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PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 31.4 MILLION
(US\$ 45.87 MILLION EQUIVALENT)

TO THE

SOCIALIST REPUBLIC OF VIETNAM

FOR A

RED RIVER DELTA RURAL WATER SUPPLY AND SANITATION PROJECT

IN SUPPORT OF THE FIRST PHASE OF A
RURAL WATER SUPPLY AND SANITATION PROGRAM

August 15, 2005

Urban Development Sector Unit
East Asia and Pacific Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective June 30, 2005)

Currency Unit = Dong
15,700 Dong = US\$1
US\$1.46323 = SDR 1

FISCAL YEAR

January 1 - December 31

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ABBREVIATIONS AND ACRONYMS

AAA	Analytical and Advisory Activities
AP	Adaptable Program Loan
ATP	Ability to Pay
AusAID	Australian Agency for International Development
CAS	Country Assistance Strategy
CERWASS	Center for Rural Water Supply and Sanitation
CFAA	Country Financial Accountability Assessment
CPO	Central Project Office
CPRGS	Comprehensive Poverty Reduction and Growth Strategy
CWDG	Community Water Development Group
DAF	Development Assistance Fund
Danida	Danish International Development Agency
DARD	Department of Agriculture and Rural Development
DCA	Development Credit Agreement
DFID	U. K. Department for International Development
DOF	Department of Finance
DONRE	Department of Natural Resources and Environment (in Provinces)
DP	Displaced Person
DPI	Department of Planning and Investment
EA	Environmental Assessment
EAP	East Asia Pacific (region)
EIA	Environmental Impact Assessment
EIRR	Economic Internal Rate of Return
EMDP	Ethnic Minority Development Plan
EMP	Environmental Management Plan
EMPF	Ethnic Minority Policy Framework
FIRR	Financial Internal Rate of Return
FM	Financial Management
FMR	Financial Monitoring Report
FRR	Financial Rate of Return
FS	Feasibility Study
GoV	Government of Vietnam
HH	Households
ICB	International Competitive Bidding
IEC	Information, Education and Communication
JICA	Japanese International Cooperation Agency
JSC	Joint Stock Company
lcd	Liters per capita per day
LLC	Limited Liability Company
MARD	Ministry of Agriculture and Rural Development
MDGs	Millennium Development Goals
MOC	Ministry of Construction
MOF	Ministry of Finance
MOH	Ministry of Health
MOLISA	Ministry of Labor, Invalids, and Social Affairs
MONRE	Ministry of Natural Resources and Environment
MPI	Ministry of Planning and Investment
MTR	Mid Term Review
NCB	National Competitive Bidding
NGO	Non Governmental Organization
NPV	Net Present Value
NTP	National Target program for Rural Water Supply and Environmental Health
PAP	Project Affected People

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VIETNAM

RED RIVER DELTA RURAL WATER SUPPLY AND SANITATION PROJECT

CREDIT AND PROJECT SUMMARY

East Asia and Pacific
EASUR

Date: August 15, 2005	Team Leader: Mr. Richard W. Pollard
Country Director: Mr. Klaus Rohland	Sectors: Water supply (60%); Sanitation (20%);
Sector Manager/Director: Mr. Keshav Varma	Health (20%)
	Themes: Rural services and infrastructure (P);
	Other communicable diseases (S)
Project ID: P077287	Environmental screening category: B (Partial
	Assessment)
Lending Instrument: Adaptable Program Loan	Safeguard screening category: Limited impact

Program Financing Data							
AP	Indicative Financing Plan (US\$m)				Estimated Implementation Period		Borrower
	IDA	%	Others	Total	Commitment Date	Closing Date	
AP1 Credit	45.87	92	4.25	50.12	9/15/05	6/30/11	SRV
AP2 Credit	96.00	92	8.89	109.88	6/30/09	6/30/14	SRV
Total	141.87	92	13.14	155.0			

Project Financing Data – AP1							
<input type="checkbox"/> Loan <input checked="" type="checkbox"/> Credit <input type="checkbox"/> Grant <input type="checkbox"/> Guarantee <input type="checkbox"/> Other:							
For Loans/Credits/Others:							
Total Bank financing (US\$m): 45.87							
Proposed terms: General IDA Conditions, as modified in the DCA							
Years to Maturity: 40 years							
Grace period: 10 years							
Commitment fee: not exceeding 0.5% per annum							
Service charge: 0.75% per annum							

Financing Plan – AP1 (US\$m)			
Source	Local	Foreign	Total
Borrower/Recipient	0.84	0.00	0.84
IDA	45.15	0.72	45.87
Local Communities	3.41	0.00	3.41
Total:	49.40	0.72	50.12

Borrower: Socialist Republic of Vietnam
Responsible Agencies:
 Ministry of Agriculture and Rural Development
 Center for Rural Water Supply & Sanitation
 Hanoi, Vietnam
 Tel: 84-4-835-5821 Fax: 84-4-835-5964
 cerwass@fpt.vn

Department of Agriculture and Rural Dev. Hai Duong Province	Department of Agriculture and Rural Dev. Nam Dinh Province
Department of Agriculture and Rural Dev. Ninh Binh Province	Department of Agriculture and Rural Dev. Thai Binh Province

Estimated disbursements – AP1 (Bank FY/US\$m)								
FY	2006	2007	2008	2009	2010	2011	2012	
Annual	1.32	2.28	5.87	8.40	11.70	12.30	4.00	
Cumulative	1.32	3.60	9.47	17.87	29.57	41.87	45.87	

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Does the project include any critical risks rated “substantial” or “high”? [X]Yes [] No
Ref. PAD C.5

Does the project meet the Regional criteria for readiness for implementation? *Ref. PAD D.7* [X]Yes [] No

The development objectives of the Rural Water Supply and Sanitation (RWSS) Program are to contribute to improving the quality of life and alleviating poverty in selected rural communities, through investments in water supply and sanitation infrastructure, hygiene and sanitation related behavior, and capacity building.

Project development objective *Ref. PAD B.3, Technical Annex 3*
The development objective of the Red River Delta Water Supply and Sanitation Project (RRDRWSP), which is Phase 1 of the Program, is to improve water and household level sanitation services and their effective use in four selected provinces in the Red River Delta in ways that are financially, technically, socially and environmentally sustainable, thereby contributing to poverty alleviation in participating rural communities.

Program description Ref. PAD B.2, Technical Annex 1
Phase 1, (\$45.87 million), will demonstrate appropriate approaches to RWSS in the Red River Delta and build capacity at decentralized levels. The Project will support initiatives in the provinces of Hai Duong, Nam Dinh, Ninh Binh, and Thai Binh.

Phase 2 (\$96 million), will scale up RWSS approaches that have been tested and proven in Phase 1. It will expand project initiatives in up to eight additional provinces: Bac Ninh, Ha Nam, Quang Ninh, Ha Tay, Hung Yen, Thanh Hoa, Vinh Phuc and Phu Tho, and thereby support expanded implementation of the National RWSS Strategy and the National RWSS Target Program.

Project description Ref. PAD B.4, Technical Annex 4
Component 1, Water and Sanitation Infrastructure Development, will respond primarily to the growing rural/urban services gap by improving access to safe water supplies and sanitation facilities in

selected rural areas. Each of the four Phase One provinces will have about 25-30 commune level sub-projects to develop improved water and sanitation infrastructure.

Component 2, Hygiene and Sanitation Behavior Change, will provide a range of hygiene and sanitation promotion interventions aimed at optimizing the effective use of improved water and sanitation infrastructure, and the adoption of safe hygiene behaviors in all households within sub-project areas through commune and school-based programs.

Component 3, Strengthening the Capacity of Community and Local Government Institutions and Management Entities, will address deficiencies in fund transfer, institutional capacities, and the effectiveness of decentralized investment through training and technical assistance. Rural Water Supply and Sanitation Enterprises (RWSSEs) that will be established under the project will be the key focus for capacity building, as well as provincial government line agencies, commune-level government, and commune-level water development groups and cooperatives.

Component 4, Support for Project Management, Monitoring and Evaluation, will provide financing and technical assistance for the establishment and functioning of Provincial Project Management Units (PPMUs) and a Central Project Office (CPO).

Which safeguard policies are triggered, if any? *Ref. PAD D.6, Technical Annex 10*

Environmental Assessment (OP/BP/GP 4.01)

Involuntary Resettlement (OP/BP 4.12)

Indigenous Peoples (OD 4.20, being revised as OP 4.10)

Significant, non-standard conditions, **if any**, for:

Ref. PAD C.6

Board presentation: None

Credit effectiveness:

1. Approval by the participating provinces of feasibility studies for their respective activities to be carried out during the first 12 months of implementation;
2. Finalization and adoption by the borrower of the following manuals, acceptable to IDA: (a) Project Management Manual; (b) Project Operations Manual; (c) Household Water, Sanitation and Drainage Revolving Fund Manual; and (d) Financial Management Manual;
3. Finalisation and adoption by the borrower of standard pre-qualification and bidding documents, acceptable to IDA, for planning, designing, building, and operating piped water supply systems; and
4. Central Project Office (CPO) and each Provincial Project Management Unit (PPMU) have: (a) established a computerized accounting system; and (b) appointed financial officers, both acceptable to IDA.

Implementation covenants:

1. PPMUs or RWSSEs to undertake the following for each Sub-Project: (a) enter into Sub-project Agreements with participating communes defining mutual rights and obligations for execution of sub-project activities; (b) carry out environmental screening, environmental reviews, and impact assessments; and (c) prepare and implement Resettlement Action Plans for those sub projects that give rise to Displaced Persons; and (d) implement Ethnic Minorities Development Plans;
2. Each participating province to establish, not later than December 31, 2007, one or more RWSSEs in accordance with the Charter developed for this purpose;
3. Provincial People's Committees (PPCs) to (a) enter into subsidiary loan agreements with RWSSEs for commune water scheme development in accordance with procedures described in the Project Management Manual; (b) set piped water supply tariffs that cover all costs using principles and procedures described in the Operations Manual, but updated for actual costs, at the start of operations of all new water supply schemes; (c) set piped water supply tariffs that cover all operation, maintenance, and depreciation costs for existing schemes beginning on or before the date that the

assets are transferred to a RWSSE established under the project; and (d) enter into arrangements with their provincial Women's Unions to establish and operate Household Water and Sanitation Revolving Funds in accordance with the procedures described in the Revolving Fund Manual;

4. GOV to require PPCs to ensure that ownership of all new and existing piped water systems under the control of Provincial Centres for Rural Water Supply and Sanitation (PCERWASS) be progressively transferred to Rural Water Supply and Sanitation Enterprises within 24 months from the date of credit effectiveness; and
5. Women's Unions that manage the Household Water and Sanitation Revolving Funds at the provincial level to maintain financial records and accounts for these funds and have them audited annually, in a manner satisfactory to IDA.

A. STRATEGIC CONTEXT AND RATIONALE

1. Country and sector issues

Key sector issues that the project will address, further described in Annex 1, include:

- **Low coverage of water and sanitation services.** About 90% of Vietnam's poor reside in rural areas. Access to safe water supplies and hygienic sanitation facilities in these rural areas is amongst the lowest in East Asia. In 2000, only 10% of rural households were estimated to have access to water supplies meeting clean water standards. Of the estimated 25-40% of rural households nationwide that use some form of latrine, only about a third are using facilities that are considered hygienic.
- **High concentrations of poor households in the delta areas.** Most of the rural poor in Vietnam live in the Red River and Mekong Deltas. Although poverty rates are somewhat lower than in remote and mountainous provinces, the very high population densities prevailing in the deltas mean that this is where most of the rural poor live (see maps at the back of this document showing poverty density and the incidence of poverty). In 2002, nearly 3 million people in the Red River Delta were classified as poor. This accounted for around 17 percent of all the poor in Vietnam. The four provinces included in Phase 1 of the Program were estimated to have poverty rates ranging from 23% to 37%.
- **Water quality.** Access to adequate quantities of good quality water continues to be a critical issue in rural areas. Many people still use untreated water from dug wells, rivers, ponds, streams or irrigation canals.
- **Rural health, productivity, and gender issues linked to water and sanitation infrastructure.** Part of the reason for enduring poverty is that despite an impressive and dramatic decline in infant mortality and communicable disease incidence over the past 20 years, water-related infectious diseases remain major health problems in Vietnam. Child malnutrition continues to be a major health issue, with Vietnam maintaining one of the highest rates of child malnutrition in East Asia. An important cluster of underlying causes for malnutrition is related to the availability and use of safe water and sanitation, and personal hygiene. Women provide most of the labor for the collection and handling of water and bear the burden of caring for those with diarrhea and other water and sanitation related diseases.
- **Under-financing of the water and sanitation sector.** The RWSS sector continues to be chronically under-financed. Funds available from all existing sources, i.e., GOV, donors and communities, comprise only about 40% of the actual amount needed to achieve national development goals in the sector. This lack of resources has meant poor maintenance with many existing schemes being desperately in need of repair, rehabilitation or upgrading.
- **Unsustainable infrastructure.** Existing rural water supply and sanitation infrastructure tends to be inappropriately designed, poorly constructed, and badly maintained. Piped water schemes are often over-designed and have a small consumer base. Tariffs have not been calculated on the basis of actual costs of operation, maintenance and repair, rendering water supply schemes financially unsustainable and dependent on substantial subsidies for operation.

Government Strategy

National policies and strategy for rural water, sanitation and health are imbedded in two documents, the *Comprehensive Poverty Reduction and Growth Strategy* (CPRGS), and the *National Rural Clean Water Supply and Sanitation Strategy up to the Year 2020* (RWSS 2020). The CPRGS reaffirms and more clearly defines the strategic approach being taken for poverty reduction and social equity, as put forward in the broader *Socioeconomic Development Strategy for 2001-2010*. The RWSS 2020 lays out the national approach for achieving the ambitious goals established in the *National Target Program for Rural Clean Water Supply and Environmental Hygiene*, which made improving rural access to clean water supplies and sanitation a national priority.

Three key social and poverty reduction targets laid out in the CPRGS are directly related to water supply, sanitation, and health services in rural areas: (a) ensuring the provision of essential infrastructure to the poor; (b) reducing child mortality and child malnutrition; and (c) achieving gender equality and empowering women. The CPRGS includes somewhat ambitious targets for improving access to water (among other infrastructure improvements) to ensure that 75% of poor communities are adequately served by 2005, and all have access by 2010. *Vietnam Development Goals* (VDGs), which guide Vietnam's efforts to achieve some of the *Millennium Development Goals*, include more realistic targets of achieving sustained access to safe water supplies for 60% of the rural population by 2005, and 85% by 2010.

The RWSS 2020 provides a pragmatic strategic approach toward achieving 100% access to safe water and sanitation services in rural areas by 2020. It is underpinned by the principles of managing water as an economic as well as a social good, basing decision-making and management at the lowest appropriate level, and emphasizing the participation of women in planning and management. Piped water systems are to be promoted where feasible. Rural households and communities are expected to actively participate in the planning, design, construction, and operation of the facilities. Government agencies are expected to play a facilitating role and ensure adherence to national regulations and standards.

The overall approach to be taken is underpinned by the principle of demand responsiveness, with households and communities making decisions about the type of service they want and are willing to pay for through a process of informed choice. As a general principle, users are expected to contribute to the construction and operating costs of water and sanitation systems, but targeted subsidies will be provided for the construction costs for poor households, piped schemes, and in remote and mountainous areas.

2. Rationale for Bank involvement

The project conforms to IDA's strategic approach in Vietnam to support projects that feature demand responsiveness, decentralization, community participation, and building local institutional capacity. It is the first phase of a longer term investment program that will be Vietnam's first large-scale investment to operationalize the RWSS 2020. The RWSS 2020 provides a clear, politically supported policy framework and approach that underpins the adaptable program supported by this project.

The phased approach, that is a feature of adaptable program lending, provides the flexibility and resources needed to further develop specific approaches and local capacities for a progressively expanding program. Building capacity at decentralized levels in the first phase will also help implementation of future rural development investment.

Bank value added comes from: (a) experience with the participatory methodologies developed and applied at scale in RWSS projects in the region; (b) provision of technical advice, critical review, field supervision, and follow-up dialogue to provide independent feedback; (c) financial support for infrastructure and social services; (d) links to global and regional research and promotion programs, such as the global hand washing initiative; and (e) access to knowledge concerning global and regional best practice in the water supply, sanitation, and health sectors.

3. Higher level objectives to which the project contributes

The project will directly respond to the 2003-2006 CAS theme of *enhancing equitable, socially inclusive and sustainable development*. Within that theme, it will help *reduce the rural/urban development gap, and contribute to gender equality and the advancement of women*. It will contribute to the theme of *promoting good governance* by increasing the capacity of communes and local governments to make development choices through transparent and democratic processes, and to plan and manage development initiatives. In addition it will promote the development and operation of transparent and accountable commercial RWSS enterprises. The project will also support Vietnam's efforts to achieve the Millennium Development Goals, in particular Goal 7.

B. PROJECT DESCRIPTION

1. Lending instrument

The proposed project is the first phase of a two-phase Adaptable Program (AP) for a ***Rural Water Supply and Sanitation Program (RWSS Program)*** supporting GOV's long-term development strategy for the RWSS sector.

2. Program objective and phases

The *higher level objectives*, to which the RWSS Program contributes, are: (a) to support GOV's efforts to extend coverage of sustainable water and sanitation facilities to 100 percent of the rural population by the year 2020, and (b) ensure effective use of these facilities to achieve enduring economic and social benefits. These are consistent with the Government's *National Target Program (NTP)* for RWSS, for which the *principal governing strategy* is the RWSS 2020, issued in 2000.

The *development objectives* of the RWSS Program interventions are to contribute to improving the quality of life and alleviating poverty in selected rural communities, through investments in water supply and sanitation infrastructure, hygiene and sanitation related behavior, and capacity building.

The *specific objectives* of the RWSS Program are:

- *Policy Development* - optimize modalities for inclusion of the poor; test and promote better cost recovery; and contribute to refining the national strategy and policies for RWSS in light of experience.
- *Expanding Access and Improving Quality of Life* - test and adapt large-scale investment processes; test and refine the implementation and financing strategy; develop and refine

RWSS management models reflecting the fact that rural communes in the Red River Delta are densely populated and are conducive to a small towns water utility approach.

- *Institutional Reform* - build experience and acceptance of more commercially oriented approaches to RWSS provision by establishing RWSS enterprises; build capacity for supporting and facilitating RWSS services through government and non-government agencies, particularly at province and district levels; and build capacity to effectively coordinate the National Target Program.

Within this context, the RWSS Program will consist of two linked phases, each lasting about five years. Both phases will have the same development objectives, and will be implemented in a total of about twelve provinces in the Red River Delta and adjacent areas. A letter from Government (the Program Letter), which sets down their commitment to the Program and the triggers for moving to the second phase, is attached to Annex 1.

Phase 1 (\$45.87 million IDA), the *Red River Delta Rural Water Supply and Sanitation Project (RRD RWSS)* will demonstrate appropriate approaches to RWSS in four provinces in the Red River Delta and build capacity at decentralized levels. Around 800,000 people living in 120 communes are expected to benefit. The provinces included are Hai Duong, Nam Dinh, Ninh Binh, and Thai Binh.

Triggers for Phase 2. The agreed triggers, which are included in the Program Letter, will measure if sufficient progress has been made towards achieving the project objectives and developing sector policy to justify continued IDA support for Phase 2. A total of seven triggers have been agreed, of which achievement of the first five is required to proceed to Phase 2. Achievement of two additional triggers (six and seven) will also be carefully monitored. Triggers either relate to the overall RWSS sectoral environment or to the RRD RWSS project.

Policy development triggers (RWSS Sector)

1. *GOV Financing and Poverty Targeting Strategy* in place, based on a review of the effectiveness of the National Target Program and related projects in helping poor households gain sustained access to a basic level of safe water and sanitation services.
2. National Sector Investment Plan for achieving WSS sector development objectives as defined in the Vietnam MDGs developed, with a pipeline of investment projects established.

Expanding access triggers (Project)

3. Fully functional and effectively operated and maintained *water supply systems* in at least five communes in each of at least three of the four Phase 1 Provinces, as measured by (a) technical performance (service availability, reliability and water quality), and (b) consumer satisfaction. Indicators for technical performance include:
 - water services being provided in a financially sustainable manner (i.e., operating and maintenance costs covered and debt serviced);
 - percent of water quality samples meeting national drinking water quality standards (at least 75% of regular random sampling of piped water supplies); and
 - volume of water sold meeting or exceeding national per capita water quantity standards (currently 60 lcd).

Consumer satisfaction will be evaluated through periodic participatory assessments that will allow measurement of changes in perceived service quality.

4. In communes that benefit from improved water supply, at least 40% of households and all schools have, and use, *hygienically improved sanitation facilities*, as indicated by: (a) number of households and schools that have constructed new or improved sanitation and household drainage facilities; and (b) changes in hygiene-related behavior as determined through participatory assessments.

Institutional reform triggers (Project)

5. *Rural Water Supply and Sanitation Enterprises* established, and are responsible for: (a) holding the assets of completed piped schemes; and (b) management of operation and maintenance in a financially sustainable manner.

Additional institutional reform triggers to be monitored (Project)

6. Provincial DARDs have established *Rural Water and Sanitation Sections* that are functioning effectively, with clearly defined performance monitoring responsibilities.
7. In communes with completed infrastructure, an effective *project financing strategy* is operating, ensuring (a) that operation, maintenance and loan repayment costs are fully covered by the tariffs, and (b) full inclusion of the poor (determined through surveys and participatory assessments).

