Coast, SCC-South Central Coast, CH-Central Highland, SE-South East, MD-Mekong Delta

Appendix 1.3 Number of Sub-Projects and Infrastructures by Province

(1/2)

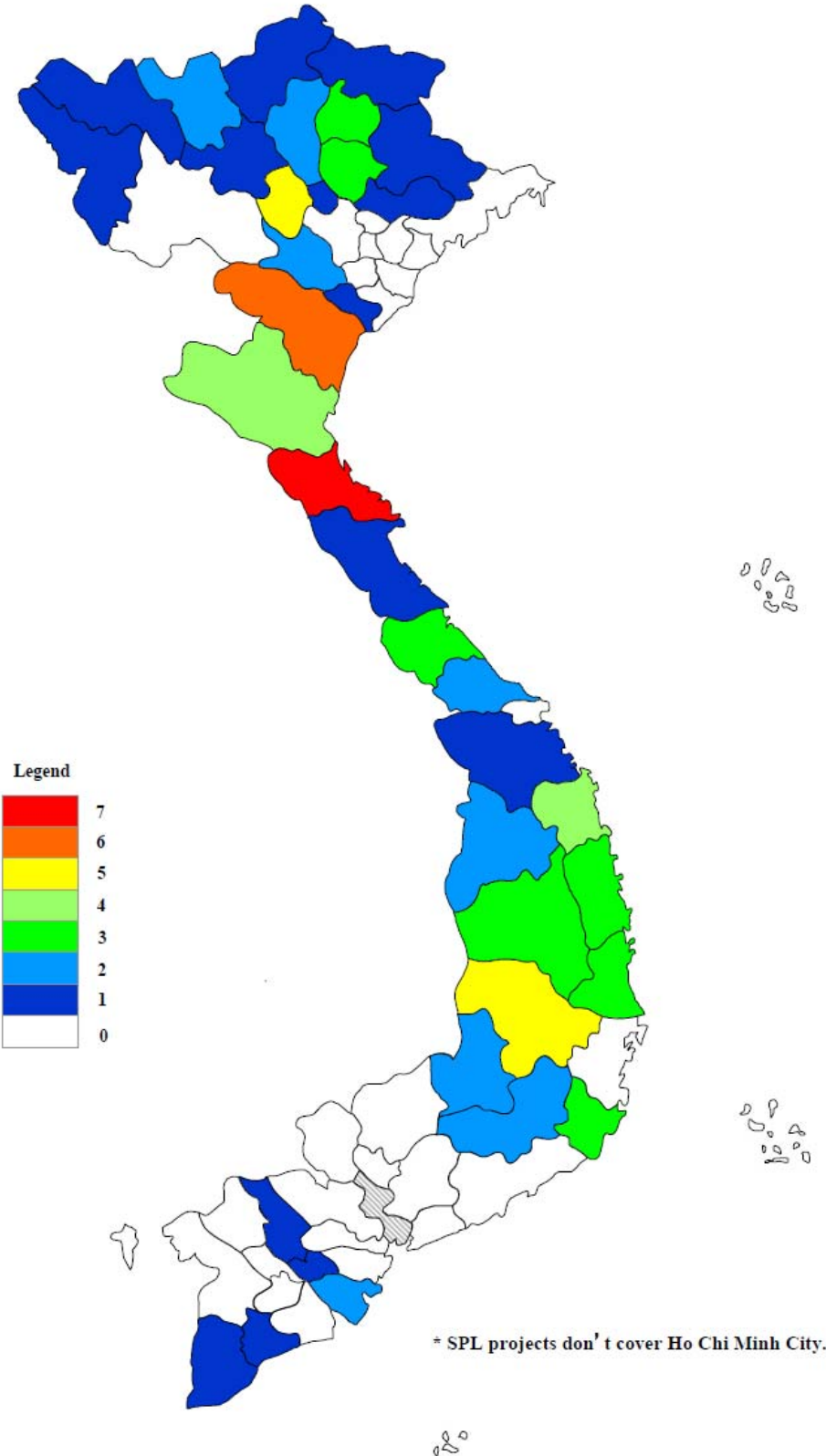
Province	Road		Electricity Distribution		Water Supply		Irrigation		Total	
	sub-project	infra-structure	sub-project	infra-structure	sub-project	infra-structure	sub-project	infra-structure	sub-project	infra-structure
An Giang	4	4	16	16	1	1	0	0	21	21
Ba Ria Vung Tau	3	2	4	4	0	0	0	0	7	6
Bac Giang	10	8	23	23	1	1	1	1	35	33
Bac Kan	13	11	5	5	1	1	3	3	22	20
Bac Lieu	5	4	6	6	1	1	1	1	13	12
Bac Ninh	10	9	8	8	1	1	0	0	19	18
Ben Tre	5	3	5	5	0	0	0	0	10	8
Binh Dinh	6	6	11	11	1	1	4	4	22	22
Binh Duong	1	1	4	4	0	0	0	0	5	5
Binh Phuoc	7	4	7	7	0	0	0	0	14	11
Binh Thuan	7	5	15	15	0	0	0	0	22	20
Ca Mau	6	4	6	6	2	4	1	1	15	15
Can Tho	4	3	0	0	0	0	0	0	4	3
Cao Bang	11	8	13	13	0	0	1	1	25	22
Da Nang	2	2	7	7	0	0	0	0	9	9
Dac Lak	10	9	9	9	2	2	5	5	26	25
Dak Nong	4	4	4	4	0	0	2	2	10	10
Dien Bien	11	7	1	1	3	3	1	1	16	12
Dong Nai	2	2	0	0	0	0	0	0	2	2
Dong Thap	4	3	8	8	1	1	1	1	14	13
Gia Lai	8	7	11	11	2	2	3	3	24	23
Ha Giang	11	8	5	5	3	3	1	1	20	17
Ha Nam	12	9	11	11	0	0	0	0	23	20
Ha Noi (Ha Tay)	11	8	8	8	1	1	0	0	20	17
Ha Tinh	17	14	26	26	6	5	7	7	56	52
Hai Duong	8	6	8	8	1	1	0	0	17	15
Hai Phong	9	8	1	1	1	1	0	0	11	10
Hau Giang	1	1	4	4	1	1	0	0	6	6
Hoa Binh	8	4	11	11	0	0	2	2	21	17
Hung Yen	11	10	7	7	0	0	0	0	18	17
Khanh Hoa	2	2	8	8	0	0	0	0	10	10
Kien Giang	5	5	4	4	1	1	0	0	10	10
Kon Tum	6	4	7	7	3	3	2	2	18	16
Lai Chau	7	6	7	7	3	4	1	1	18	18
Lam Dong	8	7	11	11	2	2	2	2	23	22
Lang Son	9	6	8	8	1	1	1	1	19	16
Lao Cai	11	6	14	14	2	2	2	2	29	24
Long An	4	3	3	3	0	0	0	0	7	6
Nam Dinh	14	11	15	15	0	0	0	0	29	26
Nghe An	15	13	13	13	4	4	4	4	36	34
Ninh Binh	15	12	9	9	1	1	1	1	26	23
Ninh Thuan	8	6	11	11	1	1	3	3	23	21
Phu Tho	16	14	19	19	5	5	5	5	45	43
Phu Yen	7	5	9	9	2	2	4	3	22	19
Quang Binh	8	7	10	10	2	2	1	1	21	20
Quang Nam	12	11	11	11	4	3	1	1	28	26
Quang Ngai	10	9	9	9	2	2	4	4	25	24
Quang Ninh	8	5	1	1	2	2	0	0	11	8
Quang Tri	16	13	13	13	6	6	3	3	38	35
Soc Trang	9	8	7	7	2	2	0	0	18	17
Son La	9	7	10	10	2	2	0	0	21	19

Appendix 1.3 Number of Sub-Projects and Infrastructures by Province

(2/2)

Province	Road		Electricity Distribution		Water Supply		Irrigation		Total	
	sub-project	infra-structure	sub-project	infra-structure	sub-project	infra-structure	sub-project	infra-structure	sub-project	infra-structure
Tay Ninh	4	3	4	4	1	1	0	0	9	8
Thai Binh	9	5	8	8	1	1	0	0	18	14
Thai Nguyen	10	9	8	8	2	2	3	3	23	22
Thanh Hoa	16	13	10	10	6	6	6	6	38	35
Thua-Thien Hue	7	4	10	10	3	3	2	2	22	19
Tien Giang	4	4	9	9	0	0	0	0	13	13
Tra Vinh	9	7	6	6	3	3	2	2	20	18
Tuyen Quang	8	6	8	8	0	0	2	2	18	16
Vinh Long	5	5	4	4	2	2	1	1	12	12
Vinh Phuc	15	12	8	8	2	2	1	1	26	23
Yen Bai	11	6	8	8	2	2	1	1	22	17
Total	518	408	526	526	96	97	85	84	1225	1115

Appendix 3.1 Distribution of the Number of Infrastructures



Irrigation Sector

Appendix 3.2 Record of Receiving the Replies to the Questionnaires

Province	Road Sector			Electricity Sector			Water Supply Sector			Irrigation Sector		
	Total.Sub-project.No	Total Rep	Sub-project III-V	Total.Sub-project.No	Total Rep	Sub-project III-V	Total.Sub-project.No	Total Rep	Sub-project III-V	Total.Sub-project.No	Total Rep	Sub-project III-V
An Giang	4	4	1	16	4	4	4	1	1	1	0	0
Ba Ria V.Tau	3	3	1	4		4					0	0
Bac Giang	10	7	2	23	5	5	5	1	1	1	1	1
Bac Kan	13	8	7	5		3		1	1		3	3
Bac Lieu	5	5	3	6		4		1	1	1	1	1
Bac Ninh	10	1	2	8		0		1	1		0	0
Ben Tre	5	2	2	5	3	3	3				0	0
Binh Dinh	6	6	1	11		5		1	1	1	4	3
Binh Duong	1		0	4		2					0	0
Binh Phuoc	6	5	2	7	5	4	4				0	0
Binh Thuan	7	6	2	15		4					0	0
Ca Mau	5	2	2	6	6	4	4	2	2	2	1	1
Can Tho	4	4	0	0	0	0	0				0	0
Cao Bang	11	9	7	13	13	10	10				1	1
Da Nang	2	2	0	7		4					0	0
Dac Lak	10	10	6	9	3	3	3	2	2	1	5	5
Dak Nong	4	4	4	4		2					2	2
Dien Bien	11	11	8	1		0		3	3	3	1	1
Dong Nai	2	2	1	0	0	0	0				0	0
Dong Thap	4	4	2	8		4		1	1	1	1	1
Gia Lai	7	7	4	8	1	4	1	2	1	1	3	2
Ha Giang	11	3	5	5	2	3	2	3	3	2	1	1
Ha Nam	12	4	3	11		0					0	0
Ha Noi	12		2	8		0		1	1	1	0	0
Ha Tinh	17	17	8	26		5		5	3	4	7	1
Hai Duong	8	6	1	8		0		1	1	1	0	0

Appendix 3.2 Record of Receiving the Replies to the Questionnaires

Province	Road Sector			Electricity Sector			Water Supply Sector			Irrigation Sector		
	Total.Sub-project.No	Total Rep	Sub-project III-V	Total.Sub-project.No	Total Rep	Sub-project III-V	Total.Sub-project.No	Total Rep	Sub-project III-V	Total.Sub-project.No	Total Rep	Sub-project III-V
Hai Phong	9	9	2	1		0	0	1	1	1	0	0
Hau Giang	1		1	4		1		1	1	1	0	0
Hoa Binh	7	7	3	11	4	4	3				2	2
Hung Yen	11		4	7		0	0				0	0
Khanh Hoa	2	2	0	8		3					0	0
Kien Giang	5	5	2	4		1		1	1	1	0	0
Kon Tum	6	6	2	6		4		3			2	2
Lai Chau	7	7	5	4	2	2	2	3	3	3	1	1
Lam Dong	8	8	3	11		4		2	2	1	2	0
Lang Son	9	9	5	8	1	4	1	1	1	1	1	1
Lao Cai	11	11	6	17	15	5	5	2	2	2	2	2
Long An	4		0	3		0	0				0	0
Nam Dinh	14	11	3	15		0	0				0	0
Nghe An	15	4	8	13		7		4	1	3	4	4
Ninh Binh	15	9	4	9		0	0	1		0	1	1
Ninh Thuan	8	7	4	11		4		1		1	3	3
Phu Tho	16	16	9	19	5	5	5	5	4	4	5	5
Phu Yen	7	7	4	9	1	3	1	2	2	2	4	1
Quang Binh	8	8	2	10	1	1	1	2	2	2	1	1
Quang Nam	12	12	5	11		5		4		3	1	1
Quang Ngai	10	10	4	9		0		2	2	2	4	4
Quang Ninh	8	8	2	1		0	0	2	2	1	0	0
Quang Tri	16	15	9	13	8	7	7	6	4	4	3	3
Soc Trang	9	5	7	7	4	3	3	2	2	2	0	0
Son La	9		5	10		5		2	2	2	0	0
Tay Ninh	4		1	4		0	0	1	1	1	0	0

Appendix 3.2 Record of Receiving the Replies to the Questionnaires

(3/3)

Province	Road Sector			Electricity Sector			Water Supply Sector			Irrigation Sector		
	Total.Sub-project.No	Total Rep III-V	Sub-project III-V	Total.Sub-project.No	Total Rep III-V	Sub-project III-V	Total.Sub-project.No	Total Rep III-V	Sub-project III-V	Total.Sub-project.No	Total Rep III-V	Sub-project III-V
Thai Binh	9		2	8		0	1		1	0	0	0
Thai Nguyen	10	7	6	8	4	2	2	2	2	3		3
Thanh Hoa	16	6	8	10	4	1	6	2	6	6	2	6
Thua-Thien Hue	7	7	1	10	1	1	3	3	2	2	1	2
Tien Giang	4	3	1	9	1	3				0		0
Tra Vinh	9	7	6	6	6	4	3	2	3	2	1	2
Tuyen Quang	8	6	6	8	4	4				2		2
Vinh Long	5	5	1	4	1	0	2	2	2	1		1
Vinh Phuc	15		6	8		0	2	2	0	1	1	1
Yen Bai	10	6	4	8	4	6	2	2	2	1	1	1
Total	512		217	522		166	96		80	85		85
Replied (No.of project)	355	355	175	92	175	70	71	71	60	42	42	42
Replied (%)	69.34%		80.65%	17.62%		42.17%	73.96%		75.00%	49.41%		49.41%

Appendix 3.3 Questionnaire

I. General Information

Name of Liaison with DPI/MPI: _____.

