



1. Project Data

Project ID P116398	Project Name Medium Cities Development Project	
Country Vietnam	Practice Area(Lead) Urban, Resilience and Land	
L/C/TF Number(s) IDA-50310,IDA-60700,IDA-60710	Closing Date (Original) 30-Dec-2017	Total Project Cost (USD) 216,579,513.22
Bank Approval Date 15-Dec-2011	Closing Date (Actual) 30-Jun-2022	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	210,000,000.00	0.00
Revised Commitment	255,103,427.51	0.00
Actual	217,621,601.68	0.00

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2. Project Objectives and Components

a. Objectives

According to the Financing Agreement (FA, p.5) and the Project Appraisal Document (PAD, paragraph 13), the original Project Development Objective (PDO) of the Vietnam Medium Cities Development Project was "to increase access to improved urban infrastructure services in Lao Cai City, Phu Ly City, and Vinh City in a sustainable and efficient manner."

Additional Financing (AF, see Financing and Dates below) revised the PDO to read "to increase access to improved urban infrastructure services in **selected** medium-sized cities in Vietnam" and deleted "in a



sustainable and efficient manner" because the team determined that the project did not contribute to this outcome (ICR, paragraph 22). The project continued to cover the three appraised target cities for the entire implementation period as confirmed by the Bank Team. However, the AF provided resources for a commensurate expansion of the scope and increase in targets in the two cities of Lao Cai City, and Phu Ly City indicating an increase in the project's ambition. The deletion of "in a sustainable and efficient manner" as part of the PDO statement acknowledged that the revised PDO did not change the type and nature of the infrastructure financed by the project, which continued to be constructed/rehabilitated according to design standards that emphasized sustainability and efficiency, nor did it stop the adoption and implementation of a comprehensive and sustainable urban asset management plan in the three cities (ICR, paragraph 22). The phrase "in a sustainable and efficient manner" are core World Bank goals and embedded in PDOs. These are not assessed separately with its own indicators.

This review will assess the project performance against the revised objective from the AF - "to increase access to improved urban infrastructure services in selected medium-sized cities in Vietnam."

b. Were the project objectives/key associated outcome targets revised during implementation?

Yes

Did the Board approve the revised objectives/key associated outcome targets?

Yes

Date of Board Approval

09-Jun-2017

c. Will a split evaluation be undertaken?

No

d. Components

1. Urban Basic Infrastructure Upgrading and Service Improvement (US\$19.4 million in IDA at appraisal; AF increased this to US\$32.6 million, US\$33.3 million actual in IDA credit and US\$6.1 million, actual in counterpart financing). This component was to finance the construction and rehabilitation of basic infrastructure systems, such as water supply and sanitation, drainage, power supply, street lighting, roads, and schools in existing or newly developed urban and resettlement areas. AF provided commensurate increase in the magnitude of the targets for non-rural roads, local roads, and classrooms built in the two cities of Lao Cai and Phu Ly.

2. Urban Water Supply and Environmental Sanitation (US\$60.8 million in IDA credit; AF increased this to US\$98.8 million, US\$78.7 million actual in IDA credit and US\$2.98 million actual in counterpart financing). This component was to finance the construction and rehabilitation of primary and secondary infrastructure for water supply in Lao Cai City. This component was also to finance drainage, wastewater collection and treatment and flood mitigation, including improving drainage and pavement of roads. In addition, this component was to finance the construction and rehabilitation of selected small lakes in Phu Ly City and drainage systems in Vinh City and maintained the three original target cities. AF increased the targets for the water supply and wastewater pipelines, drainage channels, schools with sanitation facilities, and added capacity for wastewater treatment in the two cities of Lao Cai and Phu Ly.



3. **Urban Roads and Bridges** (US\$65.87 million in IDA credit at appraisal, AF increased this to US\$81.2 million, US\$80.1 million actual in IDA credit, and US\$2.1 million actual, in counterpart financing). This component was to finance the construction of roads, and bridges, including a new three-span concrete bridge in Lao Cai City and new road bridges over a railway in Vinh City. AF added financing for new four lane highways serving a new urban center in Phu Ly City.