Phase 2 (\$96 million IDA), will scale up approaches to RWSS that have been tested and proven in Phase 1. It will expand project initiatives in up to eight additional provinces: Bac Ninh, Ha Nam, Quang Ninh, Ha Tay, Hung Yen, Thanh Hoa, Vinh Phuc and Phu Tho, and thereby support expanded implementation of the National RWSS Strategy and the National RWSS Target Program. The IDA amount is an estimate and subject to change following detailed preparation in Phase 1.

3. Project development objective and key indicators

The project's *development objective* is to improve water and household level sanitation services and their effective use in four selected provinces in the Red River Delta in ways that are financially, technically, and environmentally sustainable, thereby contributing to poverty alleviation in participating rural communities.

Selected indicators (refer to Annex 3):

- Number of people with improved access to sustained, safe water supplies;
- Number of people with access to safe sanitation facilities;
- Number of households and communes/villages served that are designated "poor" by the Ministry of Labor, Invalids, and Social Affairs (MOLISA) and/or eligible for special social programs for ethnic minorities;
- Beneficiary satisfaction evaluated through participatory assessments;
- Hygiene and sanitation behavior change evaluated through participatory assessments; and
- Institutional effectiveness of Rural Water Supply and Sanitation Enterprises (RWSSEs) and other key institutions.

4. **Project components.** The project comprises four components as described below.

Component 1, Water and Sanitation Infrastructure Development, will respond primarily to the growing rural/urban services gap by improving access to safe water supplies and hygienic sanitation facilities in selected rural areas. Each of the four Phase One provinces will have about 25 to 30 commune level sub-projects to develop improved water and sanitation infrastructure.

Component 2, Hygiene and Sanitation Behavior Change, will provide a range of hygiene and sanitation promotion interventions aimed at optimizing the effective use of improved water and sanitation infrastructure, and the adoption of safe hygiene behaviors in all households within sub-project areas through commune and school-based programs.

Component 3, Strengthening the Capacity of Community and Local Government Institutions and Management Entities, will address deficiencies in fund transfer, institutional capacities, and the effectiveness of decentralized investment through training and technical assistance. Rural Water Supply and Sanitation Enterprises (RWSEs) that will be established under the project will be the key focus for capacity building, as well as provincial government line agencies, commune-level government, and commune-level water development groups and cooperatives.

Component 4, Support for Project Management, Monitoring and Evaluation, will provide financing and technical assistance for the establishment and functioning of Provincial Project Management Units (PPMUs) and a Central Project Office (CPO) in the Ministry of Agriculture and Rural Development (MARD).

5. Lessons learned and reflected in the project design

The Mekong Delta Water Resources Development Project (supported by the World Bank), has piloted some aspects of the RWSS 2020. The project provides valuable lessons about community planning and cost-sharing. The Second Rural Energy Project is introducing new forms of decentralized management of infrastructure through Joint Stock Companies with consumers as shareholders. There is also extensive experience within the Bank of demand-responsive approaches for RWSS in large-scale projects in the East Asia region and globally. This experience has been accessed through the involvement of the Bank's Water and Sanitation Program staff in the project design. Key lessons that are reflected in the project design are outlined below.

Community participation is a key factor in ensuring sustained project benefits. Experience in past projects clearly illustrates the value of community participation. Particular aspects of participation that will be emphasized in the proposed project include *informed choice* (about the feasible range of technical alternatives, costs, and management requirements), and *communities' willingness and ability to pay*.

Need for capacity building. This is required at all levels – in the Ministry of Agriculture and Rural Development (MARD) at the central level; in the provincial DARDs, their PPMUs, and in the RWSEs to be established under the project; and also at the commune level. Government staff need to learn and adapt to the project's demand-responsive approach. Stakeholders in the communes and villages, who have not traditionally had much opportunity to make inputs to the planning, implementation and management of infrastructure need help in establishing water development groups as legally recognized bodies to represent their interests.

6. Alternatives considered and reasons for rejection

Investment in the on-going water and sanitation (WATSAN) program. Consideration was given to investing in a project based on the ongoing WATSAN Program implemented through provincial Center for Rural Water Supply and Sanitation (CERWASS) offices, supported by UNICEF, with DFID and other bilateral donors. The program is essentially supply-driven; however, it does involve community planning of water supplies and cost-sharing. The cost-sharing rules require villages to contribute 50% of the cost of water systems, along with the full cost of house connections. However, the grant component is not targeted to poor households, and the poor tend to remain under-served; villages with a large proportion of poor are unable to participate in the

program. Systems tend to be over-designed and expensive to maintain, and they do not necessarily provide the level or type of service that consumers want and are willing to pay for. In recent years, UNICEF has not been able to disburse allocated resources because of lack of demand and ineffective poverty targeting. This option was rejected on sustainability and poverty targeting grounds.

Full community-based management. Full community-based management of individual sub-projects was considered but was judged less appropriate for the needs, bearing in mind the demand in most cases for piped water systems with full treatment, and their relative complexity. A fully community-based approach would miss out on the benefits of scale (procurement, joint supplies, and the sharing of technical skills and professional oversight) arising from the shared overall management of schemes. The chosen approach does however include mechanisms for ensuring community choice and part-ownership (beneficiaries will finance 10% of the cost of schemes), as well as participation in the management of piped schemes. Communities will participate in operation and maintenance, either as monitors of contractors appointed by the RWSSs, or, if they so wish, as contractors themselves appointed on a competitive basis. This combines the advantages of both community managed and agency managed approaches.

Sector Investment Lending rather than an Adaptable Program. The option of structuring the project as a single Sector Investment Loan (SIL), or two consecutive SILs was considered. The SIL approach would be preferred if most aspects of the project design were well-tested and little change in the project approach was anticipated over the implementation period. However, the untested nature of some aspects of the institutional arrangements, the need for extensive capacity building, and the introduction of tariffs at levels to recover all operation and maintenance costs and debt repayment for the 45% of the cost of schemes that will be borrowed all require a flexible, adaptive project design. Furthermore, key policy and strategic actions are required to move to a broader, more programmatic approach that other donors, as well as the World Bank, are advocating in the medium term. An Adaptable Program was therefore selected as the most appropriate instrument because it allows for a flexible, learning-based approach in the first phase, while providing incentives for key policy and strategic actions to be completed.

C. IMPLEMENTATION

1. Partnership arrangements

Co-financing. Danida funded the preparation of the project as a component of its Water Sector Support (Water SPS) Project. The Central Project Office (CPO) will develop coordination arrangements through MARD to ensure complementarity of technical assistance inputs provided by the WaterSPS and the project.

A joint Government and donor review of the RWSS sector carried out in 2004/2005, indicated the potential for a closer RWSS partnership, with donors supporting a Government program for RWSS, possibly a revised version of the National Target Program (NTP), between 2006 to 2010. Donors will either fund the national program directly through budgetary support, or support projects that fit within its framework and adopt the RWSS 2020. The RRD RWSS Project takes the latter approach. The CPO and the Bank task team will participate in the RWSS partnership to ensure that the design of Phase 2 of the AP takes account of lessons learned during the initial years of implementation of the national program and is complementary to it.

Other partnerships. The World Bank Water and Sanitation Program (WSP), through its country program for Vietnam, has provided technical inputs and has led the Bank's preparation team for the project.

2. Institutional and implementation arrangements

Implementation arrangements for this project build on the institutional structures and responsibilities in place for implementing the National Target Program for RWSS. Authority for approving sub-project feasibility studies has been delegated to the participating Provincial People's Committees. They will receive guidance from MARD. A Steering Committee will be set up under the Standing Committee for the National Target Program for RWSS in MARD to oversee the entire project, with members drawn from the Ministry of Planning and Investment (MPI), State Bank of Vietnam (SBV), the Ministry of Finance (MOF), and the Office of the Prime Minister.

MARD will oversee the project, monitoring progress and providing support to provincial implementing agencies. A Central Project Office (CPO) will be established within MARD to guide project implementation.

Day to day implementation of the project has been decentralized to the provincial level. Provincial Project Management Units (PPMUs) have been set up in each project province within the provincial Departments of Agriculture and Rural Development (DARD) that bears overall responsibility for project development and implementation in each province. Existing National Target Program Steering Committees established by the PPCs are planning the RWSS program in each province.

Other Ministries. The Ministry of Planning and Investment (MPI) oversaw project preparation and will continue this role into implementation. The Development Assistance Fund (DAF) under MOF will be responsible for transferring IDA funds to the provinces in accordance with criteria agreed with IDA. The Ministry of Health (MOH) will provide support for the hygiene and sanitation promotion aspects of the project through the provincial Departments of Health and with the assistance of the provincial Women's Unions. The Office of the Prime Minister will provide policy guidance to all entities.

Rural Water Supply and Sanitation Enterprises (RWSSes). With assistance from the project, one or more RWSSes will be established in each province to be responsible for the operation and management of piped water supply systems. They will become the majority owner of the RWSS assets (the commune stakeholders will own 10% through their financial contributions) and will assume responsibility for repaying the 45% of investment costs on-lent by the central government. Once effectively established, the RWSSes will also take over planning, design and construction of new schemes from the PPMUs.

Commune Water Development Groups (CWDGs). Commune Water Development Groups (cooperatives or other legally recognized entities) will be established in each participating commune to work with the Commune People's Committees (CPCs). They will provide the mechanism for beneficiary participation and will also mobilise funds and assets for the communes' 10% minimum direct investment in piped water systems.

Mass Organizations and Other Institutions. The provincial Women's Unions, through arrangements with the PPMUs and the provincial Departments of Health (DOH), will undertake commune and village level mobilization campaigns to raise the demand for sanitation and hygiene behavior change and build capacity of the local private sector to respond to that demand. The provincial Women's Unions will also plan and manage revolving funds for poor households, to develop household level water supply services in areas not served by piped schemes, and for household sanitation and household drainage infrastructure.

On-lending. The GOV will on-lend a portion of the proceeds of the IDA Credit under standard arrangements through DAF to Provincial People’s Committees for a portion of the capital investment in piped water supply infrastructure. A portion of the IDA Credit will be provided as a grant to PPCs to subsidize capital investment in piped schemes, for household-level water and household sanitation and drainage services, and for hygiene promotion, capacity building and project management. IDA funds will also be used by MARD to support inputs through the CPO.

3. Monitoring and evaluation of outcomes/results

The key indicators identified in section B3 and Annex 3 will be monitored and evaluated through the monitoring program established for the National Target Program and overseen by the National Target Program Standing Committee chaired by MARD. The CPO will prepare semi-annual progress reports to monitor project progress. Specialist environment and resettlement monitoring reports will supplement the MARD annual report. The project will be subject to a mid-term review around September 2008, when progress towards meeting the project indicators and the triggers for Phase 2 of the AP will be evaluated.

4. Sustainability

During preparation the provincial governments made written commitments relating to sustainability. For piped water supply infrastructure, these include: (a) provincial level, commercially oriented management; (b) options for decentralized operation and maintenance; (c) working mechanisms for giving communities an informed choice and influence on the services they receive and how they are operated and maintained; and (d) getting commitments from consumers to pay realistic tariffs and consume viable quantities of water (through an up-front minimum of 60% of the potential consumers being both willing to connect and willing to pay). For non-piped water supply, sanitation and household drainage, sustainability will depend on the successful application of an informed choice process, leading to pragmatic choices by water user groups of infrastructure they want and can afford. Sustainability of health impacts will depend on effective and lasting change in hygiene behaviors, and commitment from local agencies to continue health and hygiene promotion programs. Specific technical assistance will focus on establishing effective RWSSEs and training their staff to fulfill their roles. Training and facilitation will be specifically tailored to develop sustainable local skills for contributing to and monitoring operation and maintenance, and for local agencies to perform new, supporting roles.

5. Critical risks and possible controversial aspects

The project is underpinned by the National RWSS strategy. A shift in GOV policies away from the principles underlying the strategy could require a major redesign of the project, but significant changes are considered unlikely. Major, prolonged economic setbacks could reduce or eliminate the viability of the financing strategy based on loans and targeted grants.

Risk	Risk Rating	Risk Mitigation Measure
To project development objectives:		
Procurement management capacity at the local level and experience with World Bank financial management procedures are limited.	S	1) Detailed procurement guidelines have been provided in implementation manuals. 2) An extensive information dissemination component has been built into project design. 3) Technical assistance has been provided for capacity building.

Risk	Risk Rating	Risk Mitigation Measure
Affordability by the poorest	M	1) Complementarity with social welfare programs. 2) Participatory planning methodology to identify internal support mechanisms to assist the poor. 3) Targeted grants for designated poor households.
Local government agencies may resist the new institutional arrangements to be introduced.	S	The process for selecting provinces, districts and communes for inclusion in the project allows those that do not support the approach to opt out.
The legal/regulatory framework for establishing RWSSEs and modalities for consumers' sharing ownership with PPCs through commune-level representative bodies is uncertain.	S	1) Technical assistance will be provided for further developing and implementing the legal/regulatory framework 2) Commune Water Development Groups can register as recognized legal economic entities, i.e., cooperatives or businesses.
To component results: Insufficient local capacity to support community-based planning.	S	Local capacities will be assessed in each province and district at the outset of the project and resources provided for private sector inputs or technical assistance as may be required.
Women and the poor or other socially marginalized groups may be excluded from community decision-making and management of services.	S	Equity and gender-sensitive training will be provided to project personnel and community facilitators. Project performance indicators that check for equity in community empowerment measures will be developed (e.g., capacity building, choice-making, community management structure development). Participating communes will be selected from a long list of communes in each province with the highest percentage of households designated poor by MOLISA.
Beneficiaries may not adopt good hygiene practices and therefore obviate some or all of the health benefits of infrastructure improvements.	M	Project will include training and capacity building for sustained support by local agencies to promote improved hygiene behaviors using a combination of participatory, community-wide behavior changing approaches, targeting whole communities – building peer pressure and collective motivation for change, along with social marketing interventions.
Overall Risk Rating:	S	

Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or Low Risk)

6. Loan/credit conditions and covenants

Conditions of *Credit Effectiveness*

- Approval by the participating provinces of feasibility studies for their respective activities to be carried out during the first 12 months of implementation;
- Finalization and adoption by the borrower of the following manuals, acceptable to IDA: (a) Project Management Manual; (b) Project Operations Manual; (c) Household Water, Sanitation and Drainage Revolving Fund Manual; and (d) Financial Management Manual;
- Finalisation and adoption by the borrower of standard pre-qualification and bidding documents, acceptable to IDA, for planning, designing, building, and operating piped water supply systems; and
- Central Project Office (CPO) and each Provincial Project Management Unit (PPMU) have: (a) established a computerized accounting system; and (b) appointed financial officers, both acceptable to IDA..

Covenants applicable to *Project Implementation*

- PPMUs or RWSSEs to undertake the following for each Sub-Project: (a) enter into Sub-project Agreements with participating communes defining mutual rights and obligations for execution of sub-project activities; (b) carry out environmental screening, environmental reviews, and impact assessments; and (c) prepare and implement Resettlement Action Plans for those sub projects that give rise to Displaced Persons; and (d) implement Ethnic Minorities Development Plans;
- Each participating province to establish, not later than December 31, 2007, one or more RWSSEs in accordance with the Charter developed for this purpose;
- Provincial People's Committees (PPCs) to (a) enter into subsidiary loan agreements with RWSSEs for commune water scheme development in accordance with procedures described in the Project Management Manual; (b) set piped water supply tariffs that cover all costs using principles and procedures described in the Operations Manual, but updated for actual costs, at the start of operations of all new water supply schemes; (c) set piped water supply tariffs that cover all operation, maintenance, and depreciation costs for existing schemes beginning on or before the date that the assets are transferred to a RWSSE established under the project; and (d) enter into arrangements with their provincial Women's Unions to establish and operate Household Water and Sanitation Revolving Funds in accordance with the procedures described in the Revolving Fund Manual;
- GOV to require PPCs to ensure that ownership of all new and existing piped water systems under the control of Provincial Centres for Rural Water Supply and Sanitation (PCERWASS) be progressively transferred to Rural Water Supply and Sanitation Enterprises within 24 months from the date of credit effectiveness; and
- Women's Unions that manage the Household Water and Sanitation Revolving Funds at the provincial level to maintain financial records and accounts for these funds and have them audited annually, in a manner satisfactory to IDA.

D. APPRAISAL SUMMARY

1. Economic and financial analyses (See Annex 9 for more details)

Economic analysis. The project's major benefits are improved household water service in rural communes. Quantified benefits include estimated revenue and consumer surplus from increased consumption at rates that are lower than more costly alternatives. Non-quantified benefits include health, productivity, environmental, social, and employment. The cost/benefit analysis of identified Phase 1 sub-projects yields an EIRR of 10.3% and NPV of US\$1 million. All sub-

projects will be subject to a range of selection filters that will include economic viability. Tariff levels in the initial sub-projects are affordable to the poor. On average, monthly expenditure on water would amount to around 2 - 5% of low-income households. Targeted subsidies provided to designated poor households in accordance with prevailing GOV policies will ensure that household level services, financed by households themselves, are available to the poor.

Financial analysis. The cost of maintaining water systems and repaying loans is to be borne by consumers through user charges. Water tariffs will be set to recover the costs of operations and maintenance, depreciation of fixed assets funded by loans and consumer contributions (but excluding fixed assets funded by government grants); interest; and loan principal which exceeds the above mentioned provision for depreciation. In order to ensure that the tariff is affordable, Government will provide a subsidy of 45% of the investment costs. Financial internal rates of returns for first year sub-projects are in the 5.0 to 8.8% range, in excess of the weighted average cost of capital of 4.4%. The project will have minimal sustained fiscal burden on public expenditure budgets.

2. Technical

The main technical issues relate to the quality of construction, the ability of RWSSEs to operate and maintain the facilities or contract out these tasks, and the effectiveness of health education and promotion interventions. These will be addressed by ensuring that sufficient guidance material is available – together with full training on their use. Rather than develop entirely new design manuals for civil works, the PPMUs and the CPO will adapt the technical guidelines and designs developed for other similar projects, including the Community-based Rural Infrastructure Project, the RWSS pilot projects supported by Danida, and other technical manuals developed by CERWASS that conform to national standards. The same approach will be adopted for hygiene awareness, with new elements introduced to promote more participatory approaches and new links to the private sector. A draft Project Operations Manual that provides detailed technical guidance is available in the project files.

3. Fiduciary

Financial management. An assessment of the adequacy of the project financial management systems was carried out by IDA in November 2004. The following weaknesses were identified: (a) lack of adequately qualified and experienced financial staff; (b) lack of suitable accounting software; and (c) lack of a detailed manual on financial management. A financial management action plan was agreed with the borrowers to rectify these deficiencies. The project will produce Financial Monitoring Reports (FMRs) in the standard formats. Normal GOV disbursement procedures applicable to IDA credits will be used.

Annual financial statements will be prepared by the CPO and DAF on their respective project-related activities. Annual audits will be carried out in accordance with international auditing standards, and in compliance with the independent auditing regulations of Vietnam. Independent auditors acceptable to IDA will be selected to audit project accounts. The auditor's reports, together with management letters, will be made available to IDA within six months of the close of the fiscal year. To date, there is no audit report overdue from the implementing agencies to be involved in this project.

Procurement. IDA-financed procurement of goods and works will follow Bank Procurement Guidelines (May 2004). Consulting services and training will be procured in accordance with the Bank's Consultant Guidelines (May 2004). See Annex 8 for details.

4. Social

The key social issues are to achieve equity in outcomes as well as affordability of services. All segments of communities will be served with improved water supply and sanitation services in an equitable yet affordable manner through a socially-inclusive demand-responsive process. Piped networks, which are expected to be the most appropriate solution for water supply in most of the densely populated communes in the Phase 1 provinces, will be designed and built with adequate community consultation.

Households that are more loosely scattered at the periphery of villages, which usually belong to the poorer segments of communities, may fall outside the clusters of households that can be economically served by the piped network. Such households will be served through alternative point-source water supply systems that are simple enough for individual households, or small groups of users, to manage and sustain. The appropriate solution will be determined based on discussions of all possible options and costs with the users. Loans of up to VND 4 million will be available and households classified by Government as poor will be eligible for grants.

The project's potential negative social impacts include small-scale land acquisition and resettlement. In the sub-projects to be implemented in the first year, which are considered to be typical of all sub-projects, none of the project affected people will be severely affected or require relocation. The Resettlement Plans (RPs) identify the compensation that is required.

5. Environment

The Environment Category is B. The project will have positive environmental impacts on public health through the provision of safe water and improved sanitation facilities. Potential adverse impacts are localized and can reasonably be mitigated through appropriate project design and additional mitigation measures where needed.

The Borrower prepared *Environmental Assessments/Environmental Management Plans (EAs/EMPs)* for the eight Year 1 sub-projects. These found that overall the project will have positive environmental and public health impacts. Construction would have temporary impacts such as increased environmental pollution (air, noise, vibration, surface run-off) resulting from excavation work and workforce activities. These impacts are small in scale and will be mitigated through standard measures that have been incorporated into the EMPs. The Year 1 sub-projects will rely on surface water, and water quality tests show that water quality of these sources meets Vietnam's standards.

A summary of *Environmental Guidelines* to be used for sub-projects appraised after Year 1, as well as detailed information on the EAs/EMPs, stakeholder consultation and disclosure requirements and actions, as well as monitoring indicators, are provided in Annex 10.

Safeguard policies

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	[X]	[]
Natural Habitats (OP/BP 4.04)	[]	[X]
Pest Management (OP 4.09)	[]	[X]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[]	[X]
Involuntary Resettlement (OP/BP 4.12)	[X]	[]
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	[X]	[]
Forests (OP/BP 4.36)	[]	[X]
Safety of Dams (OP/BP 4.37)	[]	[X]
Projects in Disputed Areas (OP/BP/GP 7.60)*	[]	[X]
Projects on International Waterways (OP/BP/GP 7.50)	[]	[X]

Environmental Assessment (OP 4.01): The Environmental Guidelines and the Environmental Assessments for the Year 1 sub-projects satisfy IDA requirements for OP 4.01.