SPL Phase:		Name of the Project:	
Province:	District/City:	Commune:	
Organization in Charge:	please select: <input type="checkbox"/> Project Implementation (Project Owner) <input type="checkbox"/> Operation <input type="checkbox"/> Maintenance and Management	Name of the Organization: _____ Address: Tel / Fax: E-mail:	
Date:		Office Information:	Tel:
Respondent:			Fax:
Cell phone #:			E-mail:
Year of Construction Works Commencement:		Project Owner in the Implementation stage:	
Year of Construction Works Completion:		Material Cost (BVND):	
Construction Cost (BVND):		Domestic Fund (BVND):	
Total investment Cost (BVND):		JBIC Fund (BVND):	

I. Farming Aspects of the Entire Project

1) Land Holders and Tenant Farmers of Beneficiaries of the Entire Project, 2009:

Tenure System:	Number of Households	Average Farming Area (ha)	Average Number of Lots
Land Holders:			
Tenant Farmers:			

Land Holders and Tenant Farmers at the Same Time:			
---	--	--	--

2) Crop Calendar of the Entire Project, 2009:

Dry Season (Month:.....to.....)

Crop (Sample)	Describe Calendar											
	J	F	M	A	M	J	J	A	S	O	N	D
1.												
2.												
3.												
4.												

Note) Indicate from transplanting/planting to harvesting only (no need to show land preparation)

Crop (Sample)	Describe Calendar											
	J	F	M	A	M	J	J	A	S	O	N	D
1.												
2.												
3.												
4.												

Wet Season (Month:.....to.....)

Note) Indicate from transplanting/planting to harvesting only (no need to show land preparation)

3) Necessary Technical Support from the Government and Others, 2009:

Necessary Support from the Government and Others
1.
2.
3.

4) Facilities of the Entire Project, 2009:

Dam & Reservoir (1/2):

No	1	2
River Name:		
Dam Name:		
Construction Year:		
Basin Area (km2):		
Purpose of Dam (I, F, W, E, O) #1:		
Dam Type (E, R, Cn, Cb, O) #2:		
Dam Height (m):		
Dam Crest Elevation (EL. m):		
Dam Length (m):		
Dam Embankment Volume (m3):		
Total Storage Capacity (m3):		
Capacity for Irrigation (m3):		
Dead (Sand) Capacity (m3):		

Dam & Reservoir (2/2):

No	1	2
Reservoir Area (ha):		
Design Intake Discharge for Irrigation (m3/s):		
Water Intake Period (M/D to M/D):		
Irrigation Area (ha):		
Full Water Level (EL. m):		
Type of Spillway (S, C, O) #3:		
Total Cost (VND):		
Working Life (Year):		

#1: I=Irrigation, F=Flood, W=Water Supply, E=Electricity, O=Other

#2: E=Earth Fill, R=Rock Fill, Cn=Concrete, Cb=Combined, O=Other

#3: S=Side Overflow, C=Chute, O=Other

5) Headwork:

No	1	2
River name:		
Average Discharge of River during Dry Season (m ³ /s):		
Average Discharge of River during Wet Season (m ³ /s):		
Construction Year:		
Basin Area (km ²):		
Weir Materials (C, O) #1:		
Weir Height (m):		
Weir Crest Elevation (EL. m):		
Weir Length (m):		
Design Water Level (EL. m):		
Water Intake Period (M/D to M/D):		
Design Water Intake Discharge (m ³ /s):		
Irrigation Area (ha):		
Total Cost (VND):		
Working Life (Year):		

#1: C=C oncrete, O=Other

6) Pump Station for Irrigation:

No	1	2	3
Water Source (R, U) #1:			
Installation Year:			
Water Intake Period (M/D to M/D):			
Irrigation Area (ha):			
Motor or Engine (M, E) #2:			
Power (Unit: HP or KW):			
Number of Motors/ Engines:			
Pump Type (H, V, S, O) #3:			
Pump Diameter (mm):			
Number of Pumps:			
Total Pump Head (m):			
Design Discharge of This Station (lm ³ /min):			
Design Annual Operating Hours (hr/year):			

Total Cost (VND):			
Working Life (Year):			

#1: R=River Water, U=Underground Water #2: M=Motor, E=Engine

#3: H=Horizontal, V=Vertical, S=Submerged, O=Other

7) Irrigation Canal:

No	1	2	3	4	5	6	7	8	9
Canal Name:									
Main or Secondary or Tertiary (M, S, T) #1:									
Construction Year:									
Total Length (km):									
Canal Bed Width (m):									
Canal Height (m):									
Side Slope (n) #2:									
Longitudinal Gradient:									
Design Discharge of This Canal Portion (m ³ /s):									
Lining Materials (E, B, C, O) #3:									
Total Cost (VND) #4:									
Working Life (Year):									

#1: M=Main, S=Secondary, T=Tertiary #2: n as 1:n #3: E=Earth, B=Brick (covered by Mortar), C=Concrete, O=Other

#4: Includes the costs of major attached facilities (like bridges, diversion works, water measurement facilities and regulating structures, etc.), but not includes the costs of dams and reservoirs, headworks, pump stations, aqueducts and siphons.

8) Aquaduct:

No	1	2
Canal Name Installed:		
Year of Installation:		
Structure of Aquaduct (R, P, O) #1:		
Open or Closed (O, C) #2:		
Total Width or Outside Diameter (m):		
Total Height or Outside Diameter (m):		
Design Discharge of This Aquaduct (m ³ /s):		
Total Cost (VND):		

Working Life (Year):		
----------------------	--	--

#1: R=Rectangular, P=Pipe, O=Other #2: O=Open, C=Closed

9) Siphon:

No	1	2
Canal Name Installed:		
Year of Installation:		
Structure of Siphon (R, P, O) #1:		
Lowest Elevation of Siphon Bed (EL. m):		
Design Water Level at Inlet (EL. m):		
Design Water Level at Outlet (EL. m):		
Width or Outside Diameter (m):		
Height or Outside Diameter (m):		
Design Discharge of This Siphon (m ³ /s):		
Total Cost (VND):		
Working Life (Year):		

#1: R=Rectangular, P=Pipe, O=Other

10) On-Farm Facilities by Types:

No	1	2	3
Type #1:			
Year of Installation:			
Number:			
Average Design Discharge of This Type (m ³ /s):			
Average Cost of This Type (VND):			
Working Life (Year):			

#1: Type Name Used in the Design, etc.

11) Drainage Canal:

No	1	2	3	4	5	6	7	8	9
Canal Name:									
Main or Secondary or Tertiary (M, S, T) #1:									
Construction Year:									
Drainage Area (ha):									
Total Length (km):									

Canal Bed Width (m):									
Canal Height (m):									
Side Slope (n) #2:									
Longitudinal Gradient:									
Design Discharge of This Canal Portion (m ³ /s):									
Lining Materials (E, B, C, O) #3:									
Total Cost (VND) #4:									
Working Life (Year):									

#1: M=Main, S=Secondary, T=Tertiary

#2: n as 1:n

#3: E=Earth, B=Brick (covered by Mortar), C=Concrete, O=Other

#4: Includes the costs of major attached facilities (like bridges and culverts, etc.), but not includes the costs of pump stations, sluiceways, flood dykes and tide gates.

12) Drainage Pump Station:

No	1	2
Name of Outlet River:		
Design Water Level of River (EL. m):		
Year of Installation:		
Motor or Engine (M, E) #1:		
Power (Unit: HP or KW):		
Number of Motors/ Engines:		
Pump Type (H, V, S, O) #2:		
Pump Diameter (mm):		
Number of Pumps:		
Pump Head (m):		
Design Discharge of This Station (m ³ /min):		
Drainage Area (ha):		
Design Annual Operating Hours (hr/year):		
Total Cost (VND):		
Working Life (Year):		

#1: M=Motor, E=Engine

#2: H=Horizontal, V=Vertical, S=Submerged, O=Other

13) Sluiceway:

No	1	2	3
Name of Outlet River:			
Gate Power Type (M, E, O) #1:			
Year of Installation:			
Design Outside Water Level (EL. m):			
Design Inside Water Level (EL. m):			
Gate Height (m):			
Gate Width (m):			
Number of Gates:			
Gate Sill Elevation (EL. m):			
Design Discharge of This Sluiceway (m ³ /s):			
Drainage Area (ha):			
Total Cost (VND):			
Working Life (Year):			

#1: M=annual, E=Electricity, O=Other

14) Flood Dyke:

No	1	2	3
Name of River Installed:			
Year of Installation:			
Design Water Level (EL. m):			
Length (m):			
Height (m):			
Upper Width (m):			
Bottom Width (m):			
River Side Slope (n) #1:			
Inside Slope (n) #1:			
Protected Area (ha):			
Total Cost (VND):			
Working Life (Year):			

#1: n as 1:n

15) Tide Gate:

No	1	2	3
Gate Power Type (M, E, O) #1:			
Year of Installation:			
Design Sea Level (EL. m):			
Design Discharge of This Tide gate (m ³ /s):			
Gate Height (m):			
Gate Width (m):			
Number of Gates:			
Gate Sill Elevation (EL. m):			
Protected Area (ha):			
Total Cost (VND):			
Working Life (Year):			

#1: M=manual, E=Electricity, O=Other

16) Issues of the Major Facilities:

Facility	Issues
Dam & Reservoir:	
Headworks:	
Irrigation Pump Station:	
Main Irrigation Canal:	
Secondary Irrigation Canal:	
Tertiary Irrigation Canal:	
Aqueduct:	
Siphon:	
Division Works:	
Water Measurement Facility:	
Regulating Structure:	
On-Farm Facilities:	
Main Drainage Canal:	
Secondary Drainage Canal:	
Tertiary Drainage Canal:	
Drainage Pump Station:	
Sluiceway:	
Flood Dyke:	
Tide Gate:	

Could you please provide us the following drawings (showing SPL portion)

Facility	Required Drawing (As Built Drawing)
Entire Project:	General Plan
Dam & Reservoir:	Plan and Typical Cross Section
Headworks:	Plan and Typical Cross Section
Irrigation Pump Station:	Plan and Typical Cross Section
Main Irrigation Canal:	Plan, Longitudinal and Cross Section
Secondary Irrigation Canal:	Plan and Cross Section
Tertiary Irrigation Canal:	Plan and Cross Section
Aqueduct:	Plan, Longitudinal and Cross Section
Siphon:	Plan, Longitudinal and Cross Section
Division Works:	Plan and Cross Section
Water Measurement Facility:	Plan and Cross Section
Regulating Structure:	Plan and Cross Section
On-Farm Facilities:	Plan and Cross Section
Drainage Canal:	Plan and Typical Cross Section
Drainage Pump Station:	Plan and Typical Cross Section
Sluiceway:	Plan and Typical Cross Section
Flood Dyke:	Plan and Typical Cross Section
Tide Gate:	Plan and Typical Cross Section

II. O&M of the Entire Project

1) Date of Handed over:

Date of Handed Over	Handed Over to

2) Water Right:

- Check
- Acquired/
- Not Acquired/

If Acquired, Registered Quantity (m³/s).....,

Water Intake Period.....

3) Organization of O&M of the Facilities, 2009:

Facility	O&M Organization
Dam & Reservoir:	
Headworks:	
Irrigation Pump Station:	
Main Irrigation Canal:	
Secondary Irrigation Canal:	
Tertiary Irrigation Canal:	
Aqueduct:	
Siphon:	
Division Works:	
Water Measurement Facility:	
Regulating Structure:	
On-Farm Facilities:	
Main Drainage Canal:	
Secondary Drainage Canal:	
Tertiary Drainage Canal:	
Drainage Pump Station:	
Sluiceway:	
Flood Dyke:	
Tide Gate:	

4) O&M Organization of the Major Facilities, 2009 (like irrigation management company, enterprise, etc.):

Name:	
Address:	
Tel:	
Fax:	
Email:	
Establishment Year:	
Function:	
Number of Members:	
Equipment of this Organization:	

Duties/Responsibility of this Organization

Duties/Responsibility
1.
2.
3.
4.