4. **Project Management Support and Technical Assistance** (US\$13.7 million in IDA credit at appraisal, US\$4.4 million in counterpart financing at appraisal; AF increased this to US\$15.2 million in IDA credit and US\$6.2 million in counterpart financing, US\$15.2 million in IDA credit, and US\$6.2 million in counterpart financing, actual). This component was to finance support for project management and supervision; independent social, environment, and financial account monitoring; urban planning, safeguards, and internal audit capacity building. This component was to finance the construction of Project Management Unit (PMU) facilities; purchase equipment, and conduct training and capacity building of PMU staff on procurement, financial management (FM), and safeguards. This component was also to finance the development of asset management plans.

5. **Additional components:** (US\$50.2 million in IDA credit at appraisal, US\$9.5 million in counterpart financing, AF increased this US\$57.5 million in IDA credit and reduced counterpart financing to US\$0.7 million; US\$10.4 million in IDA credit actual). The additional components refer to the financing of contingencies - physical (10 percent) and cost (10 percent). Counterpart funds were used for land acquisition and resettlement (US\$35.02 million at appraisal, at AF this was increased to US\$68.6 million, US\$94.4 million actual).

e. **Comments on Project Cost, Financing, Borrower Contribution, and Dates**

Project Cost: The total project cost was US\$311.9 million. The original US\$210 million was increased to US\$255 million with Additional Financing (AF, see below). The credit had disbursed a total of US\$217.6 million by the time of project closing. The project reported a total of US\$46 million in foreign exchange losses consisting of US\$26 million in 2011-2017 and another US\$20 million for the remaining period.

Financing: The International Development Assistance (IDA) financed this project. The Scale Up Facility credit added the equivalent of US\$40 million as part of AF.

Borrower Contribution: The government originally committed to contribute US\$48.9 million. At AF, the government increased its total contribution to US\$86.7 million. Counterpart funds financed land acquisition and resettlement costs (see Additional Component above). The government had disbursed US\$111.8 million by the time of project closing.

Dates: The Board approved the credit on December 15, 2011. The credit became effective on April 11, 2012. The Bank team conducted the Mid Term Review (MTR) on May 21, 2015. The project closed on June 30, 2022, 54 months (or five and a half years) after the original closing date of December 30, 2017. Three level 2 restructurings and one AF occurred on the following dates:

- On May 31, 2016, to delete the PDO outcome level indicators from the FA. The Bank removed PDO indicators from all legal agreements. All 13 on-going projects in Vietnam at that time were part of this one-time amendment (ICR, paragraphs 20 and 27).



- On June 9, 2017 to provide AF: US\$13 million from IDA and another US\$40 million from the Scale Up Facility. IDA established the Scale Up Facility in March 2016 as part of IDA 17 replenishment to provide transformational projects with flexible resources beyond the IDA concessional envelope. Between 2011 and 2017, the SDR lost 12 percent of its value against the US\$ (the credit value of US\$210 million reduced to US\$184 million). The AF was to close the financing gap, scale up the activities in the better performing cities of Lao Cai City and Phu Ly City (ICR, paragraph 21). The AF changed the PDO, components, cost allocation, and triggered an additional environmental safeguard (see Section 10 Other Issues below). The AF also introduced changes to the results framework by adding corporate scorecard indicators (gender, citizen participation) first published in 2011, and add a new outcome indicator (school students provided with access to newly built classrooms). The AF extended the project closing date of the original credit for the first time by six months, from December 30, 2017 to June 30, 2018 and the project's closing date by three years, from December 30, 2017, to December 31, 2020.
- On June 11, 2018 to extend the closing date of the original IDA credit a second time from June 30, 2018 to December 31, 2020. This extension was to give cities more time to complete the purchase of land for some of the construction and rehabilitation activities, particularly in Vinh City (ICR, paragraph 24).
- On December 20, 2020 to extend the closing date for a third and last time by another 18 months from December 31, 2020 to June 30, 2022. This extension was to complete the sanitation and classroom improvements in Lao Cai City and Phu Ly City. The government delayed allocating funds to the cities in 2018 and 2019, leading to delays.