Involuntary Resettlement (OP 4.12): The Borrower prepared a Resettlement Policy Framework (RPF) for use throughout the project, and Resettlement Action Plans (RAPs) for the Phase 1 sub-projects. Land acquisition for construction of water supply and sanitation infrastructure is small in area and will have minor impacts. The RAPs, acceptable to IDA, have been prepared in close consultation with project affected persons (PAPs), local authorities at different administrative levels, and other key stakeholders; they have been disclosed publicly. RAPs for the subsequent years of Phase 1 will be prepared during implementation, separately for each sub-project, on the basis of the RPF.

Indigenous Peoples (OP 4.20): In the project provinces there are some ethnic minorities who are likely to benefit from the project. In general the numbers of ethnic minority population are relatively small, though in one commune in the preliminary list of 120 prioritized communes there are around 3,500 Muong. To ensure that they benefit, the Borrower has prepared a Strategy for Ethnic Minority Development Plans (EMDPs), which meets the requirements of OD 4.20. It will ensure that the participatory methods used for project planning and decision making provide an equitable voice and choice for ethnic minorities and that they will not be adversely impacted by land acquisition. The sub-projects are not expected to cause any culturally specific impacts on the communities of ethnic minorities. EMDPs are not needed for any of the Year 1 sub-projects. At least one will be required in later years.

6. Policy Exceptions and Readiness

Policy Exceptions. The project does not require any exceptions from Bank policies.

Readiness Criteria:

1. Financial management and procurement arrangements in place – Yes.
2. Project staff and consultants mobilized – Yes, the CPO and the PPMUs have been established with key staff assigned.
3. Counterpart funds budgeted/released – Yes.
4. Bidding documents and terms of reference for first year procurement – Standard bid documents and key terms of reference prepared.
5. Safeguards addressed and disclosed – Yes.
6. Institutional and social assessment completed and applied – Yes
7. Co-financing agreements signed – The project does not include co-financing.
8. Land acquisition plans ready – Yes.

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

Annex 1: Country and Sector Background

VIETNAM: Red River Delta Rural Water Supply and Sanitation Project

The Government of Vietnam's commitment to improving rural infrastructure for the poor, including water supplies and sanitation, is articulated in the CPRGS and the National Target Program for Rural Clean Water and Sanitation, as well as in the Vietnam Development Goals (VDGs), based on the MDGs. The National RWSS Strategy up to 2020 (the RWSS 2020) is aimed at furthering that objective. It signals major directional changes in national policies and strategies that are deemed necessary for achieving national targets set for 2010 and 2020 in relation to access to improved water supply and sanitation facilities and hygiene behavior. In practice however, major issues and challenges still need to be addressed.

The Ministry responsible for implementing the RWSS 2020 is the Ministry for Agriculture and Rural Development (MARD). In August 2002 MARD promulgated Decision 99, establishing a multi-agency National Steering Committee for RWSS, chaired by the Vice Minister for Rural Development, with members drawn from 15 other agencies. A Standing Office for the Committee has been established, also under MARD chairmanship, to oversee allocation and use of resources for meeting the National Target Program for RWSS.

Progress and remaining challenges

Since 1991, provision of improved water services to both urban and rural customers has been an important GOV priority. A program to support expanded coverage of improved water services is one of the main pillars in Vietnam's socioeconomic development strategy. Since 1999, GOV has considered RWSS as one of the seven top national development priorities.

Over the past ten years considerable progress has been made in the sector. Thousands of piped water schemes have been constructed under the RWSS 2020, and about 100,000 hand pumps and dug wells have been built with support from UNICEF. At least three times as many schemes have been constructed by households. Other donors such as AusAID and Danida have also contributed. These efforts have resulted in improvements in living standards and the overall socio-economic development of the country.

According to a summary of progress of the National Target Program for Water Supply, after five years of implementation, the proportion of the rural population using clean water from improved sources¹ has increased to 45 – 60% in different provinces. Provinces in the southeastern part of the country have reached the highest coverage (around 60%), whereas the northern mountainous areas still have the lowest coverage (around 44%). These percentages refer to access to “clean water” which means water that is not taken directly from an undeveloped source such as a river or canal, but may not necessarily be safe water that meets Vietnam's drinking water quality standards. The sources include piped schemes, but most are dug wells, small boreholes with electric or hand pumps, and rainwater catchment schemes.

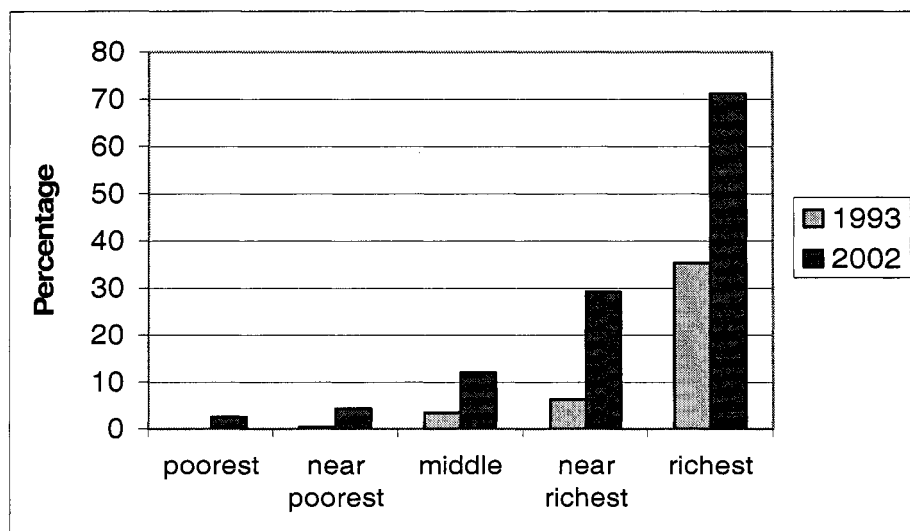
The percentage of the population using sanitary latrines has also increased by 10%, for which provinces in the Red River Delta achieved the highest gains (up to 50% coverage of sanitary latrines). Over the past five years, over two million water supply schemes (piped and non-piped)

¹ Water from protected sources, which include piped water schemes, spring catchments, dug wells, small single-family boreholes and rainwater catchment. It does not mean water that meets national water quality standards, or water that has been treated in any way.

have been financed and constructed, of which 5,889 schemes are piped water schemes, and the remainder are household-level systems. Total funding for the RWSS Target Program from 1999-2003 was VND 3,398 billion, of which VND 767.5 billion (22.5%) was from state budget. VND 309.5 billion (9.1%) was from ODA funds, the rest coming from provincial and local government budgets and water user contributions. However, the RWSS sector still faces a number of specific challenges:

- **Continued low coverage with sustainable services.** Rural access to safe water supplies and sanitation facilities in Vietnam remains among the lowest in East Asia. Although access to improved water supplies is undoubtedly higher; in 2000, only 10% of rural households were estimated to have access to water supplies that met national clean water standards. In significant numbers of rural areas, people lack even the minimum amount of water needed for domestic use. Of the estimated 25-40% of rural households nationwide that use some form of latrine, only about a third are using facilities that are considered hygienic. In contrast, both water supply and sanitation coverage in urban areas is estimated by Government to reach more than 80% during 2005.
- **High concentrations of poor households in the Red River Delta.** As about 90% of Vietnam's poor reside in rural areas, there needs to be a focused effort to achieve more equitable rural and urban development in the water and sanitation sector. The Red River Delta, with its high population density, has some of the highest poverty density rates among Vietnam's geographic regions. A December 2003 report noted that most of the rural poor in Vietnam live in the Red River and Mekong Deltas. Although the poverty rates in the deltas are somewhat lower than in remote and mountainous provinces their high population densities mean that most poor people in Vietnam live in the two deltas. Table 1 presents sanitation access data by income quintile in the Red River Delta, graphically portraying the skewed distribution of access toward the better-off.

Table 1: Households with sanitary toilets in the Red River Delta (both rural and urban) from poor to rich (from the Red River Delta Regional Poverty Assessment)



- ***Water quality and access issues.*** Access to adequate quantities of good quality water continues to be a critical issue in many areas. Many people still use untreated water from dug wells, rainwater tanks (which is good quality if the system is properly maintained), rivers, ponds, streams or irrigation canals. These water sources (except rainwater) can be seriously polluted, and therefore contribute to high water-borne disease rates. In some places, safe water is so difficult to access that people buy drinking water at 5 to 20 times the usual tariff for piped water, which ranges from VND 800-2,400/m³.
- ***Rural health, productivity, and gender issues linked to water and sanitation infrastructure.*** Part of the reason for enduring poverty is that despite an impressive and dramatic decline in infant mortality and communicable disease incidence over the past 20 years, water-related infectious diseases remain major health problems in Vietnam, with a recent study confirming a remaining and significant contribution to the overall burden of disease. Diarrhea of infectious origin is the leading cause of morbidity nationwide, with over 250,000 hospitalization cases in 1998. Child malnutrition continues to be a major health issue, with Vietnam maintaining one of the highest rates of child malnutrition in East Asia. An important cluster of underlying causes for malnutrition is related to the availability and use of safe water and sanitation, and personal hygiene. Recent studies in Vietnam indicate that water and sanitation are key factors influencing infant and child mortality.

Women provide most of the labor used for the collection and handling of water. Additionally, women's time is absorbed by the burden of caring for those with diarrhea and other water and sanitation related diseases. Depending on the relative access to and quality of water, 5 to 25 percent of women's productive time can be used on water collection and caring for water-related illness. This time is taken away from other productive endeavors in the household and in agriculture, and also represents an important constraint on the quality of life. For this reason, women are essential contributors to community activities and programs related to water and sanitation.

- ***Under-financing of the water and sanitation sector.*** The RWSS sector continues to be chronically under-funded. Over the past decade average annual expenditure was around \$50 million compared to a projected requirement of \$120 to meet Government's coverage targets. In addition, lack of resources in the sector has meant poor maintenance, with many existing schemes being desperately in need of repair, rehabilitation or upgrading.
- ***Unsustainable infrastructure.*** Existing water supply and sanitation has often been inappropriately designed, poorly constructed, and badly maintained. Piped water schemes are often over-designed and have a small consumer base. There has been little recognition of the need for financial sustainability or any consideration of business management models. Most importantly, tariffs have not been calculated on the basis of actual costs of operation, maintenance and repair, rendering water supply schemes financially unsustainable and dependent on substantial subsidies for operation. Water losses of up to 40-50% are common in piped systems. Point sources such as shallow wells are generally unprotected, and can be contaminated by surface runoff. Sanitation facilities tend to be poorly constructed and maintained, and do not adequately remove human waste from contact with the living environment.

- ***Ineffective management.*** Water scheme management has not been effective, partly due to lack of appropriate incentives. Reasons include: (a) inadequate attention paid to improving management and technical skills of staff and lack of capacity building training in general; (b) little or no community consultation during planning, leading to low user participation in managing and maintaining water supply, drainage or sanitation activities; and (c) ineffective mobilization of community participation for RWSS investment, operation and management, resulting in poor management of, and financial support for, sustaining water supply systems.

National RWSS Strategy up to 2020

The National RWSS Strategy up to 2020 (the RWSS 2020) was approved by the Prime Minister's decision 104/2000/QĐ-TTg. on August 25, 2000. Its principal goal is to introduce a more sustainable approach for RWSS planning and implementation using a demand-responsive approach, which would improve technical, financial and social sustainability. One of the top priorities identified in the RWSS 2020 is expanding the market for water supply and sanitation services, through the active participation and contribution of all economic sectors and user communities. The scope of the RWSS 2020 covers all rural areas in Vietnam, including Class 5 towns (<30,000 habitants).

The objectives of the RWSS 2020 include:

- By 2005, all kindergartens, schools, training centers, hospitals, markets and public facilities in rural areas will have adequate clean water and hygienic latrines.
- By 2010, 85% of rural population will have access to 60 liters/capita/day of clean water, and 70% of rural households will have hygienic latrines and will adopt good personal hygiene and sanitation practices.
- By 2020, all rural people will have access to at least 60 liters/capita/day of clean water conforming to national water quality standards. All households will use approved hygienic latrines and will have adopted good personal hygiene and sanitation practices.

RWSS basic principles include:

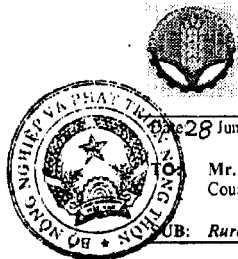
- Socialization of RWSS, which means that beneficiaries participate in RWSS planning, construction and management, that favorable conditions are created for households, economic enterprises, cooperatives and State-owned enterprises to participate in RWSS service provision, and that an appropriate legal basis is formulated for them to do so.
- International cooperation is required to expand the financial envelope to support increased coverage of RWSS services by identifying additional sources of funds (both loans and grants).
- Strengthening institutional capacity in the sector, so that sufficient numbers of qualified people are available to effectively design, construct, operate and maintain improved RWSS facilities.
- Improving management efficiency in RWSS is essential for achieving sector development goals.

To achieve the objectives of the Strategy, GOV, assisted by IDA and Danida, is developing the sector based on demand-responsiveness, community participation in planning, a supportive legal framework, and an institutional reform process based on new management models. These approaches will be used to revitalize and diversify water enterprise operations to make them financially viable in line with the State Law for stimulating effective business and improving service quality.

The steps necessary to achieve these objectives are:

- Provide more and better quality water to targeted rural communities who have both a demand for, and the willingness and ability to pay for improved services, and can reap the associated health and socio-economic beneficial impacts of these services.
- Improve the effectiveness of information, education and communication (IEC) activities in RWSS by increasing and improving the use of mass media, combined with direct communication to targeted communities. Messages must be practical, socio-culturally appropriate for target communities, and be based on what actually motivates people to adopt improved sanitation and hygiene behavior.
- Promulgate legal and financial policies and appropriate financial mechanisms to effectively mobilize local and international funding for RWSS investment. Establish loan channels with favorable loan terms and conditions, develop a supportive policy for investment in RWSS, including favorable tax incentives, effective risk management policies, favorable regulatory environment, and most importantly, an adequate and equitable tariff policy to support financial sustainability of piped water schemes. This includes considerations of special measures for the poorest and social policy households, so that they can have equitable access to improved RWSS services.
- Simplify and decentralize RWSS organizational structure, improve efficiency of state management, provide effective capacity building, and ensure clear assignment of roles and responsibilities down to the community level. Provide management and technical skills training, and improve monitoring and supervisory capability. Develop and finance RWSS training and vocational centers.
- Make the sector environment more attractive for investment, in part by proactively supporting appropriate administrative reforms to encourage and reward initiative, improve investment efficiency, and minimize obstacles to RWSS investment.

The proposed Adaptable Program (AP) will support RWSS 2020 over the period 2006 to 2014 to help achieve these objectives. The AP approach will allow the testing and refinement of some aspects of the institutional arrangements, the need for extensive capacity building, and the introduction of tariffs at levels sufficient to recover all operation and maintenance costs and debt repayment for the 45% of the cost of schemes. Furthermore, key policy and strategic actions are required to move to a broader, more programmatic approach that other donors, as well as the World Bank, are advocating in the medium term. Government confirmed their commitment to this approach in a Program Letter dated June 28, 2005, a copy of which is attached. The letter incorporates the agreed triggers for proceeding to Phase 2.



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28 June 2005

Mr. Klaus Rohland
Country Director for Vietnam, World Bank

UB: Rural Water Supply and Sanitation Adaptable Program Loan Program Letter

Dear Mr. Rohland,

The Government of Vietnam has prepared a two-phase Rural Water Supply and Sanitation Program (*the RWSS Program*) for which it is requesting IDA financing through an Adaptable Program Loan (APL). Government's letter ref. 561833/CP-QHQT dated 3rd December 2004 agreeing to the APL approach and letter ref. 804 / TTg-QHQT dated 17 June 2005 approving the Pre-Feasibility Study Volumes I and II both refer. As the responsible Ministry, MARD has been designated (*subject to approval*) by the Prime Minister to respond further on behalf of Government. This letter outlines the Government's National Rural Clean Water Supply and Sanitation Strategy, the National Target Program to implement the Strategy, and how the APL will support these initiatives and their further development.

A. THE IMPORTANCE OF RURAL WATER SUPPLY AND SANITATION, ITS STATUS AND RELATED POLICY IN VIETNAM

Rural access to safe water supplies and sanitation facilities in Vietnam is among the lowest in East Asia. As stated in the National Rural Clean Water Supply and Sanitation Strategy, in 2000, 42% of rural population were estimated to have access to water supplies, and only 10% of which can use clean water meeting set standards. Only 50% of rural households had any sort of latrine and of these only 20% were hygienic. About 90% of Vietnam's poor reside in rural areas, and the Red River Delta, with its high population density, has the highest poverty density among Vietnam's geographic regions.

In response, national policies and strategy for rural water, sanitation and health are imbedded in two documents, the *National Rural Clean Water Supply and Sanitation Strategy up to the Year 2020* (RWSS2020) and more broadly in the *Comprehensive Poverty Reduction and Growth Strategy* (CPRGS). The CPRGS reaffirms and more clearly defines the strategic approach being taken for poverty reduction and social equity, as put forward in the broader *Socioeconomic Development Strategy for 2001-2010*. RWSS2020 lays out the national approach for achieving the goals established in the *National Target Program for Rural Clean Water Supply and Environmental Hygiene*, being updated in 2005, which makes improving rural access to clean water supplies and sanitation a national priority.

B. THE RURAL WATER SUPPLY AND SANITATION ADAPTABLE PROGRAM LOAN (RWSS APL)

The *higher level objective* to which the 2-phase RWSS APL contributes is to support the Government of Vietnam's efforts to extend coverage of sustainable water and sanitation facilities to 100 percent of the rural population by the year 2020, as spelt out in RWSS2020 and ensure effective use of these facilities to achieve enduring economic benefits. The *development objective* of the RWSS APL interventions is to contribute to improving the quality of life and poverty alleviation in selected rural communities, through three water and

sanitation related intervention areas: infrastructure, hygiene and sanitation related behavior, and capacity building.

Within the above context, the RWSS APL will consist of two linked phases, each of about five years duration. Together these will focus on about twelve Provinces in the Red River Delta and adjacent areas.

- *Phase 1* (\$ 45.87 million IDA): Phase 1 of the RWSS APL, the *Red River Delta Rural Water Supply and Sanitation Project (RRD RWSS)*, will demonstrate appropriate approaches to RWSS in the Red River Delta and building capacity at decentralized levels. The Project will be implemented in four provinces – Hai Duong, Nam Dinh, Ninh Binh, and Thai Binh.
- *Phase 2* (approximately 96 million IDA): Phase 2 of the RWSS APL will scale up approaches to RWSS that have been tested and proven in Phase 1. It will expand project initiatives in up to eight additional Provinces: Bac Ninh, Ha Nam, Quang Ninh, Ha Tay, Hung Yen, Thanh Hoa, Vinh Phuc and Phu Tho and thereby support expanded implementation of the National RWSS Strategy (RWSS 2020) and the National RWSS Target Program.

The overall Implementation Plan for the RWSS APL is shown below:

Implementation Plan											
Batch	Communes	Phase Year	1					2			
			1	2	3	4	5	6	7	8	9
1	8	Four Provinces	■	■	■						
2	40		■	■	■	■					
3	72		■	■	■	■	■				
Total	120		◇								
4	80	Up to Twelve Provinces				●	●	●	●	●	
5	80					●	●	●	●	●	
6	80					●	●	●	●	●	●
Total	240										

◇ Indicates Mid-Term Review of Phase 1

A joint Government and donor review of the RWSS sector, carried out in 2004/5, indicated the potential for a closer RWSS partnership, with donors supporting an overall Government program for RWSS. This will build on the initial National Target Program (NTP), being updated in 2005 to cover the 2006 to 2010 five year plan period. MARD will be responsible for coordinating the emerging RWSS partnership and will ensure that lessons learned in Phase 1 of the RWSS APL are widely disseminated and used to improve the overall national program as well as guide the design of Phase 2 of the RWSS APL.

C. MAIN COMPONENTS OF THE RWSS APL

Component 1. Water and Sanitation Infrastructure Development, will respond primarily to the growing rural/urban services gap by improving access to safe water supplies and sanitation facilities in selected rural areas. It is envisaged that each of the participating Phase One provinces will have about 25-30 commune level sub-projects to develop improved water and sanitation infrastructure.

Component 2. Hygiene and Sanitation Behavior Change, will provide a range of hygiene and sanitation promotion interventions aimed at optimizing the effective use of improved water and sanitation infrastructure, and the adoption of safe hygiene behaviors in all households within sub-project areas through commune and school-based programs.

Component 3. Strengthening the Capacity of Community and Local Government Institutions and Management Entities, will address deficiencies in fund transfer, institutional capacities, and the effectiveness of decentralized investment through training and technical assistance.

Component 4. Support for Project Management, Monitoring and Evaluation, will provide financing and technical assistance for the establishment and functioning of Provincial Project Management Units (PPMUs) and a Central Project Office (CPO).

It is envisaged that there will be a greater emphasis on Components 2, 3 and 4 in Phase 1, because of the need, amongst others, to develop and establish the new Rural Water Supply and Sanitation Enterprises (RWSEs).