Please provide us with Organization Chart.

5) O&M Organization of the On-Farm Facilities, 2009 (like agricultural production cooperative, water user association, etc.):

Name:	
Address:	
Tel:	
Fax:	
Email:	
Establishment Year:	
Function:	
Number of Members:	
Equipment of this Organization:	

Duties/Responsibility of this Organization

Duties/Responsibility
1.
2.
3.
4.

Please provide us with Organization Chart

6) O&M Activities of the Major Facilities, 2009:

How would you conduct O&M? Please select from the following.

- O&M Manual
- Empirical Method
- Other (.....)

If you have the O&M Manual, what are its component items?

Component Items of O&M Manual
1.
2.
3.
4.

Please provide us with the O&M Manual.

Do you have O&M Plan? Yes/No

If you have the O&M Plan, what are its component items?

Component Items of O&M Plan
1.
2.
3.
4.

Please provide us with the O&M Plan.

Do you have Operation Record? Yes/No

If you have the Operation Record, what are its component items?

Component Items of Operation Record
1.
2.
3.
4.

Please provide us with the Operation Record.

Do you have Maintenance Record? Yes/No

If you have the Maintenance Record, what are its component items?

Component Items of Maintenance Record
1.
2.
3.
4.

Please provide us with the Maintenance Record.

7) O&M Activities of the On-Farm Facilities, 2009:

How would you conduct O&M?

- O&M Manual
- Empirical Method
- Other (.....)

If you have the O&M Manual, what are its component items?

Component Items of O&M Manual
1.
2.
3.
4.

Please provide us with the O&M Manual.

Do you have O&M Plan? Yes/No

If you have the O&M Plan, what are its component items?

Component Items of O&M Plan
1.
2.
3.
4.

Please provide us with the O&M Plan.

Do you have Operation Record? Yes/No

If you have the Operation Record, what are its component items?

Component Items of Operation Record
1.
2.
3.
4.

Please provide us with Operation Record.

Do you have Maintenance Record? Yes/No

If you have the Maintenance Record, what are its component items?

Component Items of Maintenance Record
1.
2.
3.
4.

Please provide us with the Maintenance Record.

8) Irrigation Water Fee, 2009:

Irrigation Water Fee (in proportion to area):VND/ha

Exemption Cases of Irrigation Water Fee (in proportion to area):

Irrigation Water Fee (annual):VND/year

Exemption Cases of Irrigation Water Fee (annual):

Collection Rate of Irrigation Water Fee

Year	Collection Rate (%)	Measures against Nonpayment Persons
2009		

9) Finance of O&M Organization of the Major Facilities, 2009:

O&M Cost of the Organization (VND)

Year	*) Year by Year Operational (Itemize)	Short Term Periodical (Itemize)	Labor Service and Others (Itemize)
2009	Total..... (.....)	Total..... (.....)	Total..... (.....)

*) Year by Year Operational: operation, maintenance, inspection costs; electricity and fuel costs; repairmen and consumable goods

Amount of Subsidy to the Organization

Year	Sources of Subsidy	Subsidy Amount (Unit)
2009(.....)

Annual Revenue and Expenditures of the Organization (Unit.....)

Year	Annual Revenue (Itemize)	Annual Expenditures (Itemize)
2009	Total..... (.....)	Total..... (.....)

10) Finance of O&M Organization of the On-Farm Facilities, 2009:

O&M Cost of the Organization (VND)

Year	*) Year by Year Operational (Itemize)	Short Term Periodical (Itemize)	Labor Service and Others (Itemize)
2009	Total..... (.....)	Total..... (.....)	Total..... (.....)

*) Year by Year Operational: operation, maintenance, inspection costs; electricity and fuel costs; repairmen and consumable goods

Amount of Subsidy to the Organization

Year	Sources of Subsidy	Subsidy Amount (Unit)
2009(.....)

Annual Revenue and Expenditures of the Organization (Unit.....)

Year	Annual Revenue (Itemize)	Annual Expenditures (Itemize)
2009	Total..... (.....)	Total..... (.....)

11) Necessary Support from the Government and Others:

Necessary Support from the Government and Others
1.
2.
3.

12) Issues on Farmers' Participation to O&M:

Issues on Farmers' Participation
1.
2.
3.

13) Issues between O&M Organizations of the Major Facilities and On-Farm Facilities:

Issues on Farmers' Participation
1.
2.

III. Problems and Damages of the Entire Project

1) Damages Caused by Poor Quality of Construction after Completion:

Year/Month of Occur	Damaged Facility	Contents of Damage	Effects of Damage	Applied Countermeasures
.../....				
.../....				
.../....				
.../....				
.../....				

2) Problems Relating to On-Farm Development (e.g., mismatching of timing between major facility and on-farm development, water shortage in the downstream, etc.):

Year/Month of Occur	Contents of Problem	Effects of Problems	Applied Countermeasures
2009/.....			
2008/... ..			
2007/			
2006/			
2005/.....			

3) Shortage of Discharge of Water Source River:

	Month of Occurrence	Average Discharge around the Occurrence Month (m ³ /s)	Actual Irrigated Area around the Occurrence Month (ha)
2009			
2008			
2007			
2006			
2005			

4) Drought Damages:

Year/Month of Occur	Period of No Rainfall (days)	Damaged Area (ha)	Damage Amount (Unit)
2009/.....		(.....)
2008/...(.....)
2007/...(.....)
2006/(.....)
2005/(.....)

5) Drainage Damages (annual maximum damages, caused by rainfall, not caused by river overflow):

Year/Month of Occur	Rainfall Amount (Unit)	Inundation Depth (cm)	Inundation Area (ha)	Inundation Period (hour)	Damage Amount (Unit)
2009/..... (.....)			(.....)
2008/... (.....)			(.....)
2007/... (.....)			(.....)
2006/ (.....)			(.....)
2005/..... (.....)			(.....)
...../..... (Before Project Conditions) (.....)			(.....)

6) Flood Damages (annual maximum, caused by river overflow):

Year/Month of Occur	Rainfall Amount (Unit)	Name of Overflow River	Damage Area (ha)	Damage Amount (Unit)
2009/..... (.....)		(.....)
2008/ (.....)		(.....)
2007/ (.....)		(.....)
2006/..... (.....)		(.....)
2005/..... (.....)		(.....)

7) Suffered Problems Caused by Changed Socio-Economic Conditions:

Year/Month of Occur	Suffered Facility	Contents of Problem	Effects of Problems	Applied Countermeasures
2009/.....				
2008/... ..				
2007/... ..				
2006/.....				
2005/.....				

8) Suffered Problems Caused by Deteriorated Water Quality:

Year/Month of Occur	Suffered Facility	Contents of Problem	Effects of Problems	Applied Countermeasures
2009/.....				
2008/.....				
2007/.....				
2006/.....				
2005/.....				

IV. Realization of the Expected Results of the Entire Project

1) **Characteristics of Year 2009 from the View Points of Agricultural Production:** Check/Good Harvest/Average Harvest/Bad Harvest/

2) **Beneficial Area of the Entire Project (ha):**

Condition	Beneficial Area
By F/S:	
By D/D:	
Actual,2009:	

3) **Beneficiaries of the Entire Project:**

Item	By F/S	By D/D	Actual,2009
Number of Farmers:			
Number of Farm Households:			

4) **Planted and Harvested Areas (ha):**

Dry Season

Crop	By F/S	By D/D	Actual Planted,2009	Actual Harvested,2009
1.				
2.				
3.				

Wet Season

Crop	By F/S	By D/D	Actual Planted,2009	Actual Harvested,2009
1.				
2.				
3.				

5) **Cropping Intensity (%):**

Without Project Conditions	By F/S	By D/D	Actual,2009

6) Production Volume (ton/year):**Dry Season**

Crop	By F/S	By D/D	Actual,2009
1.			
2.			
3.			

Wet Season

Crop	By F/S	By D/D	Actual,2009
1.			
2.			
3.			

7) Yield (ton/ha):**Dry Season**

Crop	Without Project Conditions	By F/S	By D/D	Actual,2009
1.				
2.				
3.				

Wet Season

Crop	Without Project Conditions	By F/S	By D/D	Actual,2009
1.				
2.				
3.				

8) Drainage Plan:

Condition	Allowable Inundation Depth (cm)	Allowable Inundation Period (hr)	Considered Crop
By F/S			
By D/D			
Actual, 2009			

9) Typical Farm Household Economy (Unit: VND/year/household):

By F/S

Farm Area (ha/household)	Annual Income (Itemize)	Annual Expenditures (Itemize)
..... (.....) (.....)

By D/D

Farm Area (ha/household)	Annual Income (Itemize)	Annual Expenditures (Itemize)
..... (.....) (.....)

Actual, 2009

Farm Area (ha/household)	Annual Income (Itemize)	Annual Expenditures (Itemize)
..... (.....) (.....)

Without Project Conditions

Farm Area (ha/household)	Annual Income (Itemize)	Annual Expenditures (Itemize)
..... (.....) (.....)

10) Facilities that do not Realize the Expected Results:

Facilities	Causes	Effects	Applied Countermeasures
1.			
2.			
3.			

Appendix 3.4 Progress Record of the Survey

(1/2)

Province	Road Sector		Electricity Sector		Water Supply Sector		Irrigation Sector	
	No. of Sub-project	Progress	No. of Sub-project	Progress	No. of Sub-project	Progress	No. of Sub-project	Progress
An Giang	4	6/22	16	7/2	1	5/17		
Ba Ria Vung Tau	3	5/29	4	5/10				
Bac Giang	10	7/23	23	6/18	1	9/3	1	9/13
Bac Kan	13	6/16	5	7/1	1	8/19	3	8/19
Bac Lieu	5	7/2	6	6/26	1	5/11	1	5/6
Bac Ninh	10	5/16	8	6/15	1	8/25		
Ben Tre	5	6/19	5	6/30				
Binh Dinh	6	6/15	11	7/28	1	7/12	4	6/8
Binh Duong	1	5/31	4	5/6				
Binh Phuoc	7	5/20	7	5/7				
Binh Thuan	7	5/10	15	5/14				
Ca Mau	6	6/30	6	7/8	2	5/12	1	5/5
Can Tho	4	6/15	0					
Cao Bang	11	6/17	13	5/15			1	8/18
Da Nang	2	5/31	7	7/12				
Dac Lak	10	7/9	9	8/19	2	7/16	5	5/27
Dak Nong	4	7/1	4	8/20			2	5/29
Dien Bien	11	5/15	1	8/2	3	7/28,29	1	8/6
Dong Nai	2	5/22	0					
Dong Thap	4	7/9	8	7/1	1	5/5	1	5/13
Gia Lai	7	7/12	8	8/17	2	7/15	3	6/11
Ha Giang	11	5/7	5	6/23	3	8/16,17	1	8/16
Ha Nam	12	6/7	11	6/3				
Ha Noi (inculding former HaTay)	12	7/29	8	8/20	1	9/7		
Ha Tinh	17	5/9	26	8/6	6	6/2,3	7	7/20
Hai Duong	7	5/6	8	6/25	1	8/25		
Hai Phong	9	5/15	1	8/13	1	8/30		
Hau Giang	1	6/28	4	6/8	1	5/13		
Hoa Binh	8	5/11	11	5/18			2	8/2
Hung Yen	11	5/12	7	6/8				
Khanh Hoa	2	6/27	8	8/3				
Kien Giang	5	6/28	4	6/16	1	5/14		
Kon Tum	6	7/27	6	8/13	3	7/13,14	2	6/15
Lai Chau	7	5/13	4	8/4	3	8/2,3	1	8/10
Lam Dong	8	6/30	11	7/31	2	7/19	2	5/19
Lang Son	9	7/12	8	8/17	1	8/24	1	9/15
Lao Cai	11	5/9	17	7/15	2	8/12,13	2	8/13
Long An	4	6/8	3	5/20				
Nam Dinh	14	6/15	15	6/11				
Nghe An	15	7/24	13	7/31	4	5/31,6/1	4	7/23
Ninh Binh	15	6/30	9	6/2	1	8/31	1	7/30
Ninh Thuan	8	5/6	11	5/19	1	7/20	3	5/17
Phu Tho	16	5/10	19	5/20	5	8/6,9,10	5	8/4
Phu Yen	7	6/20	9	7/30	2	7/7	4	6/3

Appendix 3.4 Progress Record of the Survey

(2/2)