Split Rating: A split rating of the outcome is not undertaken. The AF redefined the PDO, maintained the number of target cities throughout implementation but provided commensurate expansion and scaling up of the scope of the project to two of the three cities of Phu My and Lao Cai cities. The added resources expanded the scope and targets of the activities in these two cities. There were minor reductions in target values of two intermediate results (ICR, paragraph 46). The project constructed and rehabilitated infrastructure investments according to design standards that emphasized sustainability and efficiency even as the phrase "sustainable and efficient manner" was struck out of the original PDO. The three cities adopted and implemented comprehensive and sustainable urban asset management plans (ICR, paragraph 28). According to the guidelines, "If the scope of the project expanded (say, because of additional financing), this supports the decision not to apply a split rating and instead to assess the entire project based on the revised outcomes and outcome targets."

3. Relevance of Objectives

Rationale

Context: Vietnam is rapidly urbanizing. The share of urban population to overall population is expected to grow from 30 percent in 2011 to 50 percent by 2025 fueled by rural to urban migration. The Bank team confirmed that the sources of these figures were the Bank study "Vietnam Urbanization Review" published in November 2011 and the "Vietnam 2035 Toward Prosperity, Creativity, Equity, and Democracy" Bank report from 2016. Medium sized cities (with population of 100,000 to 500,000 people) lacked infrastructure, little financial resources, and low capacity for planning. All cities in Vietnam have existing urban master plans but these focus on large-scale vehicle-oriented infrastructure. Waste management, road safety, and



cost effectiveness of investments usually do not feature in these plans. There is little attention to operations and maintenance (O&M) and installing institutional and financial arrangements to manage completed assets.

Country Plans: The PDO was relevant to the government's plans for medium sized cities in the country. The government intends to develop a strong network of well-resourced, well-managed urban centers while reducing the rate of in-migration in larger cities. The government expects that medium sized cities would grow from 55 in 2011 to about 100 cities by 2025. The government updated its urbanization policy, "Framework Master Plan for Urban Development to 2020" to "Adjustment of the Master Plan for Urban Development to 2025 and Vision 2050." The plan focused on developing medium and small urban areas as development hubs in larger urban areas and provinces. This approach was to enhance local capacity for urban planning and management to match the demands of rapid urbanization. Clear sector policies were promoted for water, wastewater and drainage, and urban roads. The PDO was also relevant to Vietnam 2035, its vision and framework for long-term development. One of the six aspirations in that framework included reshaping urban policies and investments for more dynamic cities and urban centers.

World Bank Country Partnership Framework: The PDO was relevant to the current World Bank Group's Country Partnership Framework (CPF) for FY18–FY22. The PDO was to contribute to one of three focus areas - to enable Inclusive Growth and Private Sector Participation by improving planning, management, and delivery of infrastructure and land in cities (CPF, Table 2). Operationally, the Bank would use the cross-cutting governance platform by customizing its engagement at the subnational and sector, and portfolio and project levels. The Bank would provide integrated and multisector support to subnational and sector levels, including in land, transport, urban, and health. The WBG will support city-level DPOs, strengthen planning, management, and coordination across provinces to address governance constraints common to them (CPF, paragraph 60). The PDO would directly support Objective 4: Improve planning, management, and delivery of infrastructure and land in cities (CPF, paragraph 70). The Bank strategy would strengthen urban planning, management, and governance, and boost capacity to deliver high-priority infrastructure and strengthen the system of cities. The PDO was relevant to the Bank's framework approach that would: (i) transform metropolitan centers into engines of growth; (ii) promote equitable growth, service delivery, and accessibility within urban areas; and (iii) strengthen capacity for mobilizing and managing financing, governance, and public and private investment for urban infrastructure.