D. PERFORMANCE INDICATORS, TRIGGERS AND MONITORING & EVALUATION ARRANGEMENTS

Phase 1 performance indicators and milestones:

Selected indicators of achievement of phase 1 objectives include:

- Number of people served with improved access to sustained, safe water supplies;
- Number of people with access to hygienic sanitation facilities;
- Number of households and communes/villages served that are designated "poor" by Ministry of Labor, Invalids and Social Affairs (MOLISA) and/or within special social programs for ethnic minorities;
- Beneficiary satisfaction and behavior change, evaluated through participatory assessments; and
- Institutional effectiveness of Rural Water Supply and Sanitation Enterprises and other key institutions.

These will be monitored and evaluated during Phase 1 as follows:

- Bi-annual progress reports prepared by PPMUs and compiled by CPO;
- Periodic output from the Project monitoring mechanisms, including commune-level participatory assessments of project outputs and outcomes;
- Output from learning-focused events (including 6-monthly learning, feedback and adaptation workshops);
- Annual independent review of the effectiveness of learning, feedback and adaptation mechanisms within the Project;
- Phase 1 Mid-term review findings;
- Specific Safeguards and Fiduciary Reviews;
- Independent review of achievement of triggers as a measure of progress towards the second Phase of the Program

Triggers for Phase 2

IDA's financing of Phase 2 will be based on GoV achieving, at least, the five mandatory triggers detailed below.

Policy development triggers (both are required, and are "E")

1. GOV *Financing and Poverty Targeting Strategy* in place, based on a review of the effectiveness of the National Target Program and related projects in helping poor households gain sustained access to a basic level of safe water and sanitation services.
2. National Sector Investment Plan for achieving WSS sector development objectives as defined in the Vietnam MDGs developed, with a pipeline of investment projects established.

Expanding access triggers (both are required, and are "P")

3. Fully functional and effectively operated and maintained *water supply systems* in at least 5 communes in each of at least three of the four Phase I Provinces, as measured by (a) technical performance (service availability, reliability and water quality), and (b) consumer satisfaction. Indicators for technical performance include:
 - o water services being provided in a financially sustainable manner (i.e., operating and maintenance costs covered and debt serviced),
 - o percent of water quality samples meeting national drinking water quality standards (at least 75% of regular random sampling of piped water supplies),
 - o volume of water sold meeting or exceeding national per capita water quantity standards (currently 60 lcd).Consumer satisfaction will be evaluated through periodic participatory assessments that will allow measurement of changes in perceived service quality.
4. In communes that benefit from improved water supply, at least 40% of households and all schools have, and use, hygienically *improved sanitation facilities*, as indicated by (a) number of households and schools that have constructed new or improved sanitation and household drainage facilities, and (b) changes in hygiene-related behavior as determined through participatory assessments.

Institutional reform triggers (the first one is required, while the last two are preferred, all three are "P")

5. *Rural Water Supply and Sanitation Enterprises* established, and are responsible for (a) holding the assets of completed piped schemes and (b) management of operation and maintenance in a financially sustainable manner.
6. Each Provincial DARD has established a *Rural Water and Sanitation Unit* that is functioning effectively, with clearly defined performance monitoring responsibilities.
7. In communes with completed rural water supply infrastructure an effective *project financing strategy* is operating, ensuring (a) operation, maintenance and loan repayment costs are fully covered by the tariffs, and (b) full inclusion of the poor (determined through surveys and participatory assessments).

E. COST AND FINANCING

Government will on-lend a portion of the IDA financing under standard arrangements through the Development Assistance Fund (DAF) to Provincial People's Committees, to finance a portion of the planned capital investment in piped water supply infrastructure. A portion of the IDA financing will be provided as a grant to Provincial People's Committees (PPCs) to subsidize capital investment in piped schemes, and for household-level water and household sanitation and drainage services, and for hygiene promotion, capacity building and project

management. IDA funds will also be used by MARD to support inputs through the project Central Project Office (CPO).

It is anticipated that the investment cost of the APL will be approximately \$160 million.

F. INSTITUTIONAL AND IMPLEMENTATION ARRANGEMENTS

The RWSS APL will be implemented by the selected Provincial People's Committees (PPCs), guided by the Ministry of Agriculture and Rural Development (MARD).

Provincial People's Committees (PPCs). Detailed implementation of the program will be decentralized to the provincial level, and a Provincial Project Management Unit (PPMU) has been set up in each Phase 1 project province.

MARD will oversee the program, monitoring progress and providing support to provincial implementing agencies. A Central Project Office (CPO) has been set up within the Center for Rural Water Supply and Environmental Sanitation (CERWASS) to guide this support work.

Departments of Agriculture and Rural Development. Provincial Project Management Units have been established within DARDs to implement the program activities at provincial level and bear the overall responsibility for the project preparation and implementation within each province.

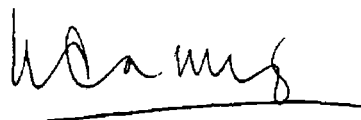
Rural Water Supply and Sanitation Enterprises will be set up under the Enterprise Law. RWSEs will be responsible for the operation and management of piped water supply systems, and will take over roles and responsibilities according to their Terms of Reference, including ultimately assuming responsibility for planning, design and construction of new schemes. Initially however, the Project Provincial Management Units (PPMUs) will initiate the planning, design and construction of initial schemes, with early transition to the RWSEs.

Commune Water Development Groups (CWDGs). Commune Water Development Groups (cooperatives, or other legally recognized entities) will be established in each commune to work with the CPCs to identify sources of funds and assets for the commune's 10% minimum direct investment in the piped water system.

Further details of both the overall RWSS APL and Phase 1, the RRD RWSS Project, are available in Volume 1 of the current Program documentation – *Volume 1 - Overall Framework for the Two-Phase Adaptable Program Loan (APL) for Twelve Provinces*, and in *Volume 2 - Pre-Feasibility Study Report for the Red River Delta Rural Water Supply and Sanitation Project*. On behalf of Government, MARD hereby confirms all details of the overall APL Program as set forth above and confirms Government's commitment both to the Program, and the supporting policy framework.

We look forward to IDA's support for the implementation of the APL Program and, more immediately, for the implementation of Phase I through approval of a Credit for the Red River Delta Water Supply and Sanitation Project.

Yours sincerely,



PHAM HONG GIANG
Vice-Minister

Annex 2: Major Related Projects Financed by the Bank and/or other Agencies

Vietnam: RED RIVER DELTA RURAL WATER SUPPLY AND SANITATION PROJECT

Sector Issue	Project	Latest Supervision (PSR) Ratings (Bank-financed projects only)	
		Implementation Progress (IP)	Development Objective (DO)
Bank-financed			
Community-based rural water and sanitation planning and management	Vietnam Mekong Delta Water Resources Development Project (Cr. 3198)	S	S
Commune control of project financing, commune-based planning and management, funds channeling through the banking system	Vietnam Community-based Rural Infrastructure Project (Cr. 3532)	S	S
Rural water supply for poor communes, community-based planning, poverty reduction, ethnic minority issues	Vietnam Northern Mountains Poverty Reduction Project (Cr. 3572)	S	S
Mechanisms for providing credit for rural households	Vietnam Second Rural Finance Project (Cr. 3648)	S	S
Legal/regulatory framework for decentralized credit in rural areas, management by local institutions	Vietnam Second Rural Energy Project (Cr. 4000)	S	S
Operation of revolving funds for household sanitation infrastructure by provincial Women's Unions	Vietnam Three Cities Sanitation Project (Cr. 3211)	S	S
Water utilities operating as commercial enterprises, private sector entry	Vietnam Urban Water Supply Development Project (Cr. 4028)	S	S
Cost recovery, on-lending, development of PSP in RWSS management	China Fourth Rural Water and Sanitation Project (Ln. 4485/Cr. 3233)	S	S
Participatory village planning and management of health interventions and WSS infrastructure, village and local government capacity building	Indonesia Second Water and Sanitation for Low Income Communities Project (Cr. 3382)	S	S

IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory)

Sector Issue	Project		
Other development agencies			
Demand-responsive sector strategy, developing and piloting implementation of the RWSS 2020	Water Sector Program Support Project (DANIDA)		
Community-based rural water and sanitation, operationalizing the RWSS 2020	Cuu Long Rural Water and Sanitation Project (AusAID)		
Community empowerment and village-based development planning	Mountains Rural Development Project (Sida)		
Common framework for programmatic, village-based development planning	Mountains Rural Development II (planned)(Sida)		
Supply-driven, prescriptive approach to rural water supply provision	Northern Provinces Groundwater Development for Water Supply Project (JICA)		
Supply-driven, prescriptive approach to rural water supply provision	Central Highlands Groundwater Development for Water Supply Project (Planned) (JICA)		
CERWASS technical capacity, community cost-sharing	UNICEF/DFID WATSAN Program		
Community-based rural and small towns water and sanitation, operationalizing the RWSS 2020 in the Red River Delta	Nam Dinh RWSS Project (Luxembourg)		

Annex 3: Results Framework and Monitoring

VIETNAM: Red River Delta Rural Water Supply and Sanitation Project

Results Framework

Project Development Objective (PDO)	Outcome Indicators	Use of Outcome Information
<p>Improve water and household level sanitation services and their effective use in selected provinces in ways that are financially, technically, and environmentally sustainable, thereby contributing to poverty alleviation in participating rural communities.</p>	<ul style="list-style-type: none"> • Number of additional people and schools with access to safe and sustained water supplies, and sanitation and drainage facilities, and number of these that are poor; • Percentage of people in project communes who have adopted safe hygiene and sanitation behaviors, based on participatory assessments and Knowledge, Attitudes, and Practices surveys • Number of RWSS enterprises established, and financial viability of the enterprises. 	<p>Years 1-2:</p> <ul style="list-style-type: none"> • Testing of arrangements and refinement as necessary <p>Years 3-5:</p> <ul style="list-style-type: none"> • Demonstrating appropriate large-scale processes • Inputs into design of Phase 2 • Inputs into mid term review and ex-post evaluation • Inputs into updating of national strategy for RWSS
Intermediate Results One per Component	Results Indicators for Each Component	Use of Results Monitoring
<p>Component One: Targeted rural communes progressively have new or improved water supply, new or improved sanitation, and new or improved household drainage</p>	<p>Component One:</p> <ul style="list-style-type: none"> • Percentages of members of targeted rural communities that have functioning, well operated and maintained water supply, sanitation and household drainage facilities. • Relative proportion of designated poor households that have access to water and sanitation services from the project. 	<p>Component One: Years 1 to 5: Refine adopted methodology and institutional set up.</p>
<p>Component Two: Targeted rural commune populations progressively have adopted safe hygiene behavior and are effectively using WSS infrastructure.</p>	<p>Component Two :</p> <ul style="list-style-type: none"> • Percentage of members of each targeted community that can demonstrate a positive and sustained improvement in hygiene knowledge, attitude, and practice, in relation to water supply, sanitation and household drainage. 	<p>Component Two: Years 1 to 5: Re-orient the hygiene approach and find improved ways of communicating potential health benefits and translating this into behavioral change.</p>

Intermediate Results One per Component	Results Indicators for Each Component	Use of Results Monitoring
<p>Component Three: RWSEs, community, Government and other institutional entities at commune, district and provincial level involved in the project, progressively have the capacity and capability to play appropriate roles in support of all stages of sustainable water supply, sanitation, household drainage, improved hygiene and capacity building.</p>	<p>Component Three:</p> <ul style="list-style-type: none"> • Degree of user satisfaction within targeted communities with services and advice offered them on water supply. • Sanitation, household drainage and hygiene. • Percentage of RWSEs that are financially viable. 	<p>Component Three: Yr. 1 to Yr. 5: Identify areas where capacity building of involved enterprises and institutions needs to be targeted or capacity building approaches improved.</p>
<p>Component Four: Each PPMU and the Central Project Office (CPO) is progressively able to successfully manage and support the project (and similar ones).</p>	<p>Component Four:</p> <ul style="list-style-type: none"> • Number of contracts awarded in accordance with agreed procurement plan. • Degree of adherence to schedules for procurement and implementation. • Extent to which satisfactory oversight and quality control are achieved, as confirmed through supervision and independent monitoring. 	<p>Component Four:</p> <ul style="list-style-type: none"> • Confirms progress in providing, and effectiveness of, project management and technical assistance inputs. • Informs assessments of need for TA, and rate of reduction in external inputs necessary for successful implementation.

Assessment milestones during Phase 1:

Bi-annual progress reports prepared by PPMUs and compiled by CPO.

Periodic outputs from the Project monitoring mechanisms, including commune-level participatory assessments of project outputs and outcomes:

- Output from learning-focused events (including 6-monthly learning, feedback and adaptation workshops);
- Annual independent review of the effectiveness of learning, feedback and adaptation mechanisms within the project;
- Mid-term review findings;
- Specific safeguards and fiduciary reviews;
- Independent review of progress towards the second phase, as a basis for assessing trigger-related achievements.

Implementation Completion Report within six months before project closing date.

Arrangements for Results Monitoring

Overall results monitoring arrangements are summarized below. Further monitoring details are included in Chapter 12 of GoV's Pre-Feasibility Study, as well as in the Project Management Manual and Project Operations Manual, which provide further details of institutional aspects, data collection, quality control, and monitoring capacity. These will be put in place in advance of project start-up. Monitoring indicators may be adapted or changed for the second phase of the AP.

Monitoring Indicators

Indicators Outcomes	Baseline	Target Values					Data Collection and Reporting	
		YR1	YR2	YR3	YR4	YR5	Frequency and Reports	Responsibility for Data Collection
1. Number of additional people with access to safe water supplies and the percentage (%) of these that are poor.	0	50,000	100,000	300,000	600,000	800,000	Yearly cumulative report, based on detailed progress reporting. Clarification of poor from MOLISA data	PPMUs acting for DARDs and then RWSSEs (combined with surveys into user satisfaction with involved institutions)
	0	15%	16%	17%	20%	20%		
2. Number of additional people with access to sanitation and drainage facilities, and the percentage (%) of these that are poor	0	37,500	75,000	225,000	450,000	600,000	As above	As above
3. Quality of water supply, sanitation, drainage and hygiene advisory services, based on consumer satisfaction surveys.	None	At least 30% of those served are satisfied	At least 40% of those served are satisfied	At least 50% of those served are satisfied	At least 60% of those served are satisfied	At least 70% of those served are satisfied	Annual surveys	Consultants hired by PPMUs
4. Percentage of RWSSEs' costs for operation, maintenance and debt repayment that is covered by revenue from water tariffs (calculated as average for all RWSSEs)	N/A	0	0	70%	80%	100%	Annual reports and audited accounts of RWSSEs	RWSSEs

Annex 4: Detailed Project Description
VIETNAM: Red River Delta Rural Water Supply and Sanitation Project

The project will be implemented in the four provinces of Nam Dinh, Ninh Binh, Hai Duong and Thai Binh, all in the Red River Delta. Approximately 28-30 communes per province will be served making a total of up to 120 communes with a total population of approximately 800,000. The project will have four components as described in detail below.

**Component 1: Water and Sanitation Infrastructure Development
(Total cost: US\$ 45.84 million)**

Piped Water Supply. The project will finance the construction of new piped water supply systems in communes not currently served and to a limited extent, the upgrading or rehabilitation of existing piped schemes. Piped water supply schemes will likely serve 80 – 90% of the 800,000 potential beneficiaries, with approximately 110 - 115 water schemes being constructed and 5 - 10 being rehabilitated. The eventual numbers will be determined by the final selection of communes and by commune consultations. In the case of piped schemes, this choice will be based in particular on willingness to pay the tariff necessary to ensure full cost recovery. It is estimated that about 85% of Component 1 investment will be for piped schemes, with the balance being used for non-piped choices and sanitation and drainage improvements.

The capacity of the new piped water systems is expected to range from 500 m³/day to 1,500 m³/day. The most common source of water will be surface water (rivers), with ground water (boreholes) as an alternative. Free flowing surface water is preferable to ground water as ground water is often saline in the Red River Delta and may be subject to arsenic contamination risks.

Systems will be designed to offer a basic but acceptable level of service from quality, quantity, and reliability viewpoints, while maximizing opportunities for cost savings, standardization and decentralization of operation and maintenance. Depending on source water quality, surface water will be treated by pre-sedimentation, alum and soda injection, vertical sedimentation with flocculation, either slow or rapid sand filtration and disinfection with chlorine. Ground water will be treated by aeration, vertical sedimentation with flocculation, rapid sand filtration and disinfection with chlorine. Arsenic treatment will be included where necessary.

Treated water will pass to a ground-level clean water reservoir, before being pumped to an elevated storage tank. From there, water will be metered and will flow under gravity into the piped distribution network, with a meter for each user-household.

Most systems are expected to be of medium scale (around 500-1100 m³/day) and cost about US\$ 275,000. Larger-scale systems (up to 1,500 m³/day capacity) will cost approximately US\$ 325,000. Small-scale systems (less than 500 m³/day) will cost on the order of US\$ 225,000.

Of the eight sub-projects prepared for implementation in Year 1, all feature piped supplies of between 400 and 1,500 m³/day capacity. The source of water is both surface water and ground water, though surface water (via mid-river intakes) predominates, with only one of the eight schemes utilizing a groundwater source. These initial schemes are likely to be representative of the systems to be financed.

Non-piped Water Supply. The non-piped water supply sub-component will provide loans and grants to individual households within communes to build improved non-piped facilities if they prefer to do so. Options will include: rainwater catchment; small shallow or medium depth drilled boreholes or improved dug wells, equipped with hand or electric pumps (in the case of the latter

two sources, with appropriate household level treatment and storage to improve water quality). Household slow sand filters, iron removal tanks and clean water household reservoirs will therefore be financed in parallel. The project will likely finance household level non-piped water supply improvements for up to 20% of the target commune populations (about 40,000 households) during Phase 1. The distribution of these improvements is estimated to be about 50% small drilled boreholes, 20% dug wells and 30% rainwater catchment. Loans of up to VND 4 million per household will be made available through the provincial Women's Unions. On-site water supply facilities for schools, daycare centers, health centers and markets (estimated at around 150-200 in number) will be grant-financed.

Household and Public Area Sanitation and Drainage. The project will finance sanitation and drainage for households and public locations. In the case of households, this will be financed through a revolving loan fund managed by the provincial Women's Unions, with start-up funds and management costs provided by the project. Sanitation and drainage facilities for public locations such as schools and markets will be financed directly by the project, as part of the contracted cost of piped water supply schemes.

Technical options to be presented to beneficiaries will range from low cost options to improve current facilities costing from US\$ 10 upwards, to complete or partial pour flush latrines, septic and semi-septic latrines, "VINSANRES" ecological latrines, double-vault composting latrines, and ventilated improved pit latrines. These options cost between US\$30 to 160. New or improved household drainage facilities (mainly improved channels and culverts) will also be financed. For both sanitation and drainage, households will borrow whatever proportion they need of the investment costs of new or improved facilities, depending on means and demand.

Component 2: Hygiene and Sanitation Behavior Change **(Total Cost US\$ 1.73 million)**

This component will provide a range of hygiene and sanitation promotional interventions and support sustainable improvements in hygiene practices among the targeted population. Hygiene promotion will focus mainly on hand washing with soap, safe feces disposal and consumption of safe water. Sanitation services will be achieved by generating public awareness and demand for sanitation and hygiene behavior improvement, ensuring that options are available for improving sanitation facilities and people are well informed about them, and people of all socio-economic categories get support in obtaining sanitation service improvements of their choice. Information sharing and engagement of all socio-economic groups, support to local service providers to tailor services to local demand, building peer pressure for beneficial change within communities, and collective pride in community accomplishments, will all be employed to expand sanitation coverage and their use.

These strategies will be applied at three levels:

Household Level. Inputs will focus on social marketing, stimulation of demand for hardware and materials, the promotion of improved hygiene practices, and the facilitation of service provision.

Community Level. Inputs will focus on health promotion meetings, to generate peer pressure for behavioral change and stimulate demand for hardware and materials, and promotion via schools, health centers and through local leaders and opinion formers.

Local Private Sector. The project will provide TA to support the local private sector in building up, and responding to, increased demand for hygiene products and services. Inputs will focus on facilitation of business development services for small-scale providers through market

development, technical skills building, development of appropriate products, encouragement of motivation-related inputs by providers to help create markets for sanitation products, and development of public-private partnerships, including school sanitation and health education programs.

Mechanisms to be used in applying these strategies will include market research and product development, training, mass media campaigns, development and production of health education and promotional tools, building of community awareness and demand, and monitoring of community behavior change.

Market Research and Product Development. Market research will be a preliminary step in each province, in order to understand the drivers of local demand and to provide a basis for developing affordable and attractive sanitation/hygiene service options for local populations. This activity will also serve to build local government capacity about how to plan and manage sanitation/hygiene improvement interventions.

Training. All project communes, districts and provinces will participate in hygiene and sanitation behavioral change and sanitation related training activities, along with CPO staff. Technical training will be provided to enable local service providers to deliver the developed range of sanitation options with acceptable quality. Training will be delivered through an appropriate mix of workshops, in-classroom learning, on-site and community level hands-on instruction, depending on the subject and the target audience.

Mass Media Campaigns. The project will support mass media campaigns such as television and radio broadcasts, as well as press and poster initiatives. These campaigns will be designed by communication experts, taking account of the above mentioned market research.

Toolkits. The project will finance TA for the development and/or adaptation of hygiene promotion toolkits. Once appropriate toolkits are ready, the project will finance their production and distribution to participating communities.

Community awareness. The project will provide TA to facilitate community awareness building, to generate demand for improving hygiene, and to facilitate dialogue between buyers and sellers of sanitation/hygiene services.

Monitoring. The project will set up mechanisms to track changes in community sanitation and hygiene behavior, through school sanitation programs, through service providers' networks, and through household surveys. Baseline community hygiene practice assessments will be introduced through commune health workers and motivators (e.g., VWU). Participatory assessments will be repeated with communities periodically to track progress.