Province	Road Sector		Electricity Sector		Water Supply Sector		Irrigation Sector	
	No. of Sub-project	Progress	No. of Sub-project	Progress	No. of Sub-project	Progress	No. of Sub-project	Progress
Quang Binh	8	5/14	10	8/10	2	6/4	1	7/15
Quang Nam	12	6/5	11	7/19	4	6/14,15	1	7/8
Quang Ngai	10	6/10	9	7/24	2	7/8,9	4	7/7
Quang Ninh	8	7/26	1	8/18	2	8/26,27		
Quang Tri	16	5/22	13	8/13	6	6/7,8	3	7/14
Soc Trang	9	6/24	7	6/23	2	5/10		
Son La	9	5/7	10	8/1	2	7/26,27		
Tay Ninh	4	6/3	4	5/5	1	5/19		
Thai Binh	9	5/21	8	6/9	1	8/30		
Thai Nguyen	10	6/15	8	8/16	2	8/18	3	9/12
Thanh Hoa	16	7/9	10	7/24	6	5/24,26	6	7/29
Thua-Thien Hue	7	5/29	10	7/15	3	6/9,10	2	7/12
Tien Giang	4	6/9	9	6/24				
Tra Vinh	9	6/25	6	6/11	3	5/6	2	5/11
Tuyen Quang	8	6/7	8	6/25			2	9/8
Vinh Long	5	6/12	4	6/10	2	5/7	1	5/12
Vinh Phuc	15	5/20	8	8/13	2	9/6	1	9/10
Yen Bai	11	5/17	8	5/25	2	8/4,5	1	8/5
Total	517		522		96		85	
Completed (No. of project)	517		522		96		85	
Completed (%)	100%		100%		100%		100%	

Appendix 4.1 Outline of Facilities

(1/2)

Province	SPL	Facility Name (Informality)	Project Owner ¹⁾	Main Purpose ²⁾	Major Facility of Project ³⁾	Major Facility under SPL ³⁾	Construction Year ¹⁾	Present Condition ⁴⁾
Bac Giang	V	Khuon Than	IMC	I	Dam, Canal	Canal	2007-2009	Completed
Bac Kan	IV	Phieng Luong	DPC	I,W	Intake, Canal, Tank, Pipe	Intake, Canal, Tank, Pipe	2006-2007	Completed
Bac Kan	IV	Cho Don District	DARD	I	Dam, Canal	Dam, Canal	2005-2007	Completed
Bac Kan	V	Cho Moi	DARD	I	Dam, Canal	Dam, Canal	2009-2010	Completed
Bac Lieu	V	30/4 Area of C.P.	DARD	Is	Canal	Canal	2007-2009	Completed
Binh Dinh	III	Tan An-Dap Da	DARD	I	Dam, PS, Canal	Dam	2000-2002	Completed
Binh Dinh	V	Tam Son	DPC	I	Dam, Canal	Dam, Canal	2008-2009	Completed
Binh Dinh	V	Suoi So	DPC	I	Dam, Canal	Dam	2008-2009	Completed
Binh Dinh	V	Chi Hoa2	DPC	I	Dam, Canal	Dam	2011-2011	D/D
Ca Mau	V	Lung Ranh	DARD	Ir	Sluiceway	Sluiceway	2006-2007	Completed
Cao Bang	V	Luong Thong	DPC	I	Dam, Canal	Dam, Canal	2006-2010	Completed
Dak Lac	III	Buon Chua	DARD	I	PS, Canal	PS	2001-2003	Completed
Dak Lac	III	Ea Yeng	DPC	I	Dam, Canal	Dam, Canal	2001-2001	Completed
Dak Lac	III	Nam Kar	DARD	I	Dam, Canal	Dam	2000-2002	Completed
Dak Lac	IV	Ea Bin	DARD (D) DPC (C)	I	Dam, Canal	Dam, Canal	2003-2003 (D) 2007-2010 (C)	Completed
Dak Lac	V	Ho Ke	DPC	I	Dam, Canal	Dam, Canal	2010-2010	Construction
Dak Nong	III	Dak Mam	PPC	I	Dam, Canal	Dam, Canal	2003-2004	Completed
Dak Nong	V	Electric P.S.	PPC	I	PS, Canal	PS, Canal	2007-2009	Completed
Dien Bien	V	Huoi Un	DARD	I	Dam, Canal	Dam, Canal	2009-2010	Construction
Dong Thap	V	Upgrade Tam Nong	DPC	I	Canal	Canal	2008-2009	Completed
Gia Lai	III	Cau Hai	DPC	I	PS, Canal	PS, Canal	2001-2002	Completed
Gia Lai	III	EaRsai	DARD	I	Dam, Canal	Dam, Canal	2001-2001	Completed
Gia Lai	V	Eaur	DPC	I	Dam, Canal	Dam, Canal	2010-2011	Construction
Ha Giang	V	Khuoi Lam-Khuoi Lac	DPC	I	Dam, Canal	Dam, Canal	2008-2010	Completed
Ha Tinh	III	Song Rac	IMC	I	Dam, Canal	Canal	2001-2002	Completed
Ha Tinh	IV	An Hung	DPC	I	Dam, Canal	Dam, Canal	2003-2004	Completed
Ha Tinh	IV	Cau Ke	DPC	I	Dam, Canal	Dam	2004-2005	Completed
Ha Tinh	IV	Khe Coi	DPC	I	Dam, Canal	Dam, Canal	2004-2004	Completed (portion not yet constructed)
Ha Tinh	IV	19/5	DPC	I	Dam, PS, Canal, Dyke	Dam, Canal, Dyke	2003-2003	Completed
Ha Tinh	IV	Lien Minh-Tung Chau	DPC	I	PS, Canal, Gate	PS, Canal, Gate	2004-2004	Completed
Ha Tinh	V	Huong Long...	DPC	I	Dam, Canal	Canal	2006-2009	Completed
Hoa Binh	III	Phu Lao	IMC	I	Dam, Canal	Dam, Canal	2000-2002	Completed
Hoa Binh	V	Ngoc Luong	IMC	I	Dam, Canal Dyke	Dam, Canal Dyke	2009-2010	Completed
Kon Tum	III	Dakpoko	DPC	F	RBP	RBP	2001-2002	Completed
Kon Tum	V	Dak Sia l	DPC	I	Dam, Canal	Dam	2008-2009 (D) 2010-2011 (C)	Completed
Lai Chau	V	Khun Ha	DPC	I	Dam, Canal	Dam, Canal	2007-2010	Construction
Lam Dong	III	Da-Don	DARD	I	Dam, Canal	Canal	2000-2003	Completed
Lam Dong	V	Bo Kabang	DARD	I	Dam, Canal	Dam, Canal	2006-2007	Completed
Lang Son	V	Thien Ky	DPC	I	Dam, Canal	Dam, Canal	2007-2008	Completed
Lao Cai	IV	Sin Chai	DPC	I	Dam, Canal	Dam, Canal	2003-2004	Completed
Lao Cai	V	Nam Chay Irrigation	DARD	I	Dam, Canal	Dam, Canal	2007-2008	Completed
Nghe An	III	Khe Ngang	DPC	I	Dam, Canal	Dam, Canal	2005-2006	Completed
Nghe An	IV	Yen Trach-Khe Chet	DPC	I	Dam, Canal	Dam, Canal	2003-2004	Completed
Nghe An	IV	Ke Coc-Khe Nha	DPC	I	Dam, Canal	Canal	2007-2007	Completed
Nghe An	IV	Trieu Duong	DPC	I	Dam, Canal	Dam, Canal	2008-2010	Construction
Ninh Binh	V	Dong Dinh	DPC	D,I	PS, Canal, Dyke	PS, Canal	2007-2009	Completed
Ninh Thuan	III	Ninh Phuoc	DARD	F	RI	RI	2003-2004	Completed
Ninh Thuan	IV	Bau Ngu	DARD	I	Dam, Canal	Dam, Canal	2005-2006	Completed
Ninh Thuan	V	Ta Ranh	DARD	I, W	Dam, Canal, Water Tower	Dam	2008-2010	Completed
Phu Tho	III	Tam Nong	DPC	I	PS, Canal	PS, Canal	2000-2001	Completed
Phu Tho	IV	Phuong Mao (2nd S.)	DPC	I	Dam, Canal	Dam, Canal	2000-2005	Completed
Phu Tho	IV	Hoang Hanh	DPC	D,I	PS, Canal, Dyke	PS, Canal, Dyke	2004-2005	Completed
Phu Tho	IV	Hien Quan	DPC	I,D	PS, Canal	PS, Canal	2000-2002	Completed
Phu Tho	V	16 Communes	DPC	D,I	PS, Canal, Sluiceway, Dyke	PS, Canal, Sluiceway, Dyke	2009-2010	Construction

Appendix 4.1 Outline of Facilities

(2/2)

Province	SPL	Facility Name (Informality)	Project Owner ¹⁾	Main Purpose ²⁾	Major Facility of Project ³⁾	Major Facility under SPL ³⁾	Construction Year ¹⁾	Present Condition ⁴⁾
Phu Yen	III	La Bach	DARD	I	Dam, Canal	Dam, Canal	2005-2010	Construction
Phu Yen	IV	Buon Chao	DPC	I	Dam, Canal	Dam, Canal	2003-2004	Completed
Phu Yen	V	La Bach (2)	DARD	I	Dam, Canal	Dam, Canal	2005-2010	Construction
Phu Yen	V	Pump and I. Canal	DPC	I	PS, Canal	PS, Canal	2010-2010	D/D
Quang Binh	III	Upgrade Cam Li	IMC	I	Dam, Canal	Canal	2001-2003	Completed
Quang Nam	V	Ho Viet An	PPC	I	Dam, Canal	Canal	2008-2009	Completed
Quang Ngai	III	Di Lang Irrigator	DARD	I	Dam, Canal	Dam, Canal	2002-2008	Completed
Quang Ngai	IV	Suoi Chi	DARD	I	Dam, Canal	Canal	2005-2006	Completed
Quang Ngai	IV	Ong Toi	DARD	I	Dam, Canal	Dam	2004-2005	Completed
Quang Ngai	V	Xa Dieu Commune	DARD	I	Dam, Canal	Dam, Canal	2009-2010	Completed
Quang Tri	IV	Nghia Hy	DARD	I	Dam, Canal	Dam, Canal	2004-2004	Completed
Quang Tri	IV	Lia	DARD	I	Dam, Canal	Dam, Canal	2006-2007	Completed
Quang Tri	V	Thac Heo	DARD	I	Dam, Canal	Dam, Canal	2008-2008	Completed
Thai Nguyen	IV	Ho Nui Coc	DARD	I	Canal	Canal	2004-2007	Completed
Thai Nguyen	IV	Ho Bao Linh	DARD	I	Dam, PS, Canal, Dyke	Dam, PS, Canal, Dyke	2003-2009	Completed
Thai Nguyen	V	Minh Lap-Hoa Thuong	DPC	I	PS, Canal	PS, Canal	2007-2010	Construction
Thanh Hoa	III	Quang Xuong	DPC	I	Headrace, PS, Canal	Headrace, Canal	2001-2001	Completed
Thanh Hoa	III	Quang Loc	DPC	I	PS, Canal	PS, Canal	2000-2001	Completed
Thanh Hoa	III	Vung Su	DARD	I	Dam, Canal	Dam	2000-2002	Completed
Thanh Hoa	IV	Duong Coc	IMC	I	Dam, Canal	Canal	2004-2005	Completed
Thanh Hoa	IV	Ben Da-Nui Trac	DPC	I	PS, Canal	PS, Canal	2004-2006	Completed
Thanh Hoa	V	Long Dong	IMC	I	PS, Canal	PS, Canal	2008-2009	Completed
Thua-Thien	III	Phong Chuong-Cua Lac	IMC	I	Dam, PS, Canal, Bridge	Dam, PS, Canal, Bridge	2000-2003	Completed
Thua-Thien	V	Dien Hoa-Dien Hai	DPC	I, D	PS, Canal, Gate	PS, Canal, Gate	2007-2010	Completed
Tra Vinh	IV	Khu B1-Lang The	DARD	I	Canal	Canal	2003-2006	Completed
Tra Vinh	V	Lang The	DARD	I	Canal	Canal	2009-2010	Construction
Tuyen Quang	IV	Minh An	DPC	I	PS, Canal	PS, Canal	2004-2005	Completed
Tuyen Quang	V	Yen Lap Commune	DPC	I	Dam, PS, Canal	Dam, PS, Canal	2008-2008	Completed
Vinh Long	V	Rach T.-Thien My	DARD	I, D	RI	RI	2008-2008	Completed
Vinh Phuc	V	Don Nhan	DPC	I	Dam, PS, Canal	Dam, PS, Canal	2007-2010	Completed
Yen Bai	V	Khe The	DARD	I	Dam, Canal	Dam, Canal	2007-2009	Completed

Note:

1) IMC=Irrigation Management Company, (D)=Dam (Including Head Works), (C)=Canal

2) I=Irrigation, D=Drainage, W=Water Supply, F=Flood Control, Is=Sea Water Utilization for Fishponds, Ir=Rain Water Storage for Irrigation ar

3) PS=Pump Station, RI=River Improvement, RBP=Riverbank Protection

4) As of 13 September 2010

Appendix 4.2 Outline of Major Facility Components Constructed under SPL

(1/7)

