



Draft Design and Monitoring Framework

Project Number: 30286
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Viet Nam: Central Region Small and Medium Towns Development Project

A design and monitoring framework is an active document, progressively updated and revised as necessary, particularly following any changes in project design and implementation. In accordance with ADB's public communications policy (2005), it is disclosed before appraisal of the project or program. This draft framework may change during processing of the project or program, and the revised version will be disclosed as an appendix to the report and recommendation of the President.

Asian Development Bank

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
Impact	By end of Project (2011)		Assumption
Improved quality of life, sustained economic growth and reduced poverty for residents in subproject towns	Increased water supply and sanitation service quality and coverage, economic output, and income levels Reduced risks to public health due to improved environmental sanitation and hygiene	Government reports; socio-economic statistics; poverty impact assessment; environmental monitoring reports; household and customer surveys; Project Completion Report	<ul style="list-style-type: none"> Full commitment of and support from the Government, PPCs, WSS service providers, and beneficiaries
Outcome	By end of Project (2011):		Assumptions
Improved access to safe and sustainable water supply	95% water supply coverage; uninterrupted 24-hour water supply; average UFW of less than 30%; benefits will accrue to about 13,200 households.	Government reports; socioeconomic statistics; plant records/ water production and sales figures; customer surveys; water quality tests; groundwater monitoring data; account statements; DONRE monitoring reports	<ul style="list-style-type: none"> Adequate and timely provision of resources needed for project completion from the Government, ADB and other stakeholders
Improved drainage and lower incidence of flooding	85% drainage coverage; reduced flooding and ponding; reduced wastewater discharge to rivers/ waterways; benefits will accrue to about 105,400 households.		<ul style="list-style-type: none"> Ability and will of the Government and PPCs to undertake necessary policy and institutional reforms
Improved functional solid waste management systems in place	90% solid waste collection coverage; fully operational SWM management systems; benefits will accrue to about 30,700 households.	Financial reports of solid waste collectors	<ul style="list-style-type: none"> Active participation and sense of ownership from Project beneficiaries
Attitudinal change towards environmental hygiene and sanitation	Septic tank coverage of 60% in all 8 subproject towns; reduced risks to public health	Household surveys; VWU records and reports on sanitation	Risks <ul style="list-style-type: none"> Lack of understanding of project objectives from stakeholders concerned
Sustainable management and delivery capacities of WSS service providers	Improved staff ratio, adequate and timely tariff adjustments for water supply; improved collection; improved cost recovery mechanisms	PWSC reports; performance audit reports; billing statistics	<ul style="list-style-type: none"> Resistance to change on part of existing WSS service providers Cumbersome administrative procedures and approvals by approving authorities

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
Outputs			Assumptions
Part A: Water Supply Development and Expansion	Mid 2008 – end 2010	PPMU and consultant reports; mission findings	<ul style="list-style-type: none"> • Implementation of suggested cost recovery mechanisms and needed tariff adjustments • Support for the Project from PPCs, WSS providers, communities, and other stakeholders • Provision of qualified personnel for PCU, PPMUs, and necessary counterpart staff • Implementation of environmental, social, and resettlement requirements • Timely recruitment of competent consultants
Construction and rehabilitation of existing headworks	10 km of raw water pipelines from source to WTPs for Gia Nghia and Ninh Hoa	Quarterly progress reports	
Construction of water treatment plants and pumping stations	3 WTPs with a combined 16,000 m3 capacity per day to agreed design standards in Ca Na, Gia Nghia, and Ninh Hoa	Quarterly progress reports	
Construction, rehabilitation, and improvements of water distribution networks	98 km of water supply distribution networks, pipes to agreed design standards in Ca Na, Gia Nghia, and Ninh Hoa; 18 km treated water pipes extended to Ca Na	Quarterly progress reports	
Installation of new piped connections and rehabilitation of existing connections	7,000 new pipe connections and rehabilitation of obsolete connections in Ca Na, Gia Nghia, and Ninh Hoa	Quarterly progress reports	
Part B: Drainage and Wastewater Management	Mid 2008–end 2011	PPMU and consultant progress reports; mission findings	Risks
Construction of drainage networks	112 km primary and secondary drains, 92 km tertiary drains and 5 km pressure mains in Cam Ranh, Gia Nghia, Phan Thiet, Song Cau, Thap Cham, and Tuy Hoa	Quarterly progress reports	<ul style="list-style-type: none"> • Cumbersome processes may inhibit timely approval and disbursements • Lack of capacity of people's committees, WSS service providers • Lack of familiarity with ADB and Government procurement and disbursement procedures
Construction of interceptor sewers for the above towns	20 km of interceptor sewers equipped with 14 pumping stations	Quarterly progress reports	
Construction of wastewater stabilization ponds for Tuy Hoa, Cam Ranh, and Phan Thiet	4 wastewater stabilization ponds, total treatment capacity 17,500 m3/day	Quarterly progress reports	
Part C: Solid Waste Management	Mid 2008–end 2009	PPMU and consultant progress reports; mission findings	
Construction and rehabilitation of landfill sites for Cam Ranh, Song Cau, and Gia Nghia	New sanitary landfills, including buffer zones, and landfill infrastructure for Gia Nghia, and Cam Ranh, each covering 6 ha; 3.5 landfill	Quarterly progress reports	