Component 3: Strengthening the Capacity Community and Local Government Institutions and Management Entities (Total cost US\$ 0.89 million)

This component will provide the following training packages aimed at building the capacity of communities, local governments, management entities, and other project stakeholders to better meet the needs of the project and the longer term program.

Commune, Village, and Neighborhood Organizations and Individuals. Participatory training for all (including the poor) to raise awareness and to carry out required planning, implementation, facilitation and oversight tasks will be provided in all sub-projects. Topics will include

participatory methods, informed and consensus-based decision making, demand responsive planning, communication, motivation, contribution and repayment, effective stock-holding in RWSSEs, using and benefiting from improved water supply and sanitation facilities, promotion of sanitation and hygiene, monitoring competitive bidding for construction and other contracts, facilitation of construction supervision, agreement on selection of O & M contractors, monitoring and reporting of performance, and complaints handling and conflict resolution.

PPMUs. Training will be provided to supplement the hands-on capacity building by local support consultants (see Component 4) and the financial management and procurement training provided by IDA prior to negotiations and effectiveness.

Provincial CERWASS. Training will be provided to help PCERWASS and other relevant organizations to reorganize and orientate personnel to effectively support demand-responsive community based programs, and encourage closer cooperation with mass organizations and the private sector.

District Focal Persons and Hygiene and Sanitation Promotion Teams, Provincial Women's Unions and DAF. As appropriate to each, training will be provided on hygiene and sanitation promotion, communication, monitoring and reporting and orientation on project financing mechanisms and approved criteria and guidelines.

Rural Water Supply and Sanitation Enterprises (RWSSEs). Once these are established, the project will finance training for the RWSSEs to enable them to effectively carry out their various functions. Workshops on best practices plus individual training courses will be used, as appropriate.

DARD. Support will include participatory meetings, training of trainers, and training on promoting the RWSS 2020, using IEC materials, promoting demand for improved RWSS services, Bank procurement procedures, financial appraisal of RWSS projects, establishing and maintaining MIS for RWSS and rewarding good / responding to poor performance.

CPO. Training to assist facilitation of communication and knowledge sharing, including effective report writing and web-based skills.

National and Provincial RRD RWSS Project Steering Committees and PPCs. Participatory meetings will be held to build consensus on the need for reform to meet the RWSS targets, and on the objectives, framework and approach of the RRD RWSS project.

Component 4: Support for Project Management, Monitoring and Evaluation (Total cost US\$ 1.67 million)

This component will provide technical assistance to develop project management techniques, procurement, finance and accounting, engineering, O&M, and monitoring and evaluation, and provision of equipment and vehicles for PPMUs and the CPO. Specific packages are listed below:

Local Consulting and Administrative Services Support at PPMUs. In each PPMU, a local consulting services support team will be recruited, to deliver support services on RWSS engineering, contracting, project and contract management, local procurement processes, contract management and evaluation of bids/tenders, training, monitoring and periodic reporting, environmental and social safeguards needs and procedures, financial appraisal, tariff calculation and setting, financial management, fund management, PHAST and IEC material development,

monitor and evaluation of commune-level activities, reporting and monitoring formats, MIS maintenance and quality control. Additional administrative staff (outsourced) may also be recruited to supplement and train local counterparts.

Technical Assistance at the CPO. The CPO will be supported by a mixed team of international and local consultants for RWSS engineering, project/contract management, financial appraisal and analysis, financial management, institutional strengthening and training, procurement, MIS and GIS data bases, donor liaison, budgeting and strategic planning, work planning, consultant coordination, hygiene and sanitation awareness, reporting formats and procedures, transparency procedures, and quality control.

Office Equipment and Vehicles for PPMUs and CPO. Equipment to be provided will include computer and communications hardware, computer software, office equipment, office space, furniture, and vehicles.

Annex 5: Project Costs

VIETNAM: Red River Delta Rural Water Supply and Sanitation Project

Table 1: Project Cost By Component
US\$ '000

Component	Total Cost	Local Currency	Foreign Currency	World Bank	Counterpart Funds	Community Contribution	% Total Cost
1: Water & sanitation infrastructure	45,837	45,437	400	41,999	428	3,410	91.4
2: Hygiene & sanitation behavior change	1,733	1,637	96	1,733	-	-	3.5
3: Institutional strengthening and capacity building	887	870	17	887	-	-	1.8
4: Project management	1,668	1,457	211	1,255	413	-	3.3
Total Project Cost	50,124	49,400	724	45,873	840	3,410	100

Table 2: Detailed Costs By Component

Units: 'US\$ '000

Item	Total Cost w/o tax	Total Cost	% IDA Funding	IDA Funding	Counterpart Funding	Community Contribution
Component 1: Total cost of Infrastructure for water supply and sanitation						
<i>Sub-Project in provinces</i>		<i>Allocation by province</i>				
1. Sub-projects in Thai Binh		10,603.7		9,653.8	108.9	841.1
2. Sub-projects in Ninh Binh		10,973.3		9,986.4	116.6	870.3
3. Sub-projects in Nam Dinh		11,913.8		10,867.6	101.2	945.0
4. Sub-projects in Hai Duong		9,503.8		8,648.7	101.2	753.8
Sub total		42994.6		39156.5	427.9	3410.2
<i>Civil Works in Provinces</i>		<i>Allocation by Investment Items</i>				
Source works		4,292.2	100	4,292.2	-	-
Treatment works		14,077.8	100	14,077.8	-	-
Main Networks		12,322.0	100	12,322.0	-	-
Subsidiary Networks		3,410.2	-	-	-	3,410.2
Revolving Funds Capital		5,456.0	100	5,456.0	-	-
Incremental Operating Costs of Revolving Funds		272.8	100	272.8	-	-
Preparation of FSs and designs for Phase 1		1,785.3	100	1,785.3	-	-
Land compensation & related costs		427.9	-	-	427.9	-
Construction supervision of Phase 1		950.4	100	950.4	-	-
Sub-Total for Provinces		42,994.6		39,156.5	427.9	3,410.2
<i>Component 1 CPO</i>						
Consultant support for coordination, training etc		690.8	100	690.8		
Auditing		324.5	100	324.5		
Independent monitoring of resettlement, environmental mitigation etc		199.1	100	199.1		
Preparation for Phase 2 of AP		1,628.0	100	1,628.0		
Sub-Total for CPO		2,842.4		2,842.4		
Total for Component 1		45,837.0		41,998.9	427.9	3,410.2

Item	Total Cost w/o tax	Total Cost	% IDA Funding	IDA Funding	Counterpart Funding	Community Contribution
Component 2:						
<u>PPMUs</u>						
Training local facilitators & project staff		547.8	100	547.8		
Community mobilisation activities		270.6	100	270.6		
Design & execution of IEC		528.0	100	528.0		
Sub-total PPMUs		1,346.4		1,346.4		
<u>CPO</u>						
Technical Assistance to PPMUs		270.6	100	270.6		
Monitoring & supervision of hygiene & behavior change		115.5	100	115.5		
Sub-total CPO		386.1		386.1		
Total for Component 2		1,732.5		1,732.5		
Component 3: Capacity Building						
<u>PPMUs</u>						
Training for commune organisations		396.0	100	396.0		
Workshops for project management, planning etc		39.6	100	39.6		
Materials in support of capacity building		13.2	100	13.2		
Sub-total PPMUs		448.8		448.8		
<u>CPO</u>						
Consultant support for national investment plan		151.8	100	151.8		
Consultant support for training & capacity building		253.0	100	253.0		
Technical Assistance for developing training materials		13.2	100	13.2		
National & regional workshops for project planning, monitoring etc		11.0	100	11.0		
Materials and other expenditures related to training		8.8	100	8.8		
Sub-total for CPO		437.8		437.8		
Total for Component 3		886.6		886.6		

Item	Total Cost w/o tax	Total Cost	% IDA Funding	IDA Funding	Counterpart Funding	Community Contribution
Component 4 - Project Management						
<u>PPMUs</u>						
Office equipment		192.5	100	192.5	0.0	
Incremental operating costs		275.0	0	0.0	275.0	
Project management support		607.2	100	607.2	0.0	
Manpower of PPMUs		111.1	0	0.0	111.1	
Outsourced staff		68.2	100	68.2		
Sub-total PPMUs		1,254.0		867.9	386.1	
<u>CPO</u>						
Consultants support for M&E		80.3	100	80.3		
Equipment & furniture		39.6	100	39.6	0.0	
Incremental operating costs		168.3	100	168.3		
Manpower of CPO		26.4	0	0.0	26.4	
Outsourced staff		99.0	100	99.0		
Sub-total CPO		413.6		387.2	26.4	
Total for Component 4		1,667.6		1,255.1	412.5	

Total Cost		50,123.7		45,873.08	840.4	3410.2
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Annex 6: Implementation Arrangements

VIETNAM: Red River Delta Rural Water Supply and Sanitation Project

Implementation arrangements for this project build on the institutional structures and responsibilities in place for implementing the National Target Program for RWSS. Authority for approving sub-project feasibility studies has been delegated to the participating Provincial People's Committees. The conceptual framework for implementation is portrayed in Figure 1. The focal point for project implementation will be the participating provinces. Provincial Steering Committees for the National Target Program for RWSS will oversee project implementation on behalf of the PPCs. RWSS Departments will be established to function as Provincial Project Management Units within provincial Departments of Agriculture and Rural Development. These Units will likely take responsibility for future projects in support of the National Target Program and will be progressively institutionalized within DARD, assuming regulatory and monitoring functions for water supply services.

Currently, provincial Centers for RWSS (PCERWASS) have lead responsibility for RWSS program planning and execution. These agencies typically plan, design, construct, and sometimes also operate and maintain rural piped water systems. Because of the need to improve overall institutional efficiency and transparency, a condition for provinces to be eligible to participate in the project will be that PCERWASSs no longer engage directly in water supply development or management. A condition for project entry by provinces will be formal agreement that ownership of all new as well as existing piped water systems under PCERWASS control will be progressively transferred to Rural Water Supply and Sanitation Enterprises (see below) within a fixed time frame of 18 to 24 months from Credit effectiveness.

Central Government Level

Ministry of Agriculture and Rural Development (MARD) will oversee the project by monitoring progress and providing technical support to the provincial implementing agencies. MARD has a Center for Rural Water Supply and Environmental Sanitation (CERWASS) which was established in the 1980s and is responsible for planning and executing the National Target Program for rural water supply and sanitation. Within CERWASS, a Project Preparation Unit (PPU) headed by a full time project manager, was established with professional staff to manage preparation of the project. A Central Project Office (CPO) in MARD will be responsible for monitoring and guiding implementation, and to provide technical assistance to build the capacity of the Provincial Project Management Units (PPMUs). Many of the staff from the PPU will transfer to the CPO.

Other Ministries. The Ministry of Public Investment (MPI) and the Ministry of Finance (MOF) will oversee project implementation by giving the necessary approvals and providing policy guidance for sector reforms. Within the MOF, the Development Assistance Fund (DAF) will be responsible for transferring IDA funds to the provinces in accordance with agreed criteria. The Ministry of Health (MOH) will provide support for the hygiene and sanitation promotion aspects of the project through its provincial departments. The Office of the Prime Minister will provide policy guidance to all entities.

Provincial Government Level

Provincial People's Committees (PPCs). Project implementation has been decentralized to the provincial level. The PPCs have already established National Target Program Steering Committees, which have planned the provincial RWSS programs. PPCs will be responsible for overseeing the preparation of feasibility studies and other project documentation and generally supervising implementation. The PPCs will ensure timely and adequate provision of counterpart

funds, and will approve resettlement and compensation policy for Project Affected Persons (PAPs). They will be responsible for reviewing requests for tariff increases. They will work with the Departments of Agriculture and Rural Development (DARD) to ensure the establishment of Rural Water Supply and Sanitation Enterprises (RWSSes) within 18-24 months of Credit effectiveness.

Provincial Project Management Units with the Departments of Agriculture and Rural

Development. DARDs have established PPMUs that will bear overall responsibility for sub-project preparation and implementation within their respective provinces. Early in implementation, for the *infrastructure development component*, the PPMUs will manage contracts for piped water supply design and construction, and provide technical assistance for households in remote locations within the commune that cannot be economically served by the piped water supply, or who choose not to connect, to develop household level WSS infrastructure (e.g., boreholes, shallow wells, rainwater catchment systems). The PPMUs will also prepare legal charters for establishing RWSSes under the Enterprise Law, and undertake to recruit staff and equip the RWSSes. They will work with the RWSSes to develop their capacity to manage commune sub-projects.

For the *hygiene and sanitation promotion component*, the PPMUs will procure consulting services to execute the hygiene and sanitation campaigns, carry out social marketing and health education services. They will work closely with the provincial Departments of Health (DOH) in planning and executing this component.

For the *capacity building component*, the PPMUs will engage consultants to provide technical assistance for: (a) project management; (b) training of PPMU, DARD, and DOH staff; (c) establishing and capacity building for the RWSSes; and (d) strengthening the communes through commune water development groups, and other partner agencies.

For the *project management component*, the PPMUs' activities will include financial management of sub-projects, providing advice on planning and implementing sub-projects, assisting with land acquisition, preparing semi-annual progress reports, managing procurement processes, organizing annual financial audits, carrying out monitoring and evaluation activities, and generally coordinating inputs from the various implementing agencies. CPO guidance will be sought when necessary.

Rural Water Supply and Sanitation Enterprises. RWSSes will be created within approximately 18 to 24 months of Credit effectiveness. Their staff will generally consist of 1 -2 managers, 4 - 5 professional staff with engineering and business management qualifications, plus support staff. RWSSes and their assets will be co-owned by the PPCs and the beneficiary communes, and they will operate on a commercial basis, either as limited liability companies or joint stock companies, in line with Vietnam's Enterprise Law. RWSSes will be regulated by various provincial level departments: (a) DARD will be responsible for their technical performance; (b) the Department of Finance (DOF) will be responsible for their financial performance; and (c) the Department of Natural Resources and the Environment (DONRE) will be responsible for ensuring their compliance with the project's environmental action and mitigation plans.

RWSSes will be responsible for managing all piped water schemes previously managed by provincial CERWASS within their coverage areas. RWSSes will take over the water supply system assets including land and buildings, treatment plant and equipment and stores, as well as the liabilities, subject to appropriate arrangements being made with beneficiaries. They will be responsible for operating and managing the piped water supply systems constructed under the project using a range of contracting options (e.g., simple service contracts, performance-based contracts, leasing). They will review tariffs annually and propose any necessary adjustments to the PPCs for approval. As their capacity develops, RWSSes will assume responsibility for designing,

procuring and constructing new sub-projects, and will borrow funds from the PPC to finance civil works from the IDA Credit.

For the non-piped water systems, sanitation and household drainage infrastructure, the RWSSEs will take over responsibility from the PPMUs for managing the household water supply and sanitation fund. It is expected that the RWSSEs will delegate operation of the fund to the provincial Women's Unions.

Provincial Women's Unions. Under the ongoing Three Cities Sanitation Project (Cr. 3211-VN), Women's Unions are successfully managing a revolving fund (US\$1 million equivalent with repayment rates over 95%) for household sanitation improvements. The proposed project will build on that experience. The PPMUs will contract with the provincial Women's Unions to undertake commune and village level mobilization campaigns designed to change sanitation and hygiene behaviors and to build the capacity of the local private sector to respond to those changes. The provincial Women's Unions will also plan and manage revolving funds and grant programs for designated poor households for household level water supply services in areas not served by piped schemes, and for household sanitation and household drainage infrastructure. The Women's Unions will be consulted about health promotion activities to be planned and led by the provincial Departments of Health. Some health promotion and social marketing activities may be contracted out to private firms or NGOs.

Commune Level

Commune Water Development Groups (CWDGs). Commune Water Development Groups will be established as legally recognized entities (e.g., cooperatives, joint stock companies) to represent the participating communes in managing the RWSSEs and will be shareholders in proportion to their investments.

CWDGs will work with RWSSEs to plan, select and design the commune's desired infrastructure. The CWDGs will help identify sources of funds and assets to meet the commune's 10% minimum direct investment requirements. These could include existing revenues, general development grants, private contributions, private investments, the value of land contributed for the water supply system, etc.

At the construction stage, the CWDGs will take part in supervision. They will be engaged in supervising and monitoring design, tendering and selection of contractors, construction, and operation and maintenance of infrastructure developed under the project. In cases of dispute they will leverage sub-contractors, the CPC, and (through their shareholding) the RWSSE, to ensure appropriate improvements.

Through their co-ownership of the RWSSE, and through direct dialogue with RWSSE management, the CWDGs will also participate in selecting appropriate operations and maintenance methods. The CWDGs may also bid on a competitive basis to undertake operation and maintenance of water systems themselves.

Sub-project planning and implementation

The Project will have many sub-projects, including new rural water supply schemes, and some rehabilitation or improvement of existing schemes. Both will include an extensive sanitation and hygiene promotion component, and support for institutional capacity strengthening, as well as project management, monitoring and evaluation.

A key barrier to serving the poor with piped water supplies is the cost of connecting to the service. RWSSEs will be encouraged to not charge a connection fee, subsume the connection costs within the capital costs of the project, and recover the costs through the consumption charge. If RWSSEs opt for charging a connection fee, households designated as poor by MOLISA will be able to access low-interest loans from the Vietnam Bank for Social Policy to pay the fee and their portion of any other commune contribution to the capital costs.

Community consultation on demand for improved water and sanitation facilities using “Informed Choice” materials will help customers determine what they want and are willing to pay for. This could be piped or non-piped water systems, or a mix of both, along with household and institutional sanitation facilities. For piped schemes, the project will assess technical feasibility, develop cost estimates, do financial analysis, calculate water tariffs, assess willingness and ability to pay, carry out willingness to connect surveys, develop bidding documents, prepare Feasibility Studies (or Investment Reports), supervise competitive bidding for technical designs, and competitive bidding on construction and system management.

For non-piped water schemes, the project will facilitate the provision of loans and grants to individual families for building improved, non-piped water facilities such as rainwater catchments, dug wells, and small drilled boreholes with hand pumps or electric pumps. Grant financing will also be provided for water supplies and sanitation facilities for schools, kindergartens, health centers, and markets.

For household-level and public area sanitation and drainage, households and local organizations (e.g. schools, markets, and health centers) will first be targeted with a village/community-wide awareness and demand generation campaign that will build collective motivation and peer pressure for key hygiene behavior improvements relevant to local lifestyles and health. Once community demand has been triggered, information will be made available about technical options available for new facilities or for rehabilitating existing ones, where to get supplies and skills for building and at what costs. Local private sector capacity building (e.g., masons and suppliers of materials) to respond to the demand that will be generated will be supported. Subsequently, community-wide behavior change campaigns will be launched at village community level.

The overall preparation process for sub-projects in communes will be as follows:

Initial planning:

1. Initial survey to establish socio-economic status of the commune and to assess current sources and costs of water supplies and status of household sanitation and drainage.
2. Participatory planning of the sub-project with commune members, initially in small groups disaggregated by income and gender.
3. Formation of a Commune Water Development Group and preparation of a draft Commune Water and Sanitation Action Plan. This group will either become a registered cooperative, or be a part of an existing cooperative to represent the commune in the RWSSE when it is established.
4. Meeting with RWSSE (or with the PPMU prior to establishment of RWSSEs) to review the Action Plan.

For piped water supply schemes:

1. Implementation of willingness to connect survey, where all households in the proposed piped water supply service area are presented with outline designs and proposed tariffs and asked to sign a commitment letter to connect to the system. If more than 60% sign the commitment letter, the sub-project proceeds to the next step. If less than 60% sign, the WSDG and RWSSE (or PPMU prior to the establishment of RWSSEs) decide how to proceed (e.g. seek additional

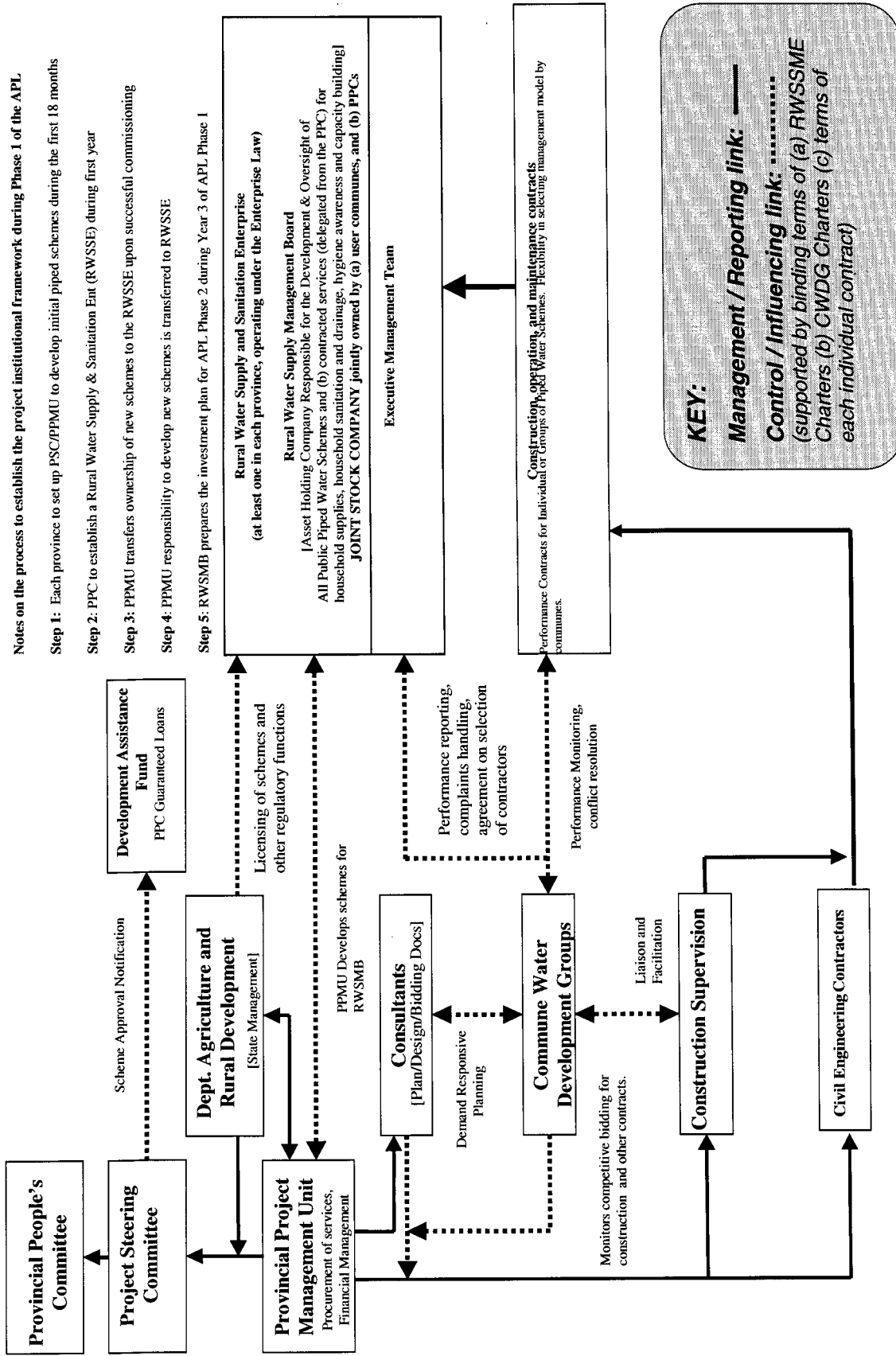
financing, redesign the system, proceed only with household services component, or abandon the sub-project).