Province	Facility Name (Informality)	Major Facility under SPL ¹⁾	No. of Dam ²⁾	Dam Type ³⁾	Dam Height (m) ³⁾	Dam Length (m) ³⁾	Reservoir Storage Capacity (MCM)	Canal Length (km) ⁴⁾	Major Canal Type ^{4) 5)}	Purpose of PS (No.) ⁶⁾	Pump Capacity (m ³ /hr), No. and Type ^{6) 7)}
Bac Giang	Khuon	Canal	-	-	-	-	-	32.2 (I)	B (I)	-	-
Bac Kan	Phieng Luong	Intake, Canal, Tank, Pipe	-	-	-	-	-	2.2 (I)	Cf (I)	-	-
Bac Kan	Cho Don District	Dam, Canal	5	H	1.4-3.2	13.6-54	-	16.1 (I)	Cf (I)	-	-
Bac Kan	Cho Moi	Dam, Canal	11	2 (E), 9 (H)	6.5-20.4 (E), 1.0-2.0	30.5-73.5 (E), 5-	0.4 (1 Reservoir)	10.4 (I)	Cf (I)	-	-
Bac Lieu	30/4 Area of C.P.	Canal	-	-	-	-	-	76.5 (I cum D)	E (I cum D)	-	-
Binh Dinh	Tan An-Dap Da	Dam	5	H (4), R (1)	2.0-3.2	18-220	-	-	-	-	-
Binh Dinh	Tam Son	Dam, Canal	1	E	11.5	605	1.1	2.5 (I)	Cf (I)	-	-
Binh Dinh	Suoi So	Dam	1	E	10.2	1,352	1.6	-	-	-	-
Binh Dinh	Chi Hoa2	Dam	1	E	10	590	0.6	-	-	-	-
Ca Mau	Lung Ranh	Sluiceway (5.5m x 5.5m x 1no.)	-	-	-	-	-	-	-	-	-
Cao Bang	Luong Thong	Dam, Canal	1	H	1.4	8	-	4.2 (I)	Cf (I)	-	-
Dak Lac	Buon Chua	PS	-	-	-	-	-	-	-	I (1)	1,100, 4 nos. (H)/
Dak Lac	Ea Yeng	Dam, Canal	1	E	10	420	0.9	1.5 (I)	Cb (I)	-	-
Dak Lac	Nam Kar	Dam	1	E	13.5	165	1	-	-	-	-
Dak Lac	Ea Bin	Dam, Canal	1	E	13	218	1.4	3.4 (I)	Cb (I)	-	-
Dak Lac	Ho Ke	Dam, Canal	1	E	11.5	245	1.6	7.9 (I)	Cf (I)	-	-
Dak Nong	Dak Mam	Dam, Canal	1	E	6	80	0.6	8.0 (I)	Cb (I)	-	-

Appendix 4.2 Outline of Major Facility Components Constructed under SPL

Province	Facility Name (Informality)	Major Facility under SPL ¹⁾	No. of Dam ²⁾	Dam Type ³⁾	Dam Height (m) ³⁾	Dam Length (m) ³⁾	Reservoir Storage Capacity (MCM)	Canal Length (km) ⁴⁾	Major Canal Type ^{4) 5)}	Purpose of PS (No.) ⁶⁾	Pump Capacity (m ³ /hr), No. and Type ^{6) 7)}
Dak Nong	Electric P.S.	PS, Canal	-	-	-	-	-	22.0 (I)	Cf (I)	I (3)	1,500, 3 nos. (H)/ 1,500, 3 nos. (H)/ 1,500, 3 nos. (H)/
Dien Bien	Huoi Un	Dam, Canal	2	H	2.5-7.4	3.0-18	-	15.2 (I)	Cf (I)	-	-
Dong Thap	Upgrade Tam Nong	Canal	-	-	-	-	-	55.7 (I cum D)	E (I cum D)	-	-
Gia Lai	Cau Hai	PS, Canal	-	-	-	-	-	0.7 (I)	Cf (I)	I (1)	450, 3 nos. (S)/
Gia Lai	EaRsai	Dam, Canal	1	H	4	55	-	6.3 (I)	Cf (I)	-	-
Gia Lai	Eaur	Dam, Canal	1	H	3.6	10	-	2.1 (I)	Cf (I)	-	-
Ha Giang	Khuoi Lam-Khuoi Lac	Dam, Canal	1	H	6	40.4	-	5.7 (I)	Cf (I)	-	-
Ha Tinh	Song Rac	Canal	-	-	-	-	-	11.7 (I)	B, S, Ct (I)	-	-
Ha Tinh	An Hung	Dam, Canal	1	E	25	460	1.1	3.8 (I)	Cf (I)	-	-
Ha Tinh	Cau Ke	Dam	1	E	34.5	193.5	0.8	-	-	-	-
Ha Tinh	Khe Coi	Dam, Canal	1	E	10	400	0.7	2.0 (I)	B (I)	-	-
Ha Tinh	19/5	Dam, Canal, Dyke	1	E	4	450	2.5	1.3 (I)	B (I)	-	-
Ha Tinh	Lien Minh-Tung Chau	PS, Canal, Gate	-	-	-	-	-	14.8 (I)	Cf (I)	I (5)	1,200, 2 nos. (H)/ 800, 1 no. (H)/ 800, 1 no. (H)/ 800, 1 no. (H)/ 800, 1 no. (H)/
Ha Tinh	Huong	Canal	-	-	-	-	-	80 (I)	E, Cf (I)	-	-
Hoa Binh	Phu Lao	Dam, Canal	11	E	7.0-10.5	43-125	1.9 (1 Reservoir)	18.4 (I)	Cf, B, E (I)	-	-
Hoa Binh	Ngoc Luong	Dam, Canal Dyke	1	E	6	1,300	1.8	2.7 (I)	B (I)	-	-

Appendix 4.2 Outline of Major Facility Components Constructed under SPL

(3/7)

Province	Facility Name (Informality)	Major Facility under SPL ¹⁾	No. of Dam ²⁾	Dam Type ³⁾	Dam Height (m) ³⁾	Dam Length (m) ³⁾	Reservoir Storage Capacity (MCM)	Canal Length (km) ⁴⁾	Major Canal Type ^{4) 5)}	Purpose of PS (No.) ⁶⁾	Pump Capacity (m ³ /hr), No. and Type ^{6) 7)}
Kon Tum	Dakpoko	RBP (1.2km)	-	-	-	-	-	-	-	-	-
Kon Tum	Dak Sia I	Dam	1	E	14	135	0.5	-	-	-	-
Lai Chau	Khun Ha	Dam, Canal	1	H	4.2	45	-	6.4 (I)	Cf (I)	-	-
Lam Dong	Da-Don	Canal	-	-	-	-	-	20.4 (I)	U (I)	-	-
Lam Dong	Bo Kabang	Dam, Canal	1	E	14.8	275	1.3	4.4 (I)	Cf (I)	-	-
Lang Son	Thien Ky	Dam, Canal	2	E	12.0-19.0	45-72	0.12-1.1	7.0 (I)	Cf (I)	-	-
Lao Cai	Sin Chai	Dam, Canal	3	H	0.9-2.0	5.0-8.0	-	11.4 (I)	Cf, E (I)	-	-
Lao Cai	Nam Chay Irrigation	Dam, Canal	1	H	1.8	6.5	-	8.1 (I)	Cf (I)	-	-
Nghe An	Khe Ngang	Dam, Canal	1	E	11	534	1.1	4.0 (I)	Cf, E (I)	-	-
Nghe An	Yen Trach-Khe Chet	Dam, Canal	3	E	3.0-6.0	62-271	0.03-1.8 (2 Reservoirs)	2.0 (I)	E, Cf (I)	-	-
Nghe An	Ke Coc-Khe Nha	Canal	-	-	-	-	-	7.0 (I)	Cf (I)	-	-
Nghe An	Trieu Duong	Dam, Canal	1	E	14	329	1.7	10.0 (I)	Cf (I)	-	-
Ninh Binh	Dong Dinh	PS, Canal	-	-	-	-	-	1.4 (D)	E (D)	D (1)	4,000, 6 nos. (V)/
Ninh Thuan	Ninh Phuoc	RI(40km)	-	-	-	-	-	-	-	-	-
Ninh Thuan	Bau Ngu	Dam, Canal	1	E	14.9	688	1.4	7.3 (I), 0.1 (D)	Cf (I), E (D)	-	-
Ninh	Ta Ranh	Dam	1	E	8.8	930	1	-	-	-	-

Appendix 4.2 Outline of Major Facility Components Constructed under SPL

(4/7)

Province	Facility Name (Informality)	Major Facility under SPL ¹⁾	No. of Dam ²⁾	Dam Type ³⁾	Dam Height (m) ³⁾	Dam Length (m) ³⁾	Reservoir Storage Capacity (MCM)	Canal Length (km) ⁴⁾	Major Canal Type ^{4) 5)}	Purpose of PS (No.) ⁶⁾	Pump Capacity (m ³ /hr), No. and Type ^{6) 7)}
Phu Tho	Tam Nong	PS, Canal	-	-	-	-	-	35.5 (I)	B (I)	I (2)	1,000, 4 nos. (H)/ 410, 2 nos. (H)/ 1,000, 3 nos. (H)
Phu Tho	Phuong Mao (2nd S.)	Dam, Canal	1	E	43.8	424	8	87 (I)	B, Cb (I)	-	-
Phu Tho	Hoang Hanh	PS, Canal, Dyke	-	-	-	-	-	3.4 (D) 6.5 (I)	E (D) B (I)	I cum D (2)	2,500, 6 nos. (V) 1,000, 4 nos. (H)/ 1,500, 1 no. (V)/ <u>(I)</u> <u>700, 2 nos. (V)/</u> <u>1,000, 6 nos. (V)/</u> <u>700, 2 nos. (V)/</u> <u>270, 2 nos. (V)/</u> <u>400, 1 no. (V)/</u> <u>400, 1 no. (V)/</u>
Phu Tho	Hien Quan	PS, Canal	-	-	-	-	-	28.4 (I)	Cb, B (I)	I (6), D (1)	<u>(D)</u> <u>4,000, 4 nos. (H)/</u>
Phu Tho	16 Communes	PS, Canal, Sluiceway, Dyke	-	-	-	-	-	1.6 (I) 17.6 (D)	B (I) E (D)	I (3)	190, 3 nos. (V)/ 190, 2 nos. (V)/ 190, 2 nos. (V)/
Phu Yen	La Bach	Dam, Canal	1	E	20	605	2.6	4.0 (I)	E (I)	-	-
Phu Yen	Buon Chao	Dam, Canal	1	C	10	30	56	0.1 (I)	Cf (I)	-	-
Phu Yen	La Bach (2)	Dam, Canal	1	E	20	605	2.6	4.0 (I)	E (I)	-	-

Appendix 4.2 Outline of Major Facility Components Constructed under SPL

Province	Facility Name (Informality)	Major Facility under SPL ¹⁾	No. of Dam ²⁾	Dam Type ³⁾	Dam Height (m) ³⁾	Dam Length (m) ³⁾	Reservoir Storage Capacity (MCM)	Canal Length (km) ⁴⁾	Major Canal Type ^{4) 5)}	Purpose of PS (No.) ⁶⁾	Pump Capacity (m ³ /hr), No. and Type ^{6) 7)}
Phu Yen	Pump and I. Canal	PS, Canal	-	-	-	-	-	D/D	D/D	I (1)	1,400, 2 nos. (H)/
Quang Binh	Upgrade Cam Li	Canal	-	-	-	-	-	21 (I)	Cf (I)	-	-
Quang Nam	Ho Viet An	Canal	-	-	-	-	-	32.8 (I)	Cf (I)	-	-
Quang Ngai	Di Lang Irrigation	Dam, Canal	1	E	38	220	9	24.4 (I)	Cb, Cf (I)	-	-
Quang Ngai	Suoi Chi	Canal	-	-	-	-	-	11.5 (I)	Cb, Cf (I)	-	-
Quang Ngai	Ong Toi	Dam	1	E	9	1,010	1.4	-	-	-	-
Quang Ngai	Xa Dieu Commune	Dam, Canal	1	H	7	101	-	8.0 (I)	Cf (I)	-	-
Quang Tri	Nghia Hy	Dam, Canal	2	E	11.0-14.0	977-1,034	3.5	4.5 (I)	Cf (I)	-	-
Quang Tri	Lia	Dam, Canal	1	E	8.6	385	1	3.0 (I)	Cf, Cb (I)	-	-
Quang Tri	Thac Heo	Dam, Canal	2	E	8.7-8.8	260-315	1.5 (1 Reservoir)	2.8 (I)	Cf (I)	-	-
Thai Nguyen	Ho Nui Coc	Canal	-	-	-	-	-	424 (I)	B, Cb (I)	-	-
Thai Nguyen	Ho Bao Linh	Dam, PS, Canal, Dyke	3	H	1.5-2.5	9-31	-	22.8 (I)	Cf, B (I)	I (2)	270, 1 no. (H)/ 270, 1 no. (H)/
Thai Nguyen	Minh Lap-Hoa Thuong	PS, Canal	-	-	-	-	-	8.5 (I)	B (I)	I (2)	360, 3 nos. (S)/ 420, 3 nos. (S)/

Appendix 4.2 Outline of Major Facility Components Constructed under SPL

(6/7)