World Bank Experience in the Country and in the Sector: Since 1993, the Bank has provided US\$25.16 billion in grants, concessional loans, and credits to Vietnam in 216 operations. Bank assistance in the urban water sector, for example, has saved 163,000 cubic meters (m³) of water a day in Ho Chi Minh City since 2016; given 3.9 million people access to improved sanitation since 2015; and reduced annual CO₂ emissions by 1.62 million tons in Hanoi from urban transport sector improvements. The Bank also recently implemented the Emergency Natural Disaster Reconstruction Project to help four disaster-affected provinces to reconstruct and rehabilitate infrastructure and strengthen government capacity to respond to future disaster events. The project improved access to resilient transport, flood prevention and control, irrigation, and drainage infrastructure assets for 1.3 million people and addressed institutional gaps for effective disaster risk management and prepared plans for integrated flood risk management in key river basins. The Bank has implemented 11 projects in the urban and water sectors including this project and prepared another four. Some were integrated projects that covered a wide range of sectors. Others targeted water and wastewater. Lessons from these projects informed project design (see Section 8 Bank Performance below). The focus of this project is the development of medium sized cities in the country.



Rating

Substantial

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To increase access to improved urban infrastructure services in selected medium-sized cities of Lao Cai City, Phu Ly City, and Vinh City. The AF updated this PDO to expand activities in medium sized cities and added resources for the cities of Lao Cai City, and Phu Ly City while maintaining the original three target cities..

Rationale

Theory of Change (ToC): The project did not present a theory of change at appraisal because none was required at the time. The results framework provided the causal logic that linked the original inputs to outputs and outcomes. The ICR prepared a ToC. The AF paper justified deleting the phrase "a sustainable and efficient" access to improved services from the original PDO because the team determined that the project activities would not contribute to this outcome. The ToC prepared at the ICR stage, reflected the activities in all three cities and added activities financed by the AF in two of the original three cities - Lao Cai and Phu Ly.

Inputs were to consist of training and financing of investment projects. AF provided additional resources to finance gaps in the original infrastructure investments and updated plans to construct new or rehabilitated infrastructure investments such as schools, roads, dredging of lakes, embankments, and bridge (see revised outputs below).

Outputs by city were to consist of the following: constructed or rehabilitated roads, water and wastewater treatment plants, water supply and sanitation pipelines, improved wastewater sanitation regulation lakes, dredging facilities, embankments, schools and school rooms and sanitation facilities in schools. AF added new or rehabilitated schools and increased target values for the original infrastructure investments such as in water supply, electricity, drainage, and sewage collection, and rehabilitated local roads, dredged lakes, improved embankments and a new bridge in Lao Cai City. At AF, minor adjustments in output targets, such as reduced values in additional wastewater treatment capacity (from 6,600 m³/day to 5,800 m³/day) in Lao Cai City was to reflect the capacity generated by the approved design of the planned wastewater treatment facility. At AF the outputs related to upgrading and rehabilitating the Dong Vinh Drainage Channel No. 3 and two packages to construct the Bac Channel in Vinh City - "Road connecting national highway 46 with the road along the Lam River" and the "Hung Tay-Vinh Road." were originally cancelled because of foreign exchange losses (ICR, paragraph 21) but were completed by the project using project savings. The Bank team confirmed that the bidding process in 2017 generated savings that financed the completion of the intended upgrades to the canal. Despite dropping the activity for upgrading and rehabilitation of Dong Vinh Channel, the target for "length of drainage channel constructed or rehabilitated" was revised upward because procurement savings and unused contingency financed additional investments in drainage around the Vinh Citadel (ICR, paragraph 23).



Outcomes by city were to include the number of people benefiting from the improved services, the reduction in Vehicle Operating Time (VOT) resulting from the improved roads, the number of schools benefiting from improved sanitation and respondents to surveys indicating satisfaction with the improved water and sanitation services brought about by the project inputs and outputs and increase in capacity delivered by the new treatment plants. However, the outcome indicators did not include savings in electricity brought about by the increase in operating efficiencies of new structures, reduced distribution losses, reduced incidence, and costs of environmental disasters (e.g., less flooding, associated safety gains, reduced losses from destruction of properties). AF clarified the description of the outcome indicators. For example, the outcome indicators now specified "beneficiaries in urban areas," "implementation" instead of "adoption," "primary roads and bridges" in place of "new roads," and added "approved annual budget for adequate O&M." The TOC also increased and decreased target values of outcome indicators accordingly. The corporate score card outcome indicators, such as gender disaggregated data and level of citizen participation and a new outcome indicator for investments made in new schools were added (ICR, paragraph 23) although this outcome indicator was more at an output rather than at outcome level (see Section 9 M&E Design below).