2. Prepare Feasibility Study, including Environmental Assessments, Resettlement Plans, and Ethnic Minority Development Plans where required, for approval by PPC, including selection of contracting arrangement for final design, construction, and operations phase; prepare bid documents and bid plan for the project.

For household-level water and sanitation services:

1. Individual dialogues between households and provincial Women's Union, in line with the Action Plan and supported by Commune Water Development Group and RWSSE (or PPMU prior to the establishment of RWSSEs).
2. Processing of household level loans where necessary.
3. Individual arrangements for design and construction of household facilities.

Figure 1 – Implementation Arrangements for Piped Water Supply Schemes



Annex 7: Financial Management and Disbursement Arrangements
VIETNAM: Red River Delta Rural Water Supply and Sanitation Project

Financial Management

Country Issues. Among the key findings of the 2001 Country Financial Accountability Assessment (CFAA) that are relevant to financial management aspects of the project are the following: (a) reports from the public expenditure accounting system attempt to capture too much detailed data, and management reports for effective decision-making are not widely used; (b) as the requirements of public expenditure accounting are very comprehensive and detailed, compliance with the requirements is challenging for all units, particularly at lower levels; and (c) as accounting staff focus on more easily accomplished requirements like mechanical verification of payments and receipts, the regular and efficient monitoring of State budget information for effective use of public funds is at times not carried out in a timely manner. The CFAA also reports that "the current budget arrangement in Vietnam suffers from a lack of transparency for achievement of objectives." Although the conclusion of the CFAA report is that there is a certain degree of fiduciary risk in the use of public resources overall, the fiduciary risk for this project is manageable for on-budget items, considering the steps that are being taken under the financial management plan.

Strengths, Weaknesses and Risk Analysis. Although both MARD and DAF, at central level and in some provinces, have experience in implementing IDA funded projects and also other projects funded by donors, the CPO and four DARD-based PPMUs selected to implement this project have not previously been involved with IDA funded projects. There is clearly inherent risk at the PPMU level. Control risks also exist in all PPMUs over project spending due to the absence of adequate financial systems. From the detailed FM assessment, weaknesses were found to exist at all levels of implementation, from CPO to PPMUs and provincial VWUs, and include lack of: (a) adequately qualified and experienced financial staff; (b) suitable accounting software; and (c) detailed manuals on financial management. However, the initiation of an agreed Action Plan on Financial Management, which is summarized below is significantly mitigating the above risks and weaknesses.

Action Plan for Financial Management

Weakness	Action	To be done by	To be done before
Lack of capable financial staff	CPO, PPMUs and provincial WUs to appoint a Financial Officer and an accountant, with qualifications and experience acceptable to IDA.	CPO, PPMU, Provincial WUs	Effectiveness
Lack of suitable accounting software	CPO and PPMUs to procure/upgrade capable computerized accounting software, acceptable to IDA, to facilitate recording and reporting tasks.	CPO, PPMUs	Effectiveness
Lack of a detailed manual on financial management	CPO to appoint a consultant to develop an FM manual for the whole project and provide training in its use	CPO	Done

Implementation Arrangements. A Central Project Office (CPO) will be set up within the Center for Rural Water Supply and Environmental Sanitation. The CPO will be responsible for monitoring and guiding overall project implementation, restricted to coordination and support functions. For items procured centrally by the CPO, the CPO will check/approve and make payment directly.

Provincial Project Management Units (PPMUs) will be established within DARDs to implement the project and bear the overall responsibility for project preparation and implementation within each province. Each DARD will establish a PPMU and develop the capacity for continued post-project implementation of the National RWSS Target Program. PPMUs will manage Year One contracts for piped water supply design and construction, develop the capacity of RWSSEs to manage sub-projects, and manage execution of program support services for household-level water and sanitation, hygiene promotion through the Departments of Health, mass organizations, and contracts with private firms. PPMUs will check payment requests from contractors/suppliers, then prepare payment documents to submit to DAF. DAF at provincial level will check again before making payment from the DAF account to contractors/suppliers. DAF at provincial level should preferably pre-finance, then seek reimbursement from central DAF. In case a provincial DAF does not have sufficient funds for pre-financing, other internal arrangements between central DAF and provincial DAFs can be established. Each provincial DAF could check, approve and then instruct central DAF to make payment directly from central level (Hanoi) to contractors/suppliers at the provincial level. This approach is currently being used in the IDA funded Second Rural Energy Project (Cr. 4000-VN).

For the hygiene and sanitation behavioral change component, and the sub-component for individual household water, sanitation and household-level drainage infrastructure, the provincial Vietnam Women's Union (VWU) will be responsible for implementation. However, all funds transferred to them from the Special Account in central DAF must go through, and be approved by, the respective PPMU. VWUs at provincial level will submit three-monthly plans to the respective PPMUs for approval. With the approval of the PPMU, money will then be transferred from the Special Account in DAF to the VWU account opened in an approved commercial bank in the province. Subsequent money transfers to the VWU will be based on actual spending from the previous period and the plan for the next period. PPMUs will check and approve these requests before instructing DAF to transfer funds.

The CPO will keep supporting documents for payments made centrally by CPO. Supporting financial documents will be maintained at province level (PPMU/VWU/DAF) to facilitate future checking by auditors and other financial authorities.

Accounting Policies and Procedures. CPO, PPMUs and provincial VWU will use their current accounting systems, as promulgated under Decision #999 or Decision #214 on accounting systems issued by the Ministry of Finance. Within these accounting systems, sub-accounts will record project expenditures by expenditure category or by project component. A chart of accounts will be developed to accommodate the functions of the selected accounting software in order to capture expenditure data, classified by project components and expenditure categories.

Reporting and Monitoring. DAF will be responsible for the preparation of financial reports on the operation of the Special Account in DAF. This report will be compiled from provincial financial reports, and should be reconciled with periodic reports prepared by provincial DAF and PPMUs. The CPO will be responsible for the preparation of financial reports on activities of the Special Account established in a commercial bank for central activities.

The Project will use the Financial Monitoring Reports (FMRs) developed by the World Bank, tailored to meet the practical monitoring requirements of the project at both central and provincial levels. A set of FMR formats will be agreed upon during negotiations. The FMRs should be part of the Progress Reports submitted by the provinces. The FMRs will include:

- Sources and uses of funds by expenditure categories
- Uses of funds by project activities/components
- Special Account statement
- Implementation progress by contract (combined for implementation progress and contract monitoring)
- Procurement process monitoring.

Disbursement Arrangements.

Allocation of Loan Proceeds (Table C)

Credit funds will be disbursed as follows: (a) civil works (source works, treatment works and main water distribution networks) - 100%; (b) goods – 100%; (c) sub-loans for on site household water supply, sanitation and drainage infrastructure; (d) consulting services – 100%; (e) workshops and training – 100%; and (f) incremental operating costs – 100%.

Expenditure Category	Amount of Credit Allocated in USD thousands							% of Expenditures Financed
	Breakdown by Component				Breakdown by Sub-Account		Sub Total	
	1	2	3	4	1 (DAF)	2 (CPO)		
Works ¹	30,693	0	0	0	30,693	0	30,693	100%
Goods	0	0	22	232	206	48	254	100%
Sub-loans	5,456	0	0	0	5,456	0	5,456	100%
Consultants' services	5,578	1,185	418	856	4,210	3,826	8,036	100%
Workshops and training	0	584	447	0	983	11	994	100%
Incremental operating costs	273	0	0	168	273	168	441	100%
Total	42,001	1,771	890	1260	41,821	4,053	45,874	

Notes:

1. To simplify disbursement the IDA credit will finance 100% of the source works, treatment works and main water distribution network of the piped water supply sub-projects. The community contributions will finance 100% of subsidiary distribution system, which will comprise about 20% of the overall water distribution network. Each sub-project will be bid as a single package and will be awarded to a single bidder, but two separate contracts will be signed to facilitate this simplified disbursement arrangement, one contract to be entirely financed from the IDA credit, and the other to be entirely financed by the community contributions.

Use of Statements of Expenditures (SOEs). Withdrawals from the Credit will be made on the basis of statements of expenditures for: works costing less than US\$100,000 equivalent per contract; goods costing less than US\$100,000 equivalent per contract; services provided by consulting firms costing less than US\$100,000 equivalent per contract; services provided by individual consultants costing less than US\$100,000 equivalent per contract; workshops, training, incremental operating costs, and sub-loans. These documents will be made available for the required audits, as well as to IDA supervision missions upon request. All other expenditures above the SOE thresholds will be submitted on the basis of full documentation.

Special Accounts. A Special Account (SA) will be opened in a commercial bank, under terms and conditions acceptable to IDA with an authorized allocation of US\$100,000, for the CPO to pay for transactions centralized in CPO. Another SA will be opened in the Development Assistance Fund (DAF), under terms and conditions acceptable to IDA with an authorized allocation of US\$1 million, to pay for infrastructure costs incurred at the provincial level. This SA will also be used to transfer an initial amount of money to the provincial Vietnam Women's Unions, and to reimburse expenditures thereafter. DAF will be responsible for preparing reports on funds received and their use and for preparing withdrawal applications to replenish their own SA.

Replenishment applications should be submitted monthly or when the account is drawn down by 30% of the authorized allocation, whichever occurs first. For withdrawals outside of the Special Accounts (applications for direct payment or for issuance of Special Commitments), a minimum application value of 20% of the authorized allocation of the Special Accounts will be observed. To speed up project implementation, retroactive financing will be permitted for payments made up to twelve months prior to the date of the Development Credit Agreement, but after the appraisal date, for contracting of urgently required civil works, goods, consulting services, workshops, and training costing in total up to \$4,000,000. The procurement procedures shall be in accordance with World Bank Procurement Guidelines in order for the eventual contracts to be eligible for IDA retroactive financing, and the normal review process by the IDA shall be followed.

Audit Arrangements

Project accounts will be audited annually in accordance with international auditing standards and in compliance with the independent auditing regulations of Vietnam. The audit will be prepared on the basis of international financial reporting standards. The auditor's reports will be made available to IDA within six months of the close of the fiscal year. Each audit will furnish a single audit opinion covering Project Accounts, and the use of SOEs and Special Accounts. A management letter addressing strengths and weaknesses of internal control by the implementing agencies will also be provided by the auditor, together with the audit report.

The CPO will take overall responsibility to select auditors for the whole project, under IDA procurement procedures. Auditors will be selected from the list of eligible auditors provided by IDA and use the audit TORs approved by IDA. Auditors will use financial reports prepared by the CPO and central DAF, and will visit PPMUs, DAFs and VWUs at provincial level, in order to check supporting documents and make random site visits.

Annex 8: Procurement Arrangements

VIETNAM: Red River Delta Rural Water Supply and Sanitation Project

General

Procurement will be carried out in accordance with the World Bank's "Guidelines: Procurement Under IBRD Loans and IDA Credits" dated May 2004; and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, and the provisions stipulated in the Development Credit Agreement. A general description of various items under different expenditure categories is provided below. For each contract financed by the Credit, the different procurement methods and consultant selection methods, estimated costs, prior review requirements and time frame have been agreed between the Borrower and IDA in the procurement plan. The procurement plan will be updated at least annually, or as required to reflect the actual project implementation needs and improvements in institutional capacity.

Procurement of Works. Civil works to be procured under this project include construction of piped rural water supply schemes, including head works, water treatment plants, transmission pipelines, storage tanks, distribution pipeline and household water meters. Schemes are estimated to cost about US\$ 300,000 equivalent each. The Phase 1 schemes will be located in some 120 communes in around 11 districts in four provinces.

National Competitive Bidding will be adopted as the most appropriate method for contracts estimated to cost less than the ICB threshold of US\$2.0 million, but more than US\$30,000 per contract. Procurement will follow the national competitive bidding procedure in accordance with the NCB-Annex to the DCA and Sample Bidding Documents for NCB for Works agreed with the Bank. *Shopping* will be used for very small works estimated to cost below US\$30,000 equivalent per contract. Special provisions for shopping are described below.

Procurement of Goods. Goods to be procured under this project will include laboratory testing equipment and toolkits, material and equipment for mass media campaigns, vehicles, and office equipment. *International Competitive Bidding (ICB)* procedures and the Bank standard documents will be used to procure goods estimated to cost more than US\$100,000 equivalent per contract. *National Competitive Bidding (NCB)* procedures in accordance with the NCB-Annex to the DCA and sample documents agreed with the Bank, will be used to procure goods estimated to cost less than US\$100,000 but more than US\$20,000 equivalent per contract. *Shopping* procedures, in accordance with Article 3.5 of the Guidelines, will be used to procure small quantities of off-the-shelf goods. Special provisions for shopping are described below.

Non-consulting Services. *Direct Contracting* will be used to procure some non-consulting services obtainable only from one source, such as Government-owned radio and TV broadcast services for mass media campaigns, subject to IDA prior agreement.

Selection of Consultants. Consulting services to be procured include: the preparation of feasibility studies, the preparation of detailed designs and bidding documents, construction supervision, training, social surveys, environmental monitoring and technical assistance. *Quality and Cost Based Selection (QCBS)* will be used for consulting services estimated to cost more than US\$100,000 per contract, along with Standard Requests for Proposals. Selection based on *Consultant Qualifications (CQS)* will be used for consulting services estimated to cost less than US\$100,000 per contract. *Single Source Selection (SSS)* will be used for some capacity building

contracts meeting the conditions specified in paragraph 3.9 through 3.13 of the Consultant Guidelines. *Individual Consultants (IC)* meeting the conditions specified in paragraph 5.1, Section V of the Consultant Guidelines, will be procured in accordance with the procedures specified in paragraph 5.2 through 5.4 of the same section.

Operating Costs will cover incremental costs related to project implementation activities, including field visits for supervision, communications, rental, operation and maintenance of vehicles, office supplies and project-related travel expenses, but excluding Government officials' salaries and salary supplements, which will be financed by the Government.

Others include expenses such as overseas and in-country training seminars and workshops which will be claimed through SOEs.

Special provisions for shopping

The following special provisions shall be used for shopping:

Works: Threshold for Shopping, less than \$30,000 equivalent per contract. Contracts falling between \$10,000-\$30,000 equivalent shall require provincial (or national) advertising with at least 10 days notice period, post-qualification (instead of pre-qualification/pre-registration) of bidders, use of sample and model Request for Quotation Documents acceptable to the Bank, submission of sealed quotations, public opening of quotations, allowing bidders and project beneficiaries to be present, and posting the bid opening record at a prominent location outside the CPO/PPMU office.

Goods: Threshold for Shopping, less than \$20,000 equivalent per contract. Contracts falling between \$5,000-\$20,000 equivalent shall follow these same requirements.

Assessment of the agencies' capacity to implement procurement

An assessment of the capacity of the implementing agencies to implement procurement actions for the project was carried out during preparation. The assessment reviewed the organizational structure for implementing the project, and the interaction between the project's staff responsible for procurement and the concerned Ministry and local governments (People's Committees).

Phase 1 procurement will be carried out by four provincial project implementing agencies and a central project implementing agency, each being responsible for their respective components. Responsibility for project implementation, including procurement, will be assigned to the Central Project Office (CPO) and Provincial Project Management Units (PPMUs) to be established under MARD and the Provincial Departments of Agriculture and Rural Development (DARD) respectively. The CPO and PPMUs will be staffed with technical personnel with adequate experience in the area of rural water supply and sanitation, and some experience in procurement using domestic public procurement procedures. Their exposure to the procurement procedures of multilateral banks is however limited.

The key issues and risks concerning procurement for implementation of the project are the limited procurement capacity of the project implementing agencies and lack of familiarity of the concerned local government agencies with the Bank's procurement procedures. Another potential risk associated with decentralized procurement, especially shopping, is collusion. The agreed corrective measures include:

- Providing procurement training for CPO, PPMUs, and local government agencies during project preparation. This was carried out by Bank procurement staff in March and April 2005;
- Staffing the CPO/PPMUs with 1-2 experienced procurement officers;
- Providing technical assistance on procurement, with an experienced procurement specialist recruited at the outset of project operations;
- Special provisions for shopping as described above incorporated in the Development Credit Agreement.

The overall project risk for procurement is **high**.

Procurement Plan

Procurement plans, which describe the procurement methods to be adopted, were developed by the Borrower for: (a) the first 18 months of implementation of piped water supply systems; (b) consultancy assignments to be procured by the CPO; and (c) consultancy assignments and goods to be procured by the PPMUs. These plans were agreed between the Borrower and IDA during negotiations in May 2005. The procurement plans will be updated in agreement with IDA supervision teams annually, or as otherwise required. Copies of the plans are attached to this annex.

Frequency of Procurement Supervision

In addition to the prior review supervision to be carried out from Bank offices, the capacity assessment of the implementing agencies has recommended that annual supervision missions visit the field to carry out post review of procurement actions.

Details of Procurement Arrangements Involving International Competition

1. Goods, Works, and Non-consulting Services

- (a) All goods and works packages are expected to be below the ICB thresholds.
- (b) All goods/works contracts estimated to cost the equivalent of US\$100,000 or more per contract and all direct contracting will be subject to prior review by the Bank.

2. Consulting Services

- (a) List of consulting assignments that will be procured through international competition.

1	2	3	4
Description of Assignment	Estimated Cost (US\$1,000)	Selection Method	Review by Bank (Prior/Post)
Project management, coordination, oversight of construction supervision and training for provinces.	628	QCBS	Prior
Independent auditing	181	LCS	Prior
Project preparation for AP Phase 2	1,480	QCBS	Prior
Technical assistance to CPO on changing hygiene behaviour	246	QCBS	Prior

1	2	3	4
Description of Assignment	Estimated Cost (US\$1,000)	Selection Method	Review by Bank (Prior/Post)
Supervision of implementation of the hygiene behaviour component	105	QCBS	Prior
Support development of the national investment plan for rural water supply and assist with updating the national strategy	138	QCBS	Prior
Support capacity building of sector institutions	259	QCBS/IC	Prior
Technical assistance and training for IEC skills, management of revolving funds etc	858	QCBS/CQ	Prior
Training on planning, procurement, calculation and collection of water tariffs etc	360	CQ/SSS/IC	Prior
Technical support for PPMUs	552	CQ/IC	Post

(b) Consultancy services estimated to cost the equivalent of US\$100,000 or more per contract and single source selection of consultants, regardless of value, will be subject to prior review by the Bank.

(c) Short lists of consultants for services estimated to cost less than US\$200,000 equivalent per contract under QCBS, may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

VIETNAM: Red River Delta Rural Water Supply and Sanitation Project

National Competitive Bidding

Vietnam represents that the procedures to be followed for National Competitive Bidding shall be those set forth in the Decree 88/99, as modified by Decree 14/2000 and Decree 66/2003 and, in order to ensure economy, efficiency and transparency and broad consistency with the provision of Section I of the Guidelines (as required by para. 3.3 of the Guidelines), goods and works for which this Schedule allows procurement shall be procured in accordance with paragraphs 3.3 and 3.4 of the Guidelines and the following paragraphs.