Province	Facility Name (Informality)	Major Facility under SPL ¹⁾	No. of Dam ²⁾	Dam Type ³⁾	Dam Height (m) ³⁾	Dam Length (m) ³⁾	Reservoir Storage Capacity (MCM)	Canal Length (km) ⁴⁾	Major Canal Type ^{4) 5)}	Purpose of PS (No.) ⁶⁾	Pump Capacity (m ³ /hr), No. and Type ^{6) 7)}
Thanh Hoa	Quang Xuong	Headrace, Canal	-	-	-	-	-	10.8 (I)	Cb, B (I)	-	-
Thanh Hoa	Quang Loc	PS, Canal	-	-	-	-	-	3.5 (I)	B, Cb (I)	I (2)	1,120, 2 nos. (H)/ 1,120, 2 nos. (H)/
Thanh Hoa	Vung Su	Dam	1	E	25	101	1.8	-	-	-	-
Thanh Hoa	Duong Coc	Canal	-	-	-	-	-	11.6 (I)	Cb, S (I)	-	-
Thanh Hoa	Ben Da-Nui Trac	PS, Canal	-	-	-	-	-	10.7 (I)	B (I)	I (2)	470, 2 nos. (H)/ 470, 3 nos. (H)/
Thanh Hoa	Long Dong	PS, Canal	-	-	-	-	-	12.0 (I)	Cf, Cb, Ct (I)	I (2)	986, 6 nos. (H)/ 1,400, 1 no. (H), 600, 1 no. (H)/
Thua-Thien Hue	Phong Chuong-Cua Lac	Dam, PS, Canal, Bridge	1	M	2.6	2,163	0	57.5 (I)	Cb, Cf (I)	I (1)	600, 2 nos. (H)/
Thua-Thien Hue	Dien Hoa-Dien Hai	PS, Canal, Gate	-	-	-	-	-	5.6 (I)	Cf (I)	I (1) D (8)	<u>(I)</u> 1,500, 3 nos. (V)/ <u>(D)</u> 290, 1 no. (H)/ 290, 1 no. (H)/ 290, 1 no. (H)/ 290, 1 no. (H)/ 400, 1 no. (H)/ 400, 1 no. (H)/ 400, 1 no. (H)/ 290, 1 no. (H)/
Tra Vinh	Khu B1-Lang The	Canal	-	-	-	-	-	36 (I)	E (I)	-	-
Tra Vinh	Lang The	Canal	-	-	-	-	-	2.6 (I cum D)	E (I cum D)	-	-

Appendix 4.2 Outline of Major Facility Components Constructed under SPL

(7/7)

Province	Facility Name (Informality)	Major Facility under SPL ¹⁾	No. of Dam ²⁾	Dam Type ³⁾	Dam Height (m) ³⁾	Dam Length (m) ³⁾	Reservoir Storage Capacity (MCM)	Canal Length (km) ⁴⁾	Major Canal Type ^{4) 5)}	Purpose of PS (No.) ⁶⁾	Pump Capacity (m ³ /hr), No. and Type ^{6) 7)}
Tuyen Quang	Minh An	PS, Canal	-	-	-	-	-	1.6 (I)	S (I)	I (1)	227, 1 no. (S)/
Tuyen Quang	Yen Lap Commune	Dam, PS, Canal	8	H	0.5-3.5	6.0-17	-	8.0 (I)	Cf (I)	I (1)	108, 1 no. (S)/
Vinh Long	Rach T.-Thien My	RI(13.1km)	-	-	-	-	-	-	-	-	-
Vinh Phuc	Don Nhan	Dam, PS, Canal	1	E	3.2	91	0.1	12.2 (I)	B (I)	I (3)	300, 1 no. (V)/ 470, 3 nos. (V)/ 470, 1 no. (V)/
Yen Bai	Khe The	Dam, Canal	1	H	3	27	-	5.6 (I)	Cf (I)	-	-

Note:

- 1) PS=Pump Station, RI=River Improvement, RBP=Riverbank Protection
- 2) Dam includes Head Works. Secondary dam is counted independently.
- 3) E=Earth Fill Dam, C=Concrete Dam, H=Head Works (Concrete Weir), M=Head Works (Earth Weir Protected with Concrete, etc.), R=Rubber Dam
- 4) I=Irrigation Canal, D=Drainage Canal, I cum D=Irrigation cum Drainage Canal
- 5) F=Concrete Flume, B=Brick (with Mortar Lining), S=Stone (Masonry), Cb=Concrete Block (Trapezoidal), U=U-Shape (Concrete), Ct=Concrete Lining (Trapezoidal), E=Earth Lining
- 6) I=Irrigation, D=Drainage, I cum D=Irrigation cum Drainage
- 7) H=Horizontal, V=Vertical, Submergible

Appendix 4.3 Facility Utilization Data

(1/5)

Province	SPL	Facility Name	Present Condition	Irrigation Beneficial Area (ha) ¹⁾	Ratio of Irrigated Cultivation Area to Irrigation Beneficial Area(%) ²⁾	Number of Beneficial Person (person) ³⁾	Major Crops	Yield of Paddy (t/ha/crop)
Bac Giang	V	Khuon Than	Completed	1,974	100	25,000	Paddy, Maize, Sweet Potato	4.5-5.0
Bac Kan	IV	Phieng Luong	Completed	45	100	1,000	Paddy	nd
Bac Kan	IV	Cho Don District	Completed	231	100	2,650	Paddy	4.7
Bac Kan	V	Cho Moi	Completed	278	100	3,000	Paddy	4.9
Bac Lieu	V	30/4 Area of C.P.	Completed	10,900 (F)	100	8,000	Shrimp, Fish, Crab	3.0 (Industrial) 0.5 (Semi-
Binh Dinh	III	Tan An-Dap Da	Completed	18,020	100	310,000	Paddy	5.2-6.0
Binh Dinh	V	Tam Son	Completed	150	100	800	Paddy, Groundnut, Maize	5
Binh Dinh	V	Suoi So	Completed	300	100	3,500	Paddy, Melon, Vegetables	4.0-5.0
Binh Dinh	V	Chi Hoa2	D/D	95	-	2,800	Paddy, Groundnut	5.5-6.0
Ca Mau	V	Lung Ranh	Completed	2.2	100	3,000	Paddy	3.7-4.0
Cao Bang	V	Luong Thong	Completed	70	100	1,000	Paddy, Bean, Maize	4
Dak Lac	III	Buon Chua	Completed	221	100	1,110	Paddy	3.5
Dak Lac	III	Ea Yeng	Completed	50	92	1,250	Paddy	4.5
Dak Lac	III	Nam Kar	Completed	100	100	400	Paddy	3.5-4.0
Dak Lac	IV	Ea Bin	Completed	250	100	350	Coffee, Paddy	4
Dak Lac	V	Ho Ke	Construction	160	-	1,800	Paddy	8.0-10.0
Dak Nong	III	Dak Mam	Completed	300	100	3,000	Paddy	7
Dak Nong	V	Electric	Completed	600	100	3,000	Paddy	7.5
Dien Bien	V	Huoi Un	Construction	174	-	450	Paddy	4.5-5.0 (planned)
Dong Thap	V	Upgrade Tam Nong	Completed	8,484	100	16,000	Paddy	5.0-7.0
Gia Lai	III	Cau Hai	Completed	150	100	1,300	Tobacco, Paddy	4.5
Gia Lai	III	EaRsai	Completed	53	100	880	Paddy	5.5
Gia Lai	V	Eaur	Construction	95	-	980	Paddy	5.5 (planned)

Appendix 4.3 Facility Utilization Data

(2/5)

Province	SPL	Facility Name	Present Condition	Irrigation Beneficial Area (ha) ¹⁾	Ratio of Irrigated Cultivation Area to Irrigation Beneficial Area(%) ²⁾	Number of Beneficial Person (person) ³⁾	Major Crops	Yield of Paddy (t/ha/crop)
Ha Giang	V	Khuoi Lam-Khuoi Lac	Completed	148	100	450	Paddy	6.0 (planned)
Ha Tinh	III	Song Rac	Completed	1,490	90	15,500 *	Paddy, Groundnut, Maize	5
Ha Tinh	IV	An Hung	Completed	219	90	5,600	Paddy, Groundnut, Maize	4
Ha Tinh	IV	Cau Ke	Completed	125	100	3,500	Paddy, Groundnut, Maize	5.5
Ha Tinh	IV	Khe Coi	Completed (portion not yet constructed)	80	88	4,000	Paddy, Groundnut, Sweet Potato	4.5-5.0
Ha Tinh	IV	19/5	Completed	650	100	9,300	Paddy, Vegetables, Sweet Potato	4.5
Ha Tinh	IV	Lien Minh-Tung Chau	Completed	400	100	11,800	Paddy, Bean	5.6-5.8
Ha Tinh	V	Huong Long	Completed	2,700	100	45,400	Paddy, Maize, Groundnut	3.6
Hoa Binh	III	Phu Lao	Completed	440	100	6,000	Paddy	6
Hoa Binh	V	Ngoc Luong	Completed	550	100	6,800	Paddy, Maize, Groundnut	6
Kon Tum	III	Dakpoko	Completed	nd	-	1,800	nd	nd
Kon Tum	V	Dak Sial	Completed	95	-	600	Paddy	5
Lai Chau	V	Khun Ha	Construction	200	-	1,200	Paddy, Maize, Bean	5.0 (planned)
Lam Dong	III	Da-Don	Completed	2,200	100	3,000	Paddy, Coffee	4
Lam Dong	V	Bo Kabang	Completed	145	100	1,230	Paddy	6
Lang Son	V	Thien Ky	Completed	146	100	1,432	Paddy, Maize, Tobacco	4.6
Lao Cai	IV	Sin Chai	Completed	130	100	1,050	Paddy, Maize, Bean	5

Appendix 4.3 Facility Utilization Data

(3/5)

Province	SPL	Facility Name	Present Condition	Irrigation Beneficial Area (ha) ¹⁾	Ratio of Irrigated Cultivation Area to Irrigation Beneficial Area(%) ²⁾	Number of Beneficial Person (person) ³⁾	Major Crops	Yield of Paddy (t/ha/crop)
Lao Cai	V	Nam Chay Irrigation	Completed	80	100	720	Paddy, Maize, Tobacco	4
Nghe An	III	Khe Ngang	Completed	160	100	2,700	Paddy, Maize, Sweet Potato	5.8
Nghe An	IV	Yen Trach-Khe Chet	Completed	170	100	1,500	Paddy, Maize, Groundnut	5
Nghe An	IV	Ke Coc-Khe Nha	Completed	652	100	9,435	Paddy, Maize, Groundnut	5.2
Nghe An	IV	Trieu Duong	Construction	200	-	1,700	Paddy, Groundnut, Sesame	5.8
Ninh Binh	V	Dong Dinh	Completed	800 (I), 800 (D)	100	2,298	Paddy, Maize, Sweet Potato	6
Ninh	III	Ninh	Completed	nd	-	nd	nd	nd
Ninh	IV	Bau Ngu	Completed	450	100	700	Paddy	7
Ninh	V	Ta Ranh	Completed	100	-	nd	Paddy	nd
Phu Tho	III	Tam Nong	Completed	1,500	100	14,100	Paddy	5.0-5.2
Phu Tho	IV	Phuong Mao (2nd S.)	Completed	928	100	17,489	Paddy	5.6
Phu Tho	IV	Hoang Hanh	Completed	840 (D), 514 (I)	100	10,000	Paddy	5.3
Phu Tho	IV	Hien Quan	Completed	350 (I), 1,855 (D)	100	14,200	Paddy	5.5
Phu Tho	V	16 Communes	Construction	2,500 (I+D)	-	58,800	Paddy	5.5
Phu Yen	III	La Bach	Construction	278	-	400	Sugarcane, Paddy	nd
Phu Yen	IV	Buon Chao	Completed	29	100	400	Paddy, Sugarcane	5
Phu Yen	V	La Bach(2)	Construction	278	-	400	Sugarcane, Paddy	nd
Phu Yen	V	Pump and I. Canal	D/D	147	-	1,800	Maize, Green Pea, Paddy	nd

Appendix 4.3 Facility Utilization Data

(4/5)

Province	SPL	Facility Name	Present Condition	Irrigation Beneficial Area (ha) ¹⁾	Ratio of Irrigated Cultivation Area to Irrigation Beneficial Area(%) ²⁾	Number of Beneficial Person (person) ³⁾	Major Crops	Yield of Paddy (t/ha/crop)
Quang Binh	III	Upgrade Cam Li	Completed	3,200	100	3,000	Paddy, Water Melon, Vegetables	5.5
Quang Nam	V	Ho Viet An	Completed	450	100	21,900	Paddy, Sesame, Bean	4.5
Quang Ngai	III	Di Lang Irrigation	Completed	650	100	5,200	Paddy, Sugarcane	3.8
Quang Ngai	IV	Suoi Chi	Completed	230	100	1,240	Paddy, Maize, Sugarcane	6.1
Quang	IV	Ong Toi	Completed	170	100	5,200	Paddy	5
Quang Ngai	V	Xa Dieu Commune	Completed	300	100	6,350	Paddy	nd
Quang Tri	IV	Nghia Hy	Completed	165	100	3,200	Paddy, Maize, Groundnut	5
Quang Tri	IV	Lia	Completed	92	100	770	Paddy, Maize	4
Quang Tri	V	Thac Heo	Completed	90	100	500	Paddy	5
Thai Nguyen	IV	Ho Nui Coc	Completed	14,500	100	100,000	Paddy, Tea, Sweet Potato	4.5
Thai Nguyen	IV	Ho Bao Linh	Completed	850	100	12,000	Paddy, Maize, Sweet Potato	4.8
Thai Nguyen	V	Minh Lap-Hoa Thuong	Construction	516	-	4,800	Paddy, Tea, Maize	5.2 (planned)
Thanh Hoa	III	Quang Xuong	Completed	1,023	80	3,500	Paddy, Groundnut, Maize	6
Thanh Hoa	III	Quang Loc	Completed	220	100	4,620	Paddy, Groundnut, Maize	5.5-6.0
Thanh Hoa	III	Vung Su	Completed	491	100	4,500	Paddy, Maize, Sugarcane	6.5
Thanh Hoa	IV	Duong Coc	Completed	700	100	24,000	Paddy, Maize, Sweet Potato	6