The ToC made the following critical assumptions, which if actualized, would increase the likelihood that the outcomes would be achieved: (i) built capacities of cities to design and deliver the infrastructure investments; (ii) sufficient interest in the project activities from local authorities and participating communities; and (iii) sufficient O&M budgets for the completed assets. This last assumption did not materialize at implementation (see Section 12 Lessons below).

OUTPUTS

The project achieved the targets of the following outputs:

- 88.2 km of **water** supply pipeline were laid exceeding the original target of 72 km but substantially achieving the revised target of 89.5 km.
 - in **Lao Cai City**, the project laid 57.7 km of new pipelines.
 - in **Phu Ly City**, the project laid 20.2 km of new pipelines (revised target 40 km), These were put into service in Quang Trung Ward, Hoa Lac village (Lam Ha commune) and Me Noi village (Liem Chinh commune).
 - in **Vinh City** including Quan Bau and Nghi Phu resettlement sites, the project laid 10.3 km of new pipeline, exceeding the revised target of 9.5 km.
- The project laid 102.03 km of wastewater pipeline exceeding the original target of 47.5 km and substantially achieving the revised target of 109 km.
 - In **Lao Cai City**, the project constructed, repaired, and replaced 47.9 km of wastewater pipeline and storm water sewer, exceeding the 40 km target; constructed the first wastewater treatment plant with a daily capacity of 4,300 m³/day, achieving the target; 4 public toilets in public spaces around the city and 8.1 ha Lao Cai central regulation lake, achieving the target.
 - In **Phu Ly City** the project constructed 30.13 km of wastewater pipeline (target 30 km), a new, Chau Giang wastewater treatment station with daily wastewater treatment capacity of 1,400 m³/day, meeting the target, conditioning reservoirs (7.8 ha) Lam Ha 1, (6.7 ha) Lam Ha 2, and Quang Trung (2.5 ha) that concentrated wastewater drainage, one pumping station, as targeted and an embankment, as targeted.
 - In **Vinh City**, the project constructed 24 km of wastewater pipeline, meeting the target.
- The project closed 9.8 km of open drainage channel to improve the Bac Channel catchment area, exceeding the original target of 6 km and achieving the revised target of 9.8 km.