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
Procurement of solid waste equipment; establishment of SWM management systems	site improvement for Song Cau Compactor trucks, bulldozers, handcarts, and storage bins	Quarterly progress reports	Assumptions <ul style="list-style-type: none"> Implementation of suggested cost recovery mechanisms and needed tariff adjustments Support for the Project from PPCs, WSS providers, communities, and other stakeholders Provision of qualified personnel for PCU, PPMUs, and necessary counterpart staff Risks <ul style="list-style-type: none"> Cumbersome processes may inhibit timely approval and disbursements Lack of capacity of people's committees, WSS service providers
Establishment of SWM management systems	Functioning SWM management systems in Gia Nghia, Song Cau, and Thap Cham	Quarterly progress reports	
Part D: Community Environmental and Sanitation Awareness	Early 2007–end 2008	PPMU and consultant progress reports; mission findings	
Public awareness on the importance of good environmental hygiene and sanitation	Evidence of community participation; increased use of septic tanks	Quarterly progress reports	
Improved access to sanitation services for the poor	Number of poor households able to acquire septic tanks and drainage connections	Quarterly progress reports	
Improved environmental conditions in poor communities	Evidence of cleanliness as verified through visual inspections	Quarterly progress reports	
Part E: Project Management and Institutional Support	Early 2007–end 2011 (Full duration of the Project)	PPMU and consultant progress reports; mission findings	
Improved capacity of MOC and PPC personnel, as well as POE and WSS personnel in the areas of project management and technical and financial expertise	Number of personnel trained in management, technical and administrative expertise in PWSCs and other POEs	Quarterly progress reports	
Greater managerial autonomy and operational efficiency of POEs and WSS providers	Issuance of Government/ PPC operational decree on autonomy and other necessary reform	Quarterly progress reports	
Improved tariff structure for WSS services for financial sustainability	Conformity to tariff schedule	Quarterly progress reports	
O&M manuals, established accounting systems, corporate plan for POEs	Publication and utilization of guidelines and manuals	Quarterly progress reports	

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
Activities	Milestones	Inputs (\$ millions)	
1. Project Start-up and Implementation		Civil Works	\$45.79
1.1 Establishment of PCU and PPMUs	End 2006		
1.2 Consultant recruitment	End 2006	Materials and Equipment	\$ 2.23
2. Water Supply Development and Expansion		Land Acquisition/Resettlement	\$ 2.20
2.1 Detailed surveys	Mid 2007	Surveys	\$ 0.70
2.2 Detailed engineering design	Mid 2007–2008		
2.3 Development of headworks	Early 2009	Training and Workshops	\$ 0.70
2.4 Construction/rehabilitation of WTPs	Early 2009		
2.5 Transmission and distribution pipes	2009–2010	Consulting Services	\$ 4.00
2.6 Land acquisition and resettlement	Mid 2008	Project Management	\$ 2.00
3. Drainage and Wastewater Management		Total	\$57.52
3.1 Detailed surveys	Mid 2007		
3.2 Detailed engineering design	Mid 2007–2008		
3.3 Pipe layout and refurbishment	2009–2011		
3.4 Public sanitation improvements	Early 2010		
3.5 Land acquisition and resettlement	End 2008		
4. Solid Waste Management			
4.1 Detailed surveys	Mid 2007		
4.2 Detailed engineering design	Mid 2007–2008		
4.3 Solid waste systems improvements	Mid 2009		
4.4 Landfill development/improvements	Mid 2009–2010		
4.5 Land acquisition and resettlement	End 2008		
4. Community Environmental Sanitation and Awareness			
4.1 Public awareness campaigns	2006–2007		
4.2 Assistance schemes for the poor	2007–2008		
5. Project Management and Implementation Assistance			
5.1 Incremental project management	Full duration		
5.2 Training and institutional strengthening	2008–2010		
5.3 Institutional/policy reforms	End 2007–2010		

DONRE = Provincial Department of Natural Resources and the Environment, O&M = operation and maintenance, PPC = provincial people's committee, PPMU = provincial project management unit, PWSC = Provincial Water Supply Company, SWM = solid waste management, VWU = Viet Nam Women's Union, WSS = water supply and sanitation, WTP = water treatment plant.

Source: ADB staff estimates.