Appendix 4.3 Facility Utilization Data

(5/5)

Province	SPL	Facility Name	Present Condition	Irrigation Beneficial Area (ha) ¹⁾	Ratio of Irrigated Cultivation Area to Irrigation Beneficial Area(%) ²⁾	Number of Beneficial Person (person) ³⁾	Major Crops	Yield of Paddy (t/ha/crop)
Thanh Hoa	IV	Ben Da-Nui Trac	Completed	370	100	3,400	Paddy, Maize, Sweet Potato	6.9
Thanh Hoa	V	Long Dong	Completed	652	100	12,000	Paddy, Sweet Potato, Maize	7
Thua-Thien Hue	III	Phong Chuong-Cua Lac	Completed	5,950	100	68,700 *	Paddy, Bean, Vegetables	5.0-5.5
Thua-Thien Hue	V	Dien Hoa-Dien Hai	Completed	360 (I), 109 (D),	100	21,300	Paddy, Fishery	5
Tra Vinh	IV	Khu B1-Lang The	Completed	4,900	100	24,040	Paddy, Vegetables	5.5
Tra Vinh	V	Lang The	Construction	3,300	100	31,500	Paddy	4.9
Tuyen Quang	IV	Minh An	Completed	42	100	520	Paddy, Bean, Maize	5.5
Tuyen Quang	V	Yen Lap Commune	Completed	125	100	3,200	Paddy, Vegetables, Bean	6.1
Vinh Long	V	Rach T.-Thien My	Completed	1,500	100	22,000	Paddy, Pineapple, Orange	6.9-7.0
Vinh Phuc	V	Don Nhan	Completed	661	100	3,530	Paddy, Maize, Sweet Potato	4.4
Yen Bai	V	Khe The	Completed	170	100	6,000	Paddy	5.0-6.0

Note:

- 1) I or Figures Only=Irrigation Beneficial Area, D=Drainage Beneficial Area (Includes Drainage Basin Area in Some Cases), F=Fishery Beneficial Area
- 2) Drainage beneficial areas are not considered.
- 3) *: Estimated by the Survey Team

Appendix 5.1 Operation, Maintenance and Management Organization and System (1/5)

Province	SPL	Facility Name (Informality)	Beneficial Area (ha) ¹⁾	OM/M Organization (Number of Total Personnel) ²⁾	Existence of O&M Plan ³⁾	Existence of O&M Record ³⁾	Number of Persons of OM/M Post (persons)	Annual OM/M Cost (MVND) ⁴⁾	Major Repair Cost and Year (MVND)
Bac Giang	V	Khuon Than	1,974	IMC (23)	Y	N	7	140	0
Bac Kan	IV	Phieng Luong	45	IMC (264)	Y	Y	22	550 for 70 Schemes	0
Bac Kan	IV	Cho Don District	231	IMC (264)	Y	Y	32	1,500 for 127 Schemes*	0
Bac Kan	V	Cho Moi	278	IMC (264)	Y	Y	41	1,600 for 90 Schemes**	0
Bac Lieu	V	30/4 Area of C.P.	10,900 (F)	DPC (20)	Y	N	0	0	0
Binh Dinh	III	Tan An-Dap Da	18,020	IMC (262)	Y	Y	7	409	0
Binh Dinh	V	Tam Son	150	FO (5)	ud	Y	1	80	0
Binh Dinh	V	Suoi So	300	FO (10), FO (10)	N	Y	6	250	0
Binh Dinh	V	Chi Hoa2	95	ud	ud	ud	ud	ud	ud
Ca Mau	V	Lung Ranh	2.2	DARD (60)	Y	N	1	100	0
Cao Bang	V	Luong Thong	70	CPC (9)	ud	N	2	ud	ud
Dak Lac	III	Buon Chua	221	FO (9)	N	Y	9 for 4 Schemes	200 for 4 Schemes	0
Dak Lac	III	Ea Yeng	50	FO (5)	Y	N	5 for 2 Schemes	217 for 2 Schemes	0
Dak Lac	III	Nam Kar	100	FO (3)	N	N	3	65	0
Dak Lac	IV	Ea Bin	250	FO (4-5)	ud	ud	ud	ud	ud
Dak Lac	V	Ho Ke	160	ud	ud	ud	ud	ud	ud

Appendix 5.1 Operation, Maintenance and Management Organization and System (2/5)

Province	SPL	Facility Name (Informality)	Beneficial Area (ha) ¹⁾	OM/M Organization (Number of Total Personnel) ²⁾	Existence of O&M Plan ³⁾	Existence of O&M Record ³⁾	Number of Persons of OM/M Post (persons)	Annual OM/M Cost (MVND) ⁴⁾	Major Repair Cost and Year (MVND)
Dak Nong	III	Dak Mam	300	FO (5)	N	Y	1	150	0
Dak Nong	V	Electric P.S.	600	FO (11)	Y	Y	7	1,050	0
Dien Bien	V	Huoi Un	174	ud	ud	ud	ud	ud	ud
Dong Thap	V	Upgrade Tam Nong	8,484	DPC (27)	Y	Y	7	13 (Whole Province)	0
Gia Lai	III	Cau Hai	150	DPC (17)	Y	Y	4	20	0
Gia Lai	III	EaRsai	53	DPC (17)	Y	Y	4	35	0
Gia Lai	V	Eaur	95	DPC (40)	ud	ud	ud	ud	ud
Ha Giang	V	Khuoi Lam-Khuoi Lac	148	CPC (18)	Y	Y	14	10 (Planned)	0
Ha Tinh	III	Song Rac	1,490	IMC (100)	Y	Y	85 for 8 Schemes	9,500 for 8 Schemes	31,000 (2010)
Ha Tinh	IV	An Hung	219	IMC (120)	Y	Y	3	80	0
Ha Tinh	IV	Cau Ke	125	IMC (30)	Y	Y	3	60	15,000 (2010-11)
Ha Tinh	IV	Khe Coi	80	FO (7)	Y	Y	4	55	28 (2008)
Ha Tinh	IV	19/5	650	CPC (36)	Y	Y	17	50	0
Ha Tinh	IV	Lien Minh-Tung Chau	400	FO (25), FO (25), FO (25), FO (25)	N	N	52	65	4 (2007)
Ha Tinh	V	Huong Long...	2,700	IMC (32)	Y	Y	13	530	0
Hoa Binh	III	Phu Lao	440	IMC (152)	Y	Y	3	90	0
Hoa Binh	V	Ngoc Luong	550	IMC (152)	Y	Y	3	90	0
Kon Tum	III	Dakpoko	nd	CPC (20)	N	N	0	0	0

Appendix 5.1 Operation, Maintenance and Management Organization and System (3/5)

Province	SPL	Facility Name (Informality)	Beneficial Area (ha) ¹⁾	OM/M Organization (Number of Total Personnel) ²⁾	Existence of O&M Plan ³⁾	Existence of O&M Record ³⁾	Number of Persons of OM/M Post (persons)	Annual OM/M Cost (MVND) ⁴⁾	Major Repair Cost and Year (MVND)
Kon Tum	V	Dak Sial	95	IMC (65)	ud	ud	ud	ud	ud
Lai Chau	V	Khun Ha	200	ud	ud	ud	ud	ud	ud
Lam Dong	III	Da-Don	2,200	Center, DARD (148)	Y	Y	20	312	0
Lam Dong	V	Bo Kabang	145	Center, DARD (148)	Y	Y	2	31	0
Lang Son	V	Thien Ky	146	IMC (272)	Y	Y	1	30	0
Lao Cai	IV	Sin Chai	130	CPC (12)	Y	N	4	60	0
Lao Cai	V	Nam Chay Irrigation	80	CPC (7)	N	N	5	60	0
Nghe An	III	Khe Ngang	160	CPC (20)	Y	Y	5	30	340 (2008)
Nghe An	IV	Yen Trach-Khe Chet	170	FO (47)	Y	Y	4	200	400 (2006)
Nghe An	IV	Ke Coc-Khe Nha	652	DPC (78)	Y	Y	6	2,300 (Whole District)	0
Nghe An	IV	Trieu Duong	200	ud	ud	ud	ud	ud	ud
Ninh Binh	V	Dong Dinh	800 (I), 800 (D)	IMC (778)	Y	Y	4	800	0
Ninh Thuan	III	Ninh Phuoc	nd	IMC (200)	N	N	0	0	0
Ninh Thuan	IV	Bau Ngu	450	IMC (200)	Y	Y	2	10	0
Ninh Thuan	V	Ta Ranh	100	IMC (200)	ud	ud	ud	ud	ud
Phu Tho	III	Tam Nong	1,500	IMC (427)	Y	Y	17	1,900	0
Phu Tho	IV	Phuong Mao (2nd S.)	928	IMC (427)	Y	Y	6	600	300 (2008)
Phu Tho	IV	Hoang Hanh	840 (D), 514 (I)	IMC (427)	Y	Y	13	1,000	0
Phu Tho	IV	Hien Quan	350 (I), 1,855 (D)	IMC (427)	Y	Y	9	1,700	0

Appendix 5.1 Operation, Maintenance and Management Organization and System (4/5)

Province	SPL	Facility Name (Informality)	Beneficial Area (ha) ¹⁾	OM/M Organization (Number of Total Personnel) ²⁾	Existence of O&M Plan ³⁾	Existence of O&M Record ³⁾	Number of Persons of OM/M Post (persons)	Annual OM/M Cost (MVND) ⁴⁾	Major Repair Cost and Year (MVND)
Phu Tho	V	16 Communes	2,500 (I+D)	ud	ud	ud	ud	ud	ud
Phu Yen	III	La Bach	278	DPC (23)	ud	ud	ud	ud	ud
Phu Yen	IV	Buon Chao	29	FO (2)	N	Y	2	70	65 (2009)
Phu Yen	V	La Bach(2)	278	DPC (23)	ud	ud	ud	ud	ud
Phu Yen	V	Pump and I. C	147	ud	ud	ud	ud	ud	ud
Quang Binh	III	Upgrade Cam Li	3,200	IMC (200)	Y	Y	34	2	ud
Quang Nam	V	Ho Viet An	450	IMC (315)	Y	Y	69 (Whole Province)	7,000 (Whole Province)	0
Quang Ngai	III	Di Lang Irrigation	650	IMC (257), DPC (106), Town PC (25)	Y	N	10	405	73 (2010)
Quang Ngai	IV	Suoi Chi	230	CPC (24)	N	N	5	80	0
Quang Ngai	IV	Ong Toi	170	IMC (257)	Y	N	24 per 3 projects	10	0
Quang Ngai	V	Xa Dieu Commune	300	CPC (21)	N	N	ud	ud	ud
Quang Tri	IV	Nghia Hy	165	IMC (300)	Y	Y	3	115	0
Quang Tri	IV	Lia	92	DPC (22), CPC (22)	Y	Y	5	3.4	0
Quang Tri	V	Thac Heo	90	DPC (100), CPC (30)	Y	Y	3	82	0
Thai Nguyen	IV	Ho Nui Coc	14,500	IMC (186)	Y	Y	60	9,300	0
Thai Nguyen	IV	Ho Bao Linh	850	IMC (186)	Y	Y	14	300	0

Appendix 5.1 Operation, Maintenance and Management Organization and System (5/5)

Province	SPL	Facility Name (Informality)	Beneficial Area (ha) ¹⁾	OM/M Organization (Number of Total Personnel) ²⁾	Existence of O&M Plan ³⁾	Existence of O&M Record ³⁾	Number of Persons of OM/M Post (persons)	Annual OM/M Cost (MVND) ⁴⁾	Major Repair Cost and Year (MVND)
Thai Nguyen	V	Minh Lap-Hoa Thuong	516	ud	ud	ud	ud	ud	ud
Thanh Hoa	III	Quang Xuong	1,023	IMC (980)	Y	Y	3	130	0
Thanh Hoa	III	Quang Loc	220	IMC (575)	Y	Y	5	80	0
Thanh Hoa	III	Vung Su	491	IMC (980)	Y	Y	6	700	700 (2008)
Thanh Hoa	IV	Duong Coc	700	IMC (980)	Y	Y	11	350	14,000 (2009)
Thanh Hoa	IV	Ben Da-Nui Trac	370	FO (45)	Y	Y	15	268	0
Thanh Hoa	V	Long Dong	652	IMC (980)	Y	Y	9	400	0
Thua-Thien Hue	III	Phong Chuong-Cua Lac	5,950	IMC (150) for 2 Areas, FO (9) for 1 Area	N	Y	18	3,000 (IMC for Whole Province), 50	1,000 (2009)
Thua-Thien Hue	V	Dien Hoa-Dien Hai	360 (I), 109 (D), 49 (F)	DPC (30)	ud	ud	ud	ud	ud
Tra Vinh	IV	Khu B1-Lang The	4,900	IMC (106)	Y	N	1	2	0
Tra Vinh	V	Lang The	3,300	IMC (106)	ud	ud	ud	ud	ud
Tuyen Quang	IV	Minh An	42	FO (7)	Y	N	5	80-90	0
Tuyen Quang	V	Yen Lap Commune	125	FO (22)	Y	Y	20	180	0
Vinh Long	V	Rach T.-Thien My	1,500	DPC (24)	Y	Y	1	0	0
Vinh Phuc	V	Don Nhan	661	ud	ud	ud	ud	ud	ud
Yen Bai	V	Khe The	170	ud	ud	ud	ud	ud	ud