- The project increased the capacity of additional treated water supply in Lao Cai City to 6,000 m³/day achieving the target.
- The project also added 5,800 m³/day of additional wastewater treatment capacity not achieving the original target of 6,600 m³/day but achieving the revised target of 5,800 m³/day.
 - in **Lao Cai City** this meant 4,300 m³/day after constructing the first wastewater treatment plant in the city
 - in **Phu Ly**, this meant 1,500 m³/day after constructing the Chau Giang wastewater treatment plant.
- To reduce Vehicle Operating Time (VOT), the project constructed 154.45 km of non-rural roads (primary roads, bridges, local roads) exceeding the target of 145.2 km. This included the construction of 119.94 km of new and upgraded local roads and 4.56 km of primary roads and bridges.
 - In **Lao Cai City**, the project constructed and improved 88.56 km of new and upgraded local roads (exceeding the target of 80 km). These included 29.88 km in the old part of the city (Coc Leu, Duyen Hai, Kim Tan, Lao Cai, Pho Moi, Bac Cuong, Nam Cuong, Bac Lenh, and Binh Minh wards); upgrading of 43.98 km of road surfaces on the right and left banks of the Red River; rehabilitation of a 1.97 km recreation road around the Lao Cai Central Lake; and construction of 12.73 km of new asphalt roads in the Dong Ha and Soi Lan resettlement sites and the Van Hoa commune. The project also constructed 10.21 km of primary roads and bridges (target 7.7 km) consisting of 9.2 km of the D1 road and 1.01-km of the Ngoi Dum 1 and Ngoi Dum 2 bridges and approach roads at Kim Tan ward and Bac Cuong ward, which reduced VOT by 20 percent as targeted. The roads facilitated the crossing of Ngoi Dum stream.
 - In **Phu Ly City**, the project constructed 13.38 km of new and upgraded local roads (not achieving the target of 18.0 km) in Quang Trung, Duong Am, and Quynh Chan low-income residential areas as well as traffic routes in Trieu Xa and Me Noi areas to connect with the bypass road DT.491. Feedback from a beneficiary survey conducted by Phu Ly City's supervision consultant firm in June 2022 found that 90 percent of respondents were satisfied with the quality of the local and primary road works. The project also upgraded 9.75 km of primary roads and bridges (exceeding the target of 7 km) that consisted of a 4.74-km backbone D4-N7 route, with four lanes with pedestrian crossings, drainage system, trees, and streetlights; a 900-m Bien Hoa Road, which is Phu Ly City's main road, intersecting the National Highway 1A at Church Slope and ending at the intersection with Le Loi Street; and 4.11 km of primary roads surrounding the Lam Ha and Quang Trung conditioning reservoirs.
 - In **Vinh City** the project constructed 18 km of new and upgraded local roads, meeting the target, including 4.6 km of new local roads in the Quan Bau Resettlement Site, 3.1 km of new local roads in the Nghi Phu Resettlement Site. and 10.3 km of additional service roads adjacent to Bac Channel, around the regulation lake, and the Vinh Citadel.
- The project constructed 139 classrooms, achieving the target.
 - In **Lao Cai City** 38 classrooms built in three new schools in Dong Ha Resettlement including a pre-school a primary school, and a secondary school.
 - In **Phu Ly City** 92 classrooms built in five new schools, including a kindergarten and primary school in Quang Trung, a secondary school in Luong Khanh, a kindergarten in Phu Van and a primary school in Tran Quoc.
- The project equipped 54 Schools with completed sanitation facilities exceeding the original target of 50 and meeting the revised target of 54.
 - **Lao Cai City** equipped 27 schools with functioning toilets and handwashing stations.



- **Vinh City** equipped 27 schools with functioning toilets and hand washing stations.

OUTCOMES

The project achieved the targets of the following outcomes:

- The project provided 58,630 persons with access to improved water sources in **Lao Cai City** and residents of Dong Ha and Soi Lan resettlement areas, exceeding the original target of 35,000 persons and revised target of 40,000 people. 50 percent of these beneficiaries were female, an added indicator, thus achieving its original target of 50 percent female. The Coc San Water Treatment Plant and distribution pipes for additional water supply expanded its capacity from 18,000 m³/day to 24,000 m³/day or an increase of 6,000 m³/day.
 - The **Lao Cai City** officials reported the achievement of the following additional outcomes. These indicators were not identified in the ToC and had no baselines or targets. (i) The water supply system was connected to the upstream Coc San Ha hydroelectric dam. The project saved the Lao Cai Water Supply Company about US\$80,000/year in electricity costs. (ii) The rate of water loss was reduced to 22 percent at closing, 6 percent less than the national average. (iii) The city achieved its urban development criteria and the province's planned targets with the increased capacity of the Coc San Water Plant.
- The project provided 280,580 urban residents of the three cities with access to improved sanitation, exceeding the original target of 191,000 people. AF increased the target value of beneficiaries to 223,000 people. 51 percent were female meeting the added target of 50 percent. Lao Cai City beneficiaries reached 59,868 (exceeding the target of 38,500 people), Phu Ly City beneficiaries reached 58,119 (almost achieving the target of 59,700 people), Vinh City beneficiaries reached 162,693 (exceeding the target of 125,000 people). The number of beneficiaries included pupils and teachers from 54 schools in Vinh City and Lao Cai City with upgraded sanitation facilities such as toilets and handwashing facilities.
 - The **Lao Cai City** officials reported the achievement of the following additional outcomes. These indicators were not identified in the TOC and had no baselines or targets. (i) The rehabilitated central regulation lake meant that wastewater that used to be directly discharged into the Red River was now treated with 99 percent efficiency. (ii) The repair and replacement of the wastewater pipelines prevented wastewater from seeping into the soil and reduced soil pollution along 84 road sections in the old part of the city. (iii) Storm water sewers supported the collection and drainage of water during pluvial events, reduced the intensity of inundation from polluted waters, and protected road surfaces and properties in Lao Cai, Pho Moi, Coc Le, Kim Tan, and Duyen Hai wards in Lao Cai City (ICR, paragraph 33).
 - The **Phu Ly City** officials reported the achievement of the following additional outcomes. These indicators were not identified in the ToC and had no baselines or targets. The Lam Ha Lake reservoirs improved sanitation and addressed unsanitary conditions that affected residential areas during heavy rains. Wastewater used to collect from neighboring areas and Nhue and Chau Giang rivers overflowed. In a June 2022 beneficiary survey, 87 percent of respondents agreed that the project improved the general hygiene of the residential areas in the city.
 - The **Vinh City** officials reported the achievement of the following additional outcomes. These indicators were not identified in the ToC and had no baselines or targets. The project expanded the capacity of the main wastewater pumping station from 12,600 m³/day to 25,000 m³/day; and reduced by 22,900 m³/day the volume of untreated water disposed into the city's canals and rivers.