Participation in bidding and preferences

- (i) For clarification purposes, it is understood that the last sentence of the amended Paragraph (c), Section 2, Article 2 of Decree 88/ND-CP which states that "All the procedures for submission, appraisal and approval of bidding results and bidder selection results shall follow the Procurement Regulation" means "Approvals of draft bidding documents, bid evaluation reports and proposals for award shall be obtained in accordance with the relevant rules and procedures of the Procurement Regulation".
- (ii) Government-owned enterprises in Vietnam shall be eligible to participate in bidding only if they can establish that they are legally and financially autonomous, operate under commercial law, and are not a dependent agency of the Borrower or the procuring entity. Military or security units, or enterprises which belong to the Ministry of Defense or the Ministry of Public Security shall not be permitted to bid.
- (iii) Foreign bidders shall be eligible to participate in bidding under the same conditions as local bidders, and local bidders shall be given no preference (either in the bidding process or in bid evaluation) over foreign bidders, nor shall bidders located in the same province or city as the procuring entity be given any such preference over bidders located outside that city or province.
- (iv) Bidders shall be allowed to participate in bidding without being listed in the Government Database on Bidder Information or in any other registration system.
- (v) Prospective bidders shall be permitted to request bidding documents either in person or through the mail upon submission of a written application. Bidding documents shall be sold to anyone who is willing to pay the required fee of the bidding documents, and no other conditions shall be imposed on the sale of the bidding documents. The fee for the bidding documents should be reasonable and consist only of the cost of printing (or photocopying) the documents and their delivery to the purchaser. The bidding documents shall be delivered, at the prospective bidders' preference, either by hand or by mail/courier provided that the bidder is willing to pay the mail/courier delivery charges which should be specified in the Invitation for Bids. Each bidder shall be allowed to purchase only one set of the bidding documents.
- (vi) Foreign bidders shall not be required, in order to participate in bidding or as a condition of award of the contract or during execution of the contract, to enter into a joint venture with a local bidder, or to subcontract part of their contract to a local bidder.
- (vii) If there is prequalification, *all* prequalified bidders shall be invited to bid.

(viii) If there is limited bidding because there are only a limited number of bidders who can meet the requirements of the bidding documents, *all* of these bidders shall be invited to bid.

(ix) Bidders shall not be required, as a condition of participation in the bidding, to provide suppliers' credits.

Advertising: time for bid preparation

(x) Invitations to bid shall be advertised in at least one widely circulated national newspaper. In addition, the Borrower is encouraged to advertise in the Government Public Procurement Bulletin when established and on a free and open access website. A minimum of 30 days for the preparation and submission of bids shall be provided, and potential bidders shall be allowed to purchase bidding documents up to 24 hours prior to the deadline for the submission of bids.

Standard Bidding Documents

(xi) The Borrower's standard bidding documents, acceptable to IDA, shall be used. The bidding documents shall provide clear instructions on how bids should be submitted, how prices should be offered, and the place and time for submission and opening of bids. Bidders shall be allowed to submit bids by hand or by mail.

Qualification criteria and evaluation criteria

(xii) Qualification criteria shall be clearly specified in the bidding documents, *and* all criteria so specified, and *only* criteria so specified, shall be used to determine whether a bidder is qualified. The evaluation of the bidder's qualifications should be conducted separately from the technical and commercial evaluation of the bid. When post qualification is applied, the assessment of bidders' qualifications shall be carried out only after the preliminary and detailed evaluation of bids has been completed by the Purchaser/Employer and, in doing so, the qualifications of the bidder who has submitted the lowest evaluated substantially responsive bid shall be assessed first. In carrying out the post-qualification assessment, the Employer/Purchaser shall exercise reasonable judgment in requesting, in writing, from a bidder only missing factual or historical supporting information related to the bidder's qualifications and shall provide a reasonable time period (that is, a minimum of 7 days) to the bidder to provide his response.

(xiii) Evaluation criteria shall be clearly specified in the bidding documents, and evaluation criteria other than price shall be quantified in monetary terms. All evaluation criteria so specified, and only evaluation criteria so specified, shall be taken into account in bid evaluation. Merit points shall not be used in bid evaluation.

Bid opening, evaluation and award of contract

(xiv) Bids shall be opened in public, immediately after the stipulated deadline for submission of bids. Bidders or their representatives, shall be allowed to be present. The name of the bidder and total amount of each bid, including discounts, shall be read aloud and recorded. Immediately after completion of the bid opening proceedings, a copy of the bid opening record shall be posted at a prominent location, accessible to the public, outside the office of the concerned procuring entity and shall be retained at the same location until the award of contract has been notified. A copy of the bid opening record shall be promptly provided to all bidders who submitted bids.

(xv) Bids received after the deadline for bid submission shall be returned to the bidders unopened.

(xvi) All bids shall not be rejected or new bids solicited without IDA's prior concurrence.

(xvii) No bidder shall be rejected merely on the basis of a comparison with the owner's estimate and budget ceiling without IDA's prior concurrence.

(xviii) A bid containing material deviations from, or reservations to, the terms, conditions or specifications of the bidding documents shall be rejected as not substantially responsive. A bidder shall not be permitted to withdraw material deviations or reservations once bids have been opened. Bidders shall not be eliminated from detailed evaluation on the basis of non-material, minor deviations or reservations.

(xix) Evaluation of bids shall be made in strict adherence to the criteria specified in the bidding documents, and contracts shall be awarded to the qualified bidder offering the lowest evaluated and responsive bid.

(xx) A bidder shall not be required, as a condition for award, to undertake obligations not specified in the bidding documents, or otherwise to modify the bid as originally submitted.

(xxi) There shall be no post-bidding negotiations with the lowest or any other bidder.

(xxii) The Borrower shall declare a firm ineligible, either indefinitely or for a stated period, to be awarded a contract financed by the Bank and the Government, if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for, or in executing, a Bank-financed contract.

Suppliers and Contractors

(xxiii) Bidding documents and contracts under national competitive bidding procedures financed by the Association shall include a provision requiring suppliers and contractors to permit the Association to inspect their accounts and records relating to the bid submission and the performance of the supplier and/or contractor, as the case may be, and to have them audited by auditors appointed by the Association, if so required by the Association.

(xiv) License for foreign contractors operation in Vietnam would be provided in a timely manner and will not be arbitrarily withheld.

Publication of the Award of Contract

(xxv) The Borrower shall publish the following information on contract award in Government Public Procurement Bulletin when established or on a free and open access website or on another means of publication acceptable to the IDA: (a) name of each bidder who submitted a bid; (b) bid prices as read out at bid opening; (c) name and evaluated price of each bid that was evaluated; (d) name of bidders whose bids were rejected and the reasons for their rejection; and (e) name of the winning bidder, price it offered as well as the duration and summary scope of the contract awarded. This publication shall be updated quarterly.

Complaints by Bidders and Handling of Complaints

(xxvi) The national competitive bidding procedures for contracts financed by the Association shall include provisions, acceptable to the Association, for bidders to protest.

PROCUREMENT PLAN - FIRST 18 MONTHS FOR PPMUs - PIPED WATER SUPPLY SYSTEMS

No	Contract Description	No. of bid. package	Procurement		Estimated cost '000USD	Issuance of Bidding Documents	Bid opening and Evaluation	Implementation		
			Type	Method				Contract signing	Start	End
Component 1: RWSS - PPMU										
Thai Binh Province										
A	Sub-project in Viet Hung commune									
1	Design and construct the piped water system.	1	W	NCB	355.85	9/05	10/05 - 1/06	2/06	3/06	1/07
2	Construction supervision	1	C	CQS	7.92	9/05	10/05 - 1/06	2/06	3/06	1/07
B	Sub-project in Minh Tan commune									
1	Design and construct the piped water system	1	W	NCB	248.59	9/05	10/05 - 1/06	2/06	3/06	1/07
2	Construction supervision	1	C	CQS	7.92	9/05	10/05 - 1/06	2/06	3/06	1/07
C	Prepare feasibility studies, designs & bid documents for sub-projects in the following years	various	C	QCBS	405.43	4/06	5/06 - 7/07	2/06	3/06	12/06
Ninh Binh Province										
A	Sub-project in Binh Minh town									
1	Design and construct the piped water system	1	W	NCB	266.66	9/05	10/05 - 1/06	2/06	3/06	1/07
2	Construction supervision	1	C	CQS	7.43	9/05	10/05 - 1/06	2/06	3/06	1/07
B	Sub-project in Gia Xuan commune									
1	Design and construct the piped water system	1	W	NCB	213.64	9/05	10/05 - 1/06	2/06	3/06	1/07
2	Construction supervision	1	C	CQS	7.43	9/05	10/05 - 1/06	2/06	3/06	1/07
C	Prepare feasibility studies, designs & bid documents for sub-projects in the following years	various	C	QCBS	417.02	10/05	11/06 - 1/07	2/06	3/06	12/06
Nam Dinh province										
A	Sub-project in Xuan Phu									
1	Design and construct the piped water system	1	W	NCB	454.32	9/05	10/05 - 1/06	2/06	3/06	1/07
2	Construction supervision	1	C	CQS	8.19	9/05	10/05 - 1/06	2/06	3/06	1/07
B	Sub-project in Dai Thang commune									
1	Design and construct the piped water system	1	W	NCB	428.10	9/05	10/05 - 1/06	2/06	3/06	1/07
2	Construction supervision	1	C	CQS	8.19	9/05	10/05 - 1/06	2/06	3/06	1/07
C	Prepare feasibility studies, designs & bid documents for sub-projects in the following years	various	C	QCBS	434.35	10/05	11/06 - 1/07	2/06	3/06	12/06

No	Contract Description	No. of bid. package	Procurement		Estimated cost '000USD	Issuance of Bidding Documents	Bid opening and Evaluation	Implementation		
			Type	Method				Contract signing	Start	End
Hai Duong province										
A	Sub-project in Dong Gia									
1	Design and construct the piped water system	1	W	NCB	227.57	9/05	10/05 - 1/06	2/06	3/06	4/07
2	Construction supervision	1	C	CQS	8.19	9/05	10/05 - 1/06	2/06	3/06	4/07
Sub-project in Chi Lang Bac Commune										
1	Design and construct the piped water system	1	W	NCB	279.91	9/05	10/05 - 1/06	2/06	3/06	4/07
2	Construction supervision	1	C	CQS	8.19	9/05	10/05 - 1/06	2/06	3/06	4/07
C	Prepare feasibility studies, designs & bid documents for sub-projects in the following years	various	C	QCBS	366.58	10/05	11/06 - 1/07	2/06	3/06	4/07

ICB

International Competitive Bidding

NCB

National Competitive Bidding

QCBS

Quality and Cost Based Selection

CQS

Selection based on Consultant Qualification

LCS

Least Cost Selection

SSS

Single Source Selection

W

Civil Works

C

Consulting services

G

Goods

Sh

Shopping

IC

Individual consultants

PROCUREMENT PLAN - CENTRAL PROJECT OFFICE

No	Contract Description	No. of bid. package	Bidding		Estimated cost '000USD	Issuance of Bidding Document	Bid opening and evaluation	Contract implementation		
			Type	Method				Contract signing	Start	End
	Component 1:									
	CPO									
1	Project management, coordination, oversight of construction supervision and training for provinces	1	C	QCBS	628.00	1/06	1/06 - 2/06	3/06	5/06	12/2010
2	Auditing	1	C	LCS	181.00	11/06	11/06 - 12/06	12/06	1/07	12/2010
3	Preparation for AP Phase II	1	C	QCBS	1,480.00	6/06	7/06 - 12/06	1/07	2/07	6/08
4	Supervision of Resettlement and environmental management	2	C	QCBS	295.00	1/05	1/06 - 2/06	3/06	5/06	12/2010
	Component 2 : Changing of Hygiene Behavior									
	CPO									
1	Technical assistance for CPO	tbid	C	QCBS	246.40	8/05	9/05 - 10/05	11/05	12/05	1/08
2	Implementation supervision	1	C	QCBS	105.00	8/05	9/05 - 10/05	11/05	12/05	1/2010
	Component 3 : Capacity building									
	CPO									
1	Support development of the National investment plan for rural water supply and update the National Strategy.	1	C	QCBS	138.00	9/05	10/05 - 12/05	1/06	12/05	1/07
2	Capacity building of sector institutions	2	C	QCBS/IC	259.28	8/05	9/05 - 10/05	11/05	12/05	1/07
	Component 4 - Project Management									
	CPO									
1	Monitoring and Evaluation	1	C	CQS	73.00	12/05	1/06 - 2/06	3/06	4/06	8/2010
2	Equipment and furniture for CPO	2	G	Sh	36.00	8/05	9/05 - 10/05	10/05	10/05	11/05

ICB International Competitive Bidding **W** Civil Works
NCB National Competitive Bidding **C** Consulting services package
QCBS Quality and Cost Based Selection **G** Goods/Equipment Package
CQS Selection based on Consultant Qualification
LCS Least Cost Selection **Sh** Shopping
SSS Single Source Selection **IC** Individual Consultants

PROCUREMENT PLAN FOR PPMUs

No	Contract Description	No of packages	Bidding		Estimated cost ('000USD)						Total Estimated cost '000USD	Issue BidDoc	Bid opening and eval	Contract Implementation		
			Type	Method	2006	2007	2008	2009	2010	2011				Signing	Start	End
Component 2 : Changing of Hygiene Behavior and activities																
	Thái Bình															
1	* Technical assistance (Training and consulting services) ,including : training on IEC skills, PHAST, operation and management of revolving fund, integrated sanitation approaches...)	tbd	C	QCBS/CQ	30	64	62	54	4	-	215	8/05	9/05 - 10/05	11/05	12/05	1/08
2	* Community mobilisation: social economic surveys, wealth ranking; WTP surveys; action plan for sanitation improvement.	tbd	C	CQS/IC/SSS	14	16	16	14	-	-	62	8/05		11/05	12/05	12/08
	Ninh Bình															
1	* Technical assistance (Training and consulting services) ,including : training on IEC skills, PHAST, operation and management of revolving fund, integrated sanitation approaches...)	tbd	C	QCBS	30	67	65	54	4	-	221	8/05	9/05 - 10/05	11/05	12/05	1/08
2	* Community mobilisation: social economic surveys, wealth ranking; WTP surveys; action plan for sanitation improvement.	tbd	C	CQS/IC/SSS	14	18	18	14	-	-	66	8/05		11/05	12/05	12/08
	Nam Định															
1	* Technical assistance (Training and consulting services) ,including : training on IEC skills, PHAST, operation and management of revolving fund, integrated sanitation approaches...)	tbd	C	QCBS/CQS	30	64	62	51	4	-	211	8/05	9/05 - 10/05	11/05	12/05	1/08

No	Contract Description	No of packages	Bidding		Estimated cost ('000USD)						Total Estimated cost '000USD	Issue BidDoc	Bid opening and eval	Contract Implementation		
			Type	Method	2006	2007	2008	2009	2010	2011				Signi ng	Start	End
2	* Community mobilisation: social economic surveys, wealth ranking; WTP surveys; action plan for sanitation improvement.	various	Cons	CQS/IC/SSS	14	16	16	12	-	-	59	8/05		11/05	12/05	12/08
	Nam Dinh															
1	* Technical assistance (Training and consulting services) including : training on IEC skills, PHAST, operation and management of revolving fund, integrated sanitation approaches...)	tbd	C	QCBS/CQ	30	64	62	51	4	-	211	8/05	9/05 - 10/05	11/05	12/05	1/08
2	* Community mobilisation: social economic surveys, wealth ranking; WTP surveys; action plan for sanitation improvement.	tbd	C	CQS/IC/SSS	14	16	16	12	-	-	59	8/05		11/05	12/05	12/08
	Component 3 : Capacity building															
	Thai Binh															
1	* Training on O&M skills ; planning, procurement, development of software for calculation and collection of water tariff.	tbd	C	CQS/IC/SSS	12	24.0	24	18.0	6.0	6.0	90	1/06	2/06 - 3/06	5/06	6/06	11/10
	Ninh Binh															
1	* Training on O&M skills ; planning, procurement, development of software for calculation and collection of water tariff.	tbd	C	CQS/IC/SSS	12	24.0	24	18.0	6.0	6.0	90	1/06	2/06 - 3/06	5/06	6/06	11/10

No	Contract Description	No of packages	Bidding		Estimated cost ('000USD)						Total Estimated cost '000USD	Issue BidDoc	Bid opening and eval	Contract Implementation			
			Type	Method	2006	2007	2008	2009	2010	2011				Signi ng	Start	End	
	Nam Dinh																
1	* Training on O&M skills ; planning, procurement, development of software for calculation and collection of water tariff.	tbd	C	CQS/IC/SSS	12	24	24	18	6	6	90	1/06	2/06 - 3/06	5/06	6/06	11/10	
	Hai Duong																
1	* Training on O&M skills ; planning, procurement, development of software for calculation and collection of water tariff.	tbd	C	CQS/IC/SSS	12	24.0	24	18.0	6.0	6.0	90	1/06	2/06 - 3/06	5/06	6/06	11/10	
Component 4 - Support for Project Management																	
	Thai Binh																
1	Office equipment and furniture PPMU	1	G	Sh	11						11	8/05	9/05 - 9/05	10/05	10/05	11/05	
2	Technical support for PPMU	tbd	C	IC/CQS	23	23.0	23	23.0	23	23	138	12/05	1/06 - 2/06	3/06	4/06	1/10	
	Ninh Binh																
1	Office equipment and furniture PPMU	1	G	Sh	11						11	8/05	9/05 - 9/05	10/05	10/05	11/05	
2	Technical support for PPMU	tbd	C	IC/CQS	23	23.0	23	23.0	23	23	138.00	12/05	1/06 - 2/06	3/06	4/06	1/10	
	Nam Dinh																
1	Office equipment and furniture PPMU	1	G	Sh	11						11	8/05	9/05 - 9/05	10/05	10/05	11/05	
2	Technical support for PPMU	tbd	C	IC/CQS	23	23.0	23	23.0	23	23	138	12/05	1/06 - 2/06	3/06	4/06	1/10	
	Hai Duong																
1	Office equipment and furniture PPMU	1	G	Sh	11						11	8/05	9/05 - 9/05	10/05	10/05	11/05	
2	Technical support for PPMU	tbd	C	IC/CQS	23	23.0	23	23.0	23	23	138	12/05	1/06 - 2/06	3/06	4/06	1/10	
	Hai Duong																
1	Office equipment and furniture PPMU	1	G	Sh	11						11	8/05	9/05 - 9/05	10/05	10/05	11/05	
2	Technical support for PPMU	tbd	C	IC/CQS	23	23.0	23	23.0	23	23	138	12/05	1/06 - 2/06	3/06	4/06	1/10	

Annex 9: Economic and Financial Analysis

VIETNAM: Red River Delta Rural Water Supply and Sanitation Project

Financial Analysis

The project will support construction of new piped water systems in communes currently not served and to a limited extent, the upgrading of existing schemes. It will also support the construction of on-site water supply, sanitation, and household level drainage facilities in households, organizations, and public locations without a piped system. Each of the four phase one provinces will have about 28-30 commune level sub-projects implemented. The financial analysis was conducted for eight communes, which are considered to be representative of the 120 communes to be served under AP1.

Water tariffs for the new systems will be based on full cost recovery of operation and maintenance and partial recovery of capital costs. Affordability will be carefully assessed. Utilizing IDA funds, the government will provide capital subsidies to each province in order to maximize access to improved water services by households. The project will set out minimum conditions for entry of communes.

To comprehensively assess the financial aspects of the project, the analysis also includes fiscal impact. Financial efficiency of the piped water schemes under the water and sanitation infrastructure development component, which account for 90% of the project, have been assessed. Other components are assessed by economic parameters.

Piped Water Supply Systems. The RRD-RWSS project is the first large-scale RWSS project in Vietnam to apply the principles of cost recovery and community participation to identify water demand and community willingness and ability to pay for improved RWSS services. Financial sustainability will be attained by charging consumers a tariff that will recover operating, maintenance, and repair costs, and debt service, but also provide a reasonable profit for water scheme investors. However, in order to keep the tariff affordable, Government would provide a capital subsidy for 45% of investment costs.

The project will adopt the tariff structure determined by an inter-ministerial decree. It has been agreed that, consistent with this decree, water tariffs would be set to ensure recovery of: O&M costs; depreciation of fixed assets funded by loans and consumer contributions (but excluding fixed assets funded by government grants); interest; and loan principal which exceeds the above mentioned provision for depreciation. Water tariffs would consider the affordability to the community, determined through socio-economic surveys. Further, water tariffs will be adjusted to reflect inflation every two years. The level and structure of water tariffs must be approved by PPCs. Within communes, tariff structures will be negotiated to ensure equitable service access by all socio-economic groups while meeting the cost recovery principles for the commune overall.

Required Water Tariff. Table 9.1 below shows the minimum tariffs required in the eight communes of the four AP 1 provinces to meet the cost recovery principles, consistent with a 45% capital subsidy and a beneficiary contribution of 10%. In each case, tariffs were computed at three levels of initial household connections: 60%; 75%; and 85%. Table 9.2 indicates the corresponding monthly household water fee, for a water consumption of 5 cubic meters.

Table 9.1
Minimum Required Water Tariff of Phase 1 Provinces

Sub-project Component	Water tariff (VND/m ³) in 2006 (Subsidy 45% and Beneficiary contribution 10%)		
	60% initial household connections	75% initial household connections	85% initial household connections
Thai Binh			
Viet Hung	2,910	2,860	2,750
Minh Tan	2,920	2,870	2,760
Nam Dinh			
Dai Thang	3,140	3,080	2,960
Xuan Phu	3,320	3,250	3,120
Ninh Binh			
Binh Minh	4,300	4,210	4,020
Gia Xuan	3,540	3,470	3,320
Hai Duong			
Dong Gia	2,970	2,940	2,840
Chi Lang Bac	2,690	2,650	2,550

Table 9.2
Monthly Household Water Fee in Phase 1 Provinces

Sub-Project Location	Water fee (VND/HH/month) in 2006 (consumption rate 5 m ³ /HH/month)		
	60% initial household connections	75% initial household connections	85% initial household connection
Thai Binh			
Viet Hung	14,600	14,300	13,800
Minh Tan	14,600	14,400	13,800
Nam Dinh			
Dai Thang	15,700	15,400	14,800
Xuan Phu	16,600	16,300	15,600
Ninh Binh			
Binh Minh	21,500	21,100	20,100
Gia Xuan	17,700	17,400	16,600
Hai Duong			
Dong Gia	14,900	14,700	14,200
Chi Lang Bac	13,500	13,300	12,800

Affordability. Field surveys in the eight communes indicated a willingness to pay in the range of VND 20,000 – 40,000 per month in the case of poor households, well in excess of the monthly household water fee under the different scenarios indicated in Table 9.2. The estimated cost recovery water tariff will account for 38 - 95% of the willingness-to pay fees of the low-income

households. The required monthly water fees correspond to about 2 - 5% of monthly low-income household income, and is considered reasonable and affordable for the targeted consumer groups.