Note:

- 1) I or Figures Only=Irrigation Beneficial Area, D=Drainage Beneficial Area (Includes Drainage Basin Area in Some Cases), F=Fishery Beneficial Area
 - 2) IMC=Irrigation Management Company, FO=Farmers' Organization
 - 3) Y=Existence, N=No Schedule to Prepare
 - 4) *=This sub-project is counted for 6 schemes, and **= counted for 14 schemes.
- Common: ud=under design stage

Appendix 5.2 Names of Operation, Maintenance and Management Organization and Post

(1/6)

Province	SPL	Facility Name (Informality)	Name of OM/M Organization	Name of OM/M Post	Remarks
Bac Giang	V	Khuon Than	Luc Ngan Irrigation Project Exploiting Company of Bac Giang PPC	Khuon Than and Lang Thun Irrigation Management Groups	5 Companies in Province
Bac Kan	IV	Phieng Luong	Irrigation Project Exploiting Company of Bac Kan PPC	Pac Nam Station	
Bac Kan	IV	Cho Don District	Irrigation Project Exploiting Company of Bac Kan PPC	Cho Don Station	
Bac Kan	V	Cho Moi	Irrigation Project Exploiting Company of Bac Kan PPC	Cho Moi Station	
Bac Lieu	V	30/4 Area of C.P.	Hoa Binh DPC	Agriculture and Rural Development Division	
Binh Dinh	III	Tan An-Dap Da	Irrigation Management Ltd. Company of Binh Dinh PPC	An Nhon Branch	
Binh Dinh	V	Tam Son	Cat Lam Agricultural Cooperative	Cat Lam Agricultural Cooperative	
Binh Dinh	V	Suoi So	My Phong Agricultural Cooperatives	My Phong Agricultural Cooperative	
Binh Dinh	V	Chi Hoa2	ud	ud	
Ca Mau	V	Lung Ranh	DARD	Water Resources Division	
Cao Bang	V	Luong Thong	Luong Thong CPC	Agriculture, Forestry and Construction Division	
Dak Lac	III	Buon Chua	Yang Tao Water Users' Cooperative	Yang Tao Water Users' Cooperative	
Dak Lac	III	Ea Yeng	Ea Yeng Water Users' Cooperative	Ea Yeng Water Users' Cooperative	
Dak Lac	III	Nam Kar	Nam Kar Water Users' Cooperative	Nam Kar Water Users' Cooperative	
Dak Lac	IV	Ea Bin	Ea Bhok Water Users' Cooperative	Ea Bhok Water Users' Cooperative	
Dak Lac	V	Ho Ke	ud	ud	

Appendix 5.2 Names of Operation, Maintenance and Management Organization and Post

(2/6)

Province	SPL	Facility Name (Informality)	Name of OM/M Organization	Name of OM/M Post	Remarks
Dak Nong	III	Dak Mam	Nam Da Water Users' Cooperative	Nam Da Water Users' Cooperative	
Dak Nong	V	Electric P.S.	Choah Village Water Users' Cooperative	Choah Village Water Users' Cooperative	
Dien Bien	V	Huoi Un	ud	ud	
Dong Thap	V	Upgrade Tam Nong	Tam Nong DPC	Agriculture and Rural Development Division	
Gia Lai	III	Cau Hai	Krongpa DPC	Irrigation and Agriculture Station	
Gia Lai	III	EaRsai	Krongpa DPC	Irrigation and Agriculture Station	
Gia Lai	V	Eaur	Krongpa DPC	Agriculture Management Station	
Ha Giang	V	Khuoi Lam-Khuoi Lac	Trung Thanh CPC	O&M Team	No IMC in Province
Ha Tinh	III	Song Rac	Song Rac Irrigation Project Exploiting Company of Ha Tinh PPC	Song Rac Branch	3 Province Owned and 4 District Owned Companies in Province
Ha Tinh	IV	An Hung	Irrigation Project Exploiting Company of Can Loc DPC	An Hung Station	
Ha Tinh	IV	Cau Ke	Irrigation Management and Exploitation Company of Huong Son DPC	Cay Truong Station	
Ha Tinh	IV	Khe Coi	Xuan Thang Farmers' Cooperation	O&M Team	
Ha Tinh	IV	19/5	Cam Phuc CPC	Water Service Team	
Ha Tinh	IV	Lien Minh-Tung Chau	Thong Nhat, Dai Minh, Duc Ninh and Duc Chau Farmers' Cooperations	Thong Nhat, Dai Minh, Duc Ninh and Duc Chau Farmers' Cooperations	
Ha Tinh	V	Huong Long...	Huong Khe Irrigation Project Construction, Management and Exploitation Company of Ha Tinh PPC	Tiem River Station	

Appendix 5.2 Names of Operation, Maintenance and Management Organization and Post

(3/6)

Province	SPL	Facility Name (Informality)	Name of OM/M Organization	Name of OM/M Post	Remarks
Hoa Binh	III	Phu Lao	Irrigation Project Exploiting Company of Hoa Binh PPC	Lac Thuy Branch	
Hoa Binh	V	Ngoc Luong	Irrigation Project Exploiting Company of Hoa Binh PPC	Yen Thuy Branch	
Kon Tum	III	Dakpoko	Dak Glei CPC	none	
Kon Tum	V	Dak Sia1	Irrigation Exploitation Company of Kon Tum PPC	Sa Thay Team	
Lai Chau	V	Khun Ha	ud	ud	
Lam Dong	III	Da-Don	Center for Management and Operation, DARD	Lam Ha Station	
Lam Dong	V	Bo Kabang	Center for Management and Operation, DARD	Don Duong Station	
Lang Son	V	Thien Ky	Irrigation Project Exploiting Company of Lang Son PPC	Huu Lung Branch	
Lao Cai	IV	Sin Chai	Den Thang CPC	Chairman, Irrigation Officer, Village Leaders	
Lao Cai	V	Nam Chay Irrigation	Nam Chay CPC	Irrigation Project Management Unit	
Nghe An	III	Khe Ngang	Hung Yen Bac CPC	Service Team	
Nghe An	IV	Yen Trach-Khe Chet	Thai Son Cooperation for Agriculture Services	Water Service Station	
Nghe An	IV	Ke Coc-Khe Nha	Quy Chau DPC	Agriculture and Irrigation Station	
Nghe An	IV	Trieu Duong	ud	ud	
Ninh Binh	V	Dong Dinh	Irrigation Project Exploiting One Member Company of Ninh Binh PPC	Nho Quan Branch	

Appendix 5.2 Names of Operation, Maintenance and Management Organization and Post

(4/6)

Province	SPL	Facility Name (Informality)	Name of OM/M Organization	Name of OM/M Post	Remarks
Ninh Thuan	III	Ninh Phuoc	Irrigation Works Dyploing Company of Ninh Thuan PPC	none	
Ninh Thuan	IV	Bau Ngu	Irrigation Works Dyploing Company of Ninh Thuan PPC	Ninh Phuoc Station	
Ninh Thuan	V	Ta Ranh	Irrigation Works Dyploing Company of Ninh Thuan PPC	Ninh Phuoc Station	
Phu Tho	III	Tam Nong	Irrigation Exploiting One Member Company of Phu Tho PPC	Tam Nong Irrigation Station	
Phu Tho	IV	Phuong Mao (2nd S.)	Irrigation Exploiting One Member Company of Phu Tho PPC	Thanh Thuy Irrigation Station	
Phu Tho	IV	Hoang Hanh	Irrigation Exploiting One Member Company of Phu Tho PPC	Thanh Ba Irrigation Station	
Phu Tho	IV	Hien Quan	Irrigation Exploiting One Member Company of Phu Tho PPC	Tam Nong Irrigation Station	
Phu Tho	V	16 Communes	ud	ud	
Phu Yen	III	La Bach	Song Hinh DPC	Agricultural Division	
Phu Yen	IV	Buon Chao	Buon Chao Agricultural Water Association	Buon Chao Team	District owned
Phu Yen	V	La Bach(2)	Song Hinh DPC	Agricultural Division	
Phu Yen	V	Pump and I. C	ud	ud	
Quang Binh	III	Upgrade Cam Li	Irrigation Project Exploiting Company of Quang Binh PPC	Cam Li Station	
Quang Nam	V	Ho Viet An	Irrigation Exploiting Company of Quang Nam PPC	Que Son Branch, and Thang Binh Branch	

Appendix 5.2 Names of Operation, Maintenance and Management Organization and Post

(5/6)

Province	SPL	Facility Name (Informality)	Name of OM/M Organization	Name of OM/M Post	Remarks
Quang Ngai	III	Di Lang Irrigation	Irrigation Exploiting Company of Quang Ngai PPC (Dam) and Son Ha DPC, and Di Lang Town PC (Canal)	Station 7 (Dam) and O&M Teams (Canal)	
Quang Ngai	IV	Suoi Chi	Hanh Tindong CPC	O&M Team	
Quang Ngai	IV	Ong Toi	Irrigation Exploiting Company of Quang Ngai PPC	Station No.5	
Quang Ngai	V	Xa Dieu	Son Ha CPC	ud	
Quang Tri	IV	Nghia Hy	Irrigation Project Exploiting Company of Quang Tri PPC	Gio Cam Ha Station	
Quang Tri	IV	Lia	Huong Hoa DPC and A Tuc CPC	OM Team of A Tuc CPC	
Quang Tri	V	Thac Heo	Hai Lang DPC and Hai Lam CPC	OM Team of Hai Lam CPC	
Thai Nguyen	IV	Ho Nui Coc	Developing of Irrigation Limited Liability Company of Thai Nguyen PPC	Ho Nui Coc Branch	
Thai Nguyen	IV	Ho Bao Linh	Developing of Irrigation Limited Liability Company of Thai Nguyen PPC	Dinh Hoa Station	
Thai Nguyen	V	Minh Lap-Hoa Thuong	ud	ud	
Thanh Hoa	III	Quang Xuong	Song Chu Irrigation Project Exploiting Ltd. Company of Thanh Hoa PPC	Quang Xuong Branch	
Thanh Hoa	III	Quang Loc	Bac Song Ma Irrigation and Agriculture Company of Thanh Hoa PPC	Hau Loc Branch	
Thanh Hoa	III	Vung Su	Song Chu Irrigation Project Exploiting Ltd. Company of Thanh Hoa PPC	Thach Thanh Branch, Irrigation Group	

Appendix 5.2 Names of Operation, Maintenance and Management Organization and Post

(6/6)

Province	SPL	Facility Name (Informality)	Name of OM/M Organization	Name of OM/M Post	Remarks
Thanh Hoa	IV	Duong Coc	Song Chu Irrigation Project Exploiting Ltd. Company of Thanh Hoa PPC	Cam Thuy Branch	
Thanh Hoa	IV	Ben Da-Nui Trac	Vinh Long-1 Farmers' Organization	Electricity Team, and Maintenance of Irrigation and Road Team	
Thanh Hoa	V	Long Dong	Song Chu Irrigation Project Exploiting Ltd. Company of Thanh Hoa PPC	Thach Thanh Branch, Pumping Group, and Technical and Electricity Group	
Thua-Thien Hue	III	Phong Chuong-Cua Lac	My Phu Farmers' Organization (1 Area) and Company for Management and Exploiting of Irrigation Project of Thua-Thien Hue PPC (2 Areas)	My Phu Pump Station (1 Area) and Cua Lac Station and Phong Chaong Station (2 Areas)	
Thua-Thien Hue	V	Dien Hoa-Dien Hai	Phong Dien DPC	ud	
Tra Vinh	IV	Khu B1-Lang The	Management and Opeartion of Irrigation Schemes of Tra Vinh PPC and Cang Long DPC	Cang Long Branch	
Tra Vinh	V	Lang The	Management and Opeartion of Irrigation Schemes of Tra Vinh PPC and Chau Thanh DPC	Chau Thanh Branch	
Tuyen Quang	IV	Minh An	Farmers' Organization in Ngoc Hoi Commune	Farmers' Organization in Ngoc Hoi Commune	
Tuyen Quang	V	Yen Lap Commune	Farmers' Organization in Yep Lap Commune	Farmers' Organization in Yep Lap Commune	
Vinh Long	V	Rach T.-Thien My	Tra On DPC	Agricultural and Rural Development Division	
Vinh Phuc	V	Don Nhan	ud	ud	
Yen Bai	V	Khe The	ud	ud	

Common: ud=not yet decided