- The project achieved a 35 percent reduction in vehicle operating time (VOT) on new roads, exceeding the original target of 30 percent.
 - In **Lao Cai City**, the project reduced VOT by 40 percent on the D1 road (baseline of 37.5 minutes to 22.5 minutes at closing) travel time from a 1 km road from Lang Chieng Bridge to Binh Minh Road used to be fragmented. People used to travel 15-18 km to reach the bridge from the road. 73.3 percent of respondents to a May 2022 beneficiary survey in Lao Cai City acknowledged satisfaction with the new D1 road. The Ngoi Dum 1 and 2 bridges and approach roads reduced VOT by 20 percent, as targeted. The roads facilitated the crossing of Ngoi Dum stream. In Lao Cai City, VOT was reduced by 30 percent overall meeting the target.
 - In **Phu Ly city**, VOT was reduced by 35 minutes (target 30 percent). it took 35-45 minutes VOT (10 km) to travel from the south of Chau Giang River to North Chau Giang (Lam Ha Ward) due to the need to go around National Highway 1A. VOT improved by 30 percent due to the new more direct route. The new D4-N7 route also connected key urban areas (North Chau Giang and Liem Chinh) to the Bach Mai Hospital, Viet Duc Hospital, and the intercity bus station on Cau Gie-Ninh Binh Highway, increasing the efficiency of the urban transportation network in Phu Ly City. According to city officials, the upgrading of Bien Hoa Road resulted in a reduced VOT from 15-30 minutes to 3-5 minutes during times where the road would have previously flooded. Considering the road's propensity for flooding, city officials calculated a 40 percent improvement in VOT along the route. A June 2022 Phu Ly City beneficiary survey found that 90 percent of respondents were satisfied with the quality of the local and primary road works. The below-target result for local roads did not affect the overall VOT outcome as they were not considered in the VOT analysis.
 - In **Vinh City** VOT was reduced by 40 percent (target 30 percent) 40 percent VOT reduction was recorded on a new 6.30-km four-lane Hung Tay-Vinh Road (including Ke Gai Bridge), and a 33 percent VOT reduction was noted on a new 8.30-km two-lane road connecting NH46 to Lam Riverside Road. According to city officials, after the project was closed, the Nghe An PPC constructed Vinh-Cua Lo Boulevard, connecting Quan Bau intersection (the end point of Hung Tay-Vinh Road) to Cua Lo Beach to further improve connectivity to the area. A January to April 2018 Vinh City beneficiary survey found that over 80 percent of respondents expressed satisfaction with the project's new roads.
- The three cities adopted and implemented a comprehensive and sustainable urban asset management plan with an approved annual budget for adequate operation and maintenance (O&M), achieving the revised wording of the indicator and meeting the original target of 3. Each city had an asset management system with the server located at the Urban Management Department. After closing, funds were annually allocated for O&M in each city. However, both cities of Lao Cai and Vinh reported insufficient budgets to cover O&M needs.
- 230,288 beneficiaries, 50.8 percent female were engaged in the consultative processes from planning, implementation to evaluation of the project almost achieving the target of 246,500, with 50 percent female.
- The project benefited 512,740 people directly, exceeding the target of 300,220 people and achieved 50.6 percent female achieving the target of 50 percent female.
 - In Lao Cai City, 109,920 beneficiaries, 50 percent were female.
 - Phu Ly City, 69,056 beneficiaries, 50.8 percent were female.
 - Vinh City 333,764 beneficiaries, 51.1 percent were female.
- AF added a new outcome indicator where 4,321 school students were provided access to newly built or improved classrooms, exceeding the original target of 3,440 school students.47 percent were



female, almost achieving the new added core original target of 50 percent female. This indicator was at an output or intermediary outcome level at best.

- In Lao Cai City, 1,208 students, 46 percent female.
- In Phu Ly City, 3,113 students, 48 percent were female.

Additionally, the Bank Team reported the following development outcomes, with no targets and estimates derived from calculating the benefit streams to arrive at the economic efficiency of the project (ICR, Annex 4):

- Savings in direct health care costs. These were estimated at US\$15.0 per beneficiary per year in Lao Cai, US\$34.9 in Phu Ly City, and 32.0 in Vinh City;
- Savings in productive time. Beneficiaries were assumed to save six working days per year. These savings were estimated at US\$18.9 per beneficiary per year in Lao Cai, US\$22.1 in Phu Ly City, and US\$20.6 in Vinh City;
- Savings in flood control damage. The investments would reduce flood damage at US\$31.4 per year in Lao Cai, US\$25.4 in Phu Ly City, and US\$24.1 in Vinh City; and
- Increase in land prices. The value of project-induced increases in land prices was conservatively estimated for residential land at 180 percent in Lao Cai City, 150 percent in Phu Ly City, and 200 percent in Vinh City.

Overall, the efficacy of the project to achieve the updated objective is rated **Substantial**. The project achieved if not exceeded the target values of expected outcomes using the additional resources provided at AF. The project partially achieved the outcome associated with the adequacy of O&M budgets.

Rating

Substantial

OVERALL EFFICACY

Rationale

The overall efficacy of the project to achieve the original outcomes is rated **Substantial** with moderate shortcomings, particularly the adequacy of O&M budgets. The additional investments funded from the AF led to exceeding most outcome targets.

Overall Efficacy Rating

Substantial

5. Efficiency



Economic Analysis. The project conducted economic and financial analysis for all known investment components in each city including affordability of proposed tariffs in the water and wastewater investments (PAD, paragraph 29). The project used a 12 percent discount rate and "with and without" scenarios. Annual costs and benefits for each sub-component were evaluated for a period up to 2036, with a five-year construction period, a benefit period of 20 years. A sensitivity analysis increased costs by 10 percent and decreased benefits by 10 percent. The Net Present Values (NPVs) of the investments ranged from US\$0.28 million to US\$22.7 million. The economic internal rates of return (EIRRs) ranged from 13.7 to 33.8 percent.

At appraisal, the economic benefit streams consisted of quantified benefits from reduced health-related expenditures, productivity gains from time savings; reduced damages caused by flooding, increased water supply (measured by the willingness to pay for water); and increase in land values. For roads, the economic benefits were derived from the two main conventional benefits for road sector economic analysis, savings from vehicle operating cost (VOC) and passenger time (VOT). VOCs for the project roads were calculated using the World Bank's Highway Development and Management Model Four (HDM4-VOC model). In all three cities, the speed attained by each type of vehicle on each road section of the network in the "with" or "without" the project case was correlated with the road's physical and traffic conditions. VOT savings were obtained when a constructed road led to increased vehicle speeds or/and shorter journeys, reducing travel times. VOTs