According to surveys conducted in areas which have no piped water supply system, households tend to be willing to pay higher water tariffs to access clean piped water. This suggests that community affordability will certainly be high enough to pay the monthly water charge.

Loan Repayment for Household Level RWSS Facilities. Household repayment ability will be appraised by the Women's Union. In general, according to the results of Preliminary Surveys of Willingness and Ability to Pay, and the subsequent Socioeconomic Surveys conducted in 8 pilot communes of the four project provinces, the households are clearly able to repay the debt service from their monthly income. With a loan of less than VND 4 million/per/household to be repaid, households will be able to pay debt service ranging from VND 45,000 to VND 68,000 in the 3 -5 year repayment period. This constitutes two to three percent of monthly income, and is considered affordable.

FIRR

FIRR for the eight communes were calculated to assess the financial viability of the water supply systems. With the required tariff summarized in Table 9.1, FIRRs of the eight sub-projects in four provinces range from 5.0% - 8.8%, and are higher than the weighted average cost of capital of about 4.4 %. The FIRR is sensitive to the water demand, including the initial percentage of household connections, as shown in Table 9.3. In addition to tariff-setting requirements described above, the project has set out two conditions for entry of communes to help assure minimum project financial viability. These conditions are: (a) at least 60% of households within the proposed service area of piped schemes will agree to being connected; and (b) monthly water consumption per household is estimated to be at least 5m³/household per month. The socio-economic survey indicated willingness to connect by about 80-85% of the households; hence the assumption of at least 60% of the initial households connecting appears to be conservative.

Table 9.3
FIRR of 8 Sub-Projects

Province and Commune	FIRR % (Subsidy 45% and Beneficiary Contribution 10%)		
	60% initial household connections	75% initial household connections	85% initial household connections
Thai Binh			
Viet Hung	8.0%	8.4%	8.8%
Minh Tan	7.2%	7.5%	7.9%
Nam Dinh			
Dai Thang	6.8%	7.1%	7.4%
Xuan Phu	6.8%	7.1%	7.4%
Ninh Binh			
Binh Minh	5.8%	6.0%	6.3%
Gia Xuan	5.0%	5.2%	5.6%
Hai Duong			
Dong Gia	5.0%	5.2%	5.6%
Chi Lang Bac	6.8%	7.1%	7.5%

Fiscal Impact

The estimated counterpart funds from Vietnamese sources will be US\$ 4.25 million accounting for 8.5% of total investment capital of all four project components. \$0.84 million will come as counterpart funds from the four participating provinces and US\$ 3.41 million will come from community contributions to piped schemes – this is 10% of the construction cost. Socio-economic surveys and experience from similar schemes elsewhere in Vietnam indicate that this level of contribution is affordable. In order to spread the burden it has been agreed that Commune or Provincial Authorities may initially make the contribution on behalf of beneficiaries and recover it gradually over time. The normal practice in Vietnam of requiring households to contribute according to their means will apply i.e. households that are formally classified as poor will not have to contribute with their share being made up by better off households. Through the operation of 120 water schemes, the government budget will benefit from annual corporate taxes on these schemes and associated activities, estimated at about 4.8 billion VND. The overall fiscal impact of the project is considered manageable.

Economic Analysis

Cost benefit analysis was conducted to verify economic viability by identifying and quantifying economic costs and benefits for “with project” and “without project” conditions.

Targeted Beneficiaries. The project will benefit about 800,000 people living in the four provinces of AP 1. Because of GOV subsidy policies, poor and low income households will also benefit from access to improved water and sanitation facilities. The project will result in better living conditions and reduce the risk of water borne diseases caused by using unsafe water and poor sanitation facilities and practices. Overall, the project will improve the quality of life in rural communities.

Quantified project benefits include economic benefits (revenues and customer surplus, i.e., benefits from the increase of consumption at a lower price than the price in the “without” case). Non-quantified benefits of the project include improved community health through reduced risk of water borne diseases such as diarrhea, skin disease, typhoid, eye disease, etc. Other benefits include: socio-economic development; positive environmental impacts; social impacts; local employment creation for water scheme construction, operation and maintenance; and strengthened capacity and capability of local staff to operate and maintain the schemes, and for constructing sanitary latrines.

The calculated EIRR is 10.3%. The project is considered as economically viable, even without taking into account the health and other non-quantifiable benefits.

Annex 10: Safeguard Policy Issues

VIETNAM: Red River Delta Rural Water Supply and Sanitation Project

The project is in safeguard category “B”, as during Phase 1 of the AP, the project will finance small-scale water supply and on-site sanitation and drainage systems in rural and peri-urban communities that lack such services. The cost of these sub-projects is expected to range mostly between \$200,000 and \$350,000. The safeguard review process will provide for simple screening and review of small projects, but with the means for more detailed review if larger projects with potentially adverse impacts are requested. In particular, water quality issues related to arsenic and agricultural pesticide contamination, and home industry waste will be assessed for sub-projects.

Environmental safeguards

The environmental impacts of the project are expected to be small. An *Environmental Guideline and Environmental Assessment for identified sub-projects of the 1st year program* has been prepared; approval by the Borrower will be a condition of project effectiveness. The Environmental Guideline and Environmental Assessments for sub-projects that are to be implemented in the first year have been publicly disclosed, as required by the Bank. Environmental Assessments for those Year One sub-projects, which are determined to require them based on the guidelines, have been carried out, and include identification of the major environmental issues and mitigation measures. These focus on water quality and availability, protection of natural habitats, drainage, and sanitation.

The Environmental Guideline commits the Borrower to an environmental review process for sub-projects in subsequent years, that includes: (a) screening (potentially leading to exclusion, based on environmental siting, water resource availability, and water quality issues); (b) environmental assessment of sub-projects as determined by the Guidelines; and (c) the institutional arrangements for preparation of EA/EMPs, and their implementation. These documents will be prepared through a process of public consultation and disclosure.

Environmental Management Plans (EMPs) have been prepared for Phase 1 sub-projects, and provide mitigation measures for construction (air quality, noise) and operation. The EMP contains specific monitoring parameters and frequency, implementation arrangements, and costs for implementation. Environmental safeguard capacity building is included in the overall capacity building program for central and provincial project management offices. An independent consultant will be contracted to monitor implementation of the EMPs. Environmental screening includes testing for the presence of arsenic in groundwater. Mitigation measures include identifying an alternative source, and if none is available, removing the arsenic in the treatment process.

Stakeholder consultation. For Year I sub-projects, consultation meetings were held with commune and district authorities, households, and mass organizations (e.g., Women's Union) to provide inputs to the project design and the scope of the environmental assessment. Follow-up consultations on the findings of the draft EA were held with the same stakeholders. Feedback from these consultations has been incorporated in the EMPs and sub-project designs.

Monitoring and indicators. Mitigation measures for Year 1 sub-projects are designed to mitigate the small and localized adverse impacts, and their implementation will be monitored throughout the project. Environmental assessments will be prepared for sub-projects in the subsequent years, as

per the Environmental Guidelines. If these sub-projects have impacts that require measurement of specific environmental indicators, these will be identified in the EMPs and monitored accordingly.

Social safeguards

The project will require some very limited land acquisition and resettlement (e.g., for locating water treatment works, digging of water wells and temporary impacts of laying water pipelines). A *Resettlement Policy Framework* (RPF), which meets Bank requirements, has been prepared and approved by the GoV, and abbreviated *Resettlement Plans* (RP) have been prepared for specific communes where resettlement is anticipated for Year One implementation.

The project will also require preparation of *Ethnic Minority Development Plans* (EMDPs) to assure the participation of indigenous peoples. Populations of ethnic minorities reside in the provinces of Hai Duong and Ninh Binh in Phase 1 of the AP, and in the Phase 2 provinces of Phu Tho, Quang Ninh, Vinh Phuc, and Thanh Hoa. A *Strategy and Guidelines for Ethnic Minorities* (SEM) has been prepared and will be used to guide development of *Ethnic Minority Development Plans* (EMDPs) for the provinces in Phase 1 and Phase 2, when the policy is triggered. These documents have been disclosed as per Bank requirements.

Annex 11: Poverty within the Red River Delta

VIETNAM: Red River Delta Rural Water Supply and Sanitation Project

The Red River Delta is the most densely populated region in Vietnam, and nearly 80 percent of the population lives in rural areas. The Red River Delta region has made significant progress in poverty reduction in recent years: 22 percent of the population was reported to live below the poverty line in 2002, down from 29 percent in 1998. However, the Red River Delta still has a very high poverty density as can be seen from the map. In 2002, nearly 3 million people in the Red River Delta were still poor, comprising around 17 percent of all the poor in Vietnam. The four provinces in Phase 1 of the Program were estimated to have poverty rates ranging from 23% to 37% in 2002. Most households that remain poor in the Red River Delta live in rural areas, with large and growing rural-urban disparities, higher than the national average.

The number of households and communes classified as poor, is likely to increase significantly in 2005 as a result of an increase in MOLISA's poverty threshold from VND 100,000 to around VND 200,000/capita/month in rural areas. Most studies also fail to capture data on unregistered migrants, many of whom may be poor, or poverty experience of individual household members, rather than the household as a whole. These factors may significantly increase the number of poor in the Red river Delta.

Access to services

Poor people in rural areas lack access to water and sanitation services. Ninety-three percent of the richest group (in both urban and rural areas) have access to clean water, compared to only 55 percent of people in the poorest group. Access to hygienic sanitation for the poor is of particular concern. While the overall proportion of households in the Red River Delta with sanitary toilets (26 percent) is around the same as the national average (25 percent), only a tiny proportion of poor households have hygienic toilets, compared to more than 70% of the richest one fifth.

Ethnic minorities and poverty

Unlike in other regions, the poor in the Red River Delta are not predominantly members of ethnic minorities. In the four project provinces, the ethnic minority population ranges from only 0.2% in Hai Duong to 2.1% in Ninh Binh; the main ethnic minorities are the Muong, Tay, San Dieu and Hoa. However, for the very few ethnic minority households in the region, poverty rates are much higher.

Participation of the poor

There is little consultation with the poor on key issues such as sub-provincial development plans and budgets. However, as decentralization intensifies, feedback from all citizens, and in particular the poor, on basic service delivery and targeted assistance is vital to keep reforms relevant. The Participatory Poverty Assessment identified three potential benefits of effectively implementing Government decrees relating to participation, including: (a) better resource mobilization from the community; (b) improved relations between government and constituents; and (c) less corruption. The Red River Delta Regional Poverty Assessment notes however that assessment and development of local capacity will be essential to make this work.

Poverty in the project provinces

Relative poverty was a factor in prioritizing provinces for inclusion in the project: one of the project provinces, Thai Ninh, is the second poorest province in the Red River Delta, and another, Ninh Binh, is third. “Pockets of poverty” exist in particular districts on the edges of the Red River Delta, especially in five provinces, including two of the project provinces, Ninh Binh and Nam Dinh. Using current MOLISA criteria, the total number of poor households in the four provinces is 130,583 households, with approximately 500,000 habitants. As noted earlier in this annex, the number of designated poor households will rise significantly following revision of the MOLISA criteria in 2005. Using the Methodology for Participatory Assessment (MPA, used by WB and other international organizations), the number of poor households identified was 1.5 times the MOLISA number. Poverty rates by commune in each project province are shown in maps.

Poverty focus within the RRD RWSS Project

Component 1: Water and Sanitation Infrastructure Development. Communes in the four provinces will be ranked based on poverty ranking criteria and a priority list of communes will be selected from the poorest 40 communes in each province. Of these, the communes that apply to participate and agree to the project rules would be eligible for eventual inclusion.

Within selected communes, poor households will be identified, and will be eligible for loans to support construction of household-level water supply and sanitation facilities. The poorest households as classified by Government will be eligible for grants. Poor households desiring to connect to a piped water supply system will be encouraged to do so, with connection costs free or amortized through tariff payments. In raising its 10% up-front contribution, communes will be encouraged to identify methods which do not place an undue burden on poor households, e.g., payment in installments, cross-subsidization by richer households, and reduced contributions. Information on the participation of, contributions by, and benefits to the poor will be included in the project database and monitoring procedures.

Component 2: Hygiene and Sanitation Behavior Change. The poor will be encouraged to participate on an equal basis with other groups in the activities under this component, including preparation of hygiene and sanitation promotion activities. If the poor within a community face particular constraints to introducing change, the program will be designed to give them extra information, assistance and support, but always as part of a community-wide approach.

Component 3: Strengthening the Capacity of Community and Local Government Institutions and Management Entities. Poverty issues are reflected in all capacity building initiatives, whether institutional reform or human resources development. They will assist all stakeholders to: (a) better and more reliably identify poor communes, poor clusters within communes, poor households, and poor within households; (b) ensure that all project activities include, and are adapted to reach and serve the poor; (c) equitably utilize all existing Government mechanisms to support the poor in the context of the project; and (d) carry out effective monitoring of the project’s impact on the poor, and to ensure a flexible response to progressively improve poverty-related performance. Capacity building for local community level facilitators/motivators will ensure that the poor and their vital role in improving commune level outcomes as a whole are not excluded. At the commune level, the poor themselves will be encouraged to participate on an equal basis as other groups.

Component 4: Support for Project Management, Monitoring and Evaluation. One of the outcome indicators is the number of additional poor people with access to safe water supplies,

sanitation and drainage facilities. A trigger to move to Phase 2 is that within 30 months of Phase 1 effectiveness, a GOV Financing and Poverty Targeting Strategy is in place, based on a review to assess the effectiveness of the National Target Program and related projects in helping poor households gain sustained access to a basic level of safe water and sanitation services. Another trigger requires that in communes with completed infrastructure, an effective *project financing strategy* is operating, ensuring, among other things, the full inclusion of the poor.

Annex 12: Project Preparation and Supervision

VIETNAM: Red River Delta Rural Water Supply and Sanitation Project

Planned	Actual
PCN review	October 11, 2002
Initial PID to PIC	June 5, 2003
Initial ISDS to PIC	June 15, 2003
Appraisal	February 2, 2005
Negotiations	May 30, 2005
Board/RVP approval	September 15, 2005
Planned date of effectiveness	December 31, 2005
Planned date of mid-term review	September 30, 2008
Planned closing date	June 30, 2011

Key institutions responsible for preparation of the project:

- Center for Rural Water Supply and Environmental Sanitation , Ministry of Agriculture and Rural Development – Project Preparation Unit

Bank staff and consultants who worked on the project included:

Name	Title	Unit
Core Team:		
Richard Pollard	Team Leader	EWDEA
Alan Coulthart	Infrastructure Coordinator	EASUR
Michael Seager	Consultant WSS Specialist	EWDEA
Nguyen Cong Thanh	Senior Operations Specialist	EASUR
Hoi-Chan Nguyen	Senior Counsel	LEGEA
Hoang Thi Hoa	Community Development Specialist	EASUR
Nilanjana Mukherjee	Senior Community Development Specialist	EWDEA
Le Viet Hung	Financial Mgmt. Specialist	EAPCO
Nguyen Chien Thang	Procurement Specialist	EAPCO
Philip Brylski	Safeguards Coordinator	EASES
Quang Ngoc Bui	Envir. Safeguards Specialist	EAPCO
Vinh Quoc Duong	Social Safeguards Specialist	EAPCO
Mariko Ogawa	Finance and Economics Specialist	EASEG
Nguyen Huong Thi Giang	Program Assistant	EACVF
Quality Team:		
Parameswaran Iyer		EWDWS
William Kingdom		EASUR
Peer Reviewers:		
Caroline van den Berg		EWDWS
Scott Guggenheim		EASES
Richard Myers		EASHD

Bank funds expended to date on project preparation:

1. Bank resources:	\$420,000
2. Trust funds:	\$160,000 (CTF)
3. Total:	\$580,000

Estimated Approval and Supervision costs:

1. Remaining costs to approval:	\$10,000
2. Estimated annual supervision cost:	\$65,000

Annex 13: Documents in the Project File

VIETNAM: Red River Delta Rural Water Supply and Sanitation Project

1. PROJECT IMPLEMENTATION PLAN (PIP)

- First draft of PIP

2. BANK STAFF ASSESSMENTS

- IDA Identification Mission/Pre appraisal mission aide memoires
- Project Concept Document
- Procurement Capacity Assessment
- Financial Management Capacity Assessment
- Detailed Financial Projection
- Detailed Economic Analysis
- Policy Framework for RAP
- Policy Framework for EMDP
- Framework Environmental Guidelines

3. OTHER DOCUMENTS

- Project Pre Feasibility Study approved by the Prime Minister
- Feasibility Studies for Year 1 Sub projects
- Resettlement Action Plans for Year 1 Sub projects
- Environmental Management Plans for Year 1 Sub projects
- Draft Project Operations Manual
- Draft Project Management Manual

Annex 14: Statement of Loans and Credits

VIETNAM: Red River Delta Rural Water Supply and Sanitation Project

Project ID	FY	Purpose	Original Amount in US\$ Millions				Cancel.	Undisb.	Difference between expected and actual disbursements	
			IBRD	IDA	SF	GEF			Orig.	Frm. Rev'd
P059663	2004	VN-Road Network Improvement	0.00	225.26	0.00	0.00	0.00	230.49	1.34	0.00
P065898	2004	VIETNAM WATER RESOURCES ASSISTANCE	0.00	157.80	0.00	0.00	0.00	155.74	0.00	0.00
P070197	2004	VN-Urban Upgrading	0.00	222.47	0.00	0.00	0.00	215.98	0.00	0.00
P075399	2003	Public Financial Management Reform Proj.	0.00	54.33	0.00	0.00	0.00	57.35	1.33	0.00
P044803	2003	VN-PRIMARY EDUC FOR DISADV ANTEGED CHILRE	0.00	138.76	0.00	0.00	0.00	195.74	1.78	0.00
P071019	2003	VN-GEF Demand-Side Management & Energy	0.00	0.00	0.00	5.50	0.00	5.50	0.87	0.00
P051838	2002	VN-PRIMARY TEACHER DEVELOPMENT	0.00	19.84	0.00	0.00	0.00	21.43	10.10	0.00
P059936	2002	VN -Northern Mountains Poverty Reduction	0.00	110.00	0.00	0.00	0.00	111.72	30.94	0.00
P073778	2002	VN-GEF-System Energy Equitization-Renewal	0.00	0.00	0.00	4.50	0.00	5.01	0.65	0.00
P066396	2002	VN-SYSTEM ENERGY, EQUITIZATION & RENEWAB	0.00	225.00	0.00	0.00	0.00	248.06	90.60	0.00
P073305	2002	VN-Regional Blood Transfusion Centers	0.00	38.20	0.00	0.00	0.00	43.35	14.03	0.00
P072601	2002	VN - Rural Finance II Project	0.00	200.00	0.00	0.00	0.00	152.12	-38.64	0.00
P062748	2001	VN - COMMUNITY BASED RURAL INFRA.	0.00	102.78	0.00	0.00	0.00	106.18	17.28	0.00
P042927	2001	VN-Mekong Transport/Flood Protection	0.00	110.00	0.00	0.00	0.00	105.56	80.13	0.00
P052037	2001	VN-HCMC ENVMTL SANIT.	0.00	166.34	0.00	0.00	0.00	170.93	27.63	10.40
P042568	2000	VN - COASTAL Wetl/Prot Dev	0.00	31.80	0.00	0.00	0.00	30.45	23.92	0.00
P059864	2000	VN-2nd Rural Transport	0.00	103.90	0.00	0.00	0.00	35.37	20.08	0.00
P056452	2000	VN-RURAL ENERGY	0.00	150.00	0.00	0.00	0.00	56.18	49.44	0.00
P004833	1999	VN-Urban Transport Improvement	0.00	42.70	0.00	0.00	8.19	14.87	21.55	2.49
P004845	1999	VN - MEKONG DELTA WATER	0.00	101.80	0.00	0.00	0.00	74.95	64.76	0.00
P051553	1999	VN-3 CITIES SANITATION	0.00	80.50	0.00	0.00	0.00	60.74	37.75	1.66
P004828	1999	VN-HIGHER EDUC.	0.00	83.30	0.00	0.00	0.00	56.49	44.88	21.89
P004839	1998	VN - FOREST PROT.& RUL DE	0.00	21.50	0.00	0.00	0.00	16.61	15.42	13.30
P045628	1998	VN-TRANSMISSION & DISTR	0.00	199.00	0.00	0.00	0.00	110.73	103.13	35.51
P004844	1998	VN-AGRIC. DIVERSIFICATION	0.00	66.90	0.00	0.00	0.00	35.71	28.34	1.45
P004843	1998	VN-Inland Waterways	0.00	73.00	0.00	0.00	0.00	46.68	43.26	20.92
P004830	1997	VN-WATER SUPPLY	0.00	98.61	0.00	0.00	31.28	12.22	47.71	9.99
P004838	1996	VN-NATIONAL HEALTH SUPPORT	0.00	101.20	0.00	0.00	2.35	19.69	29.17	0.00
Total:			0.00	2,924.99	0.00	10.00	41.82	2,395.85	767.45	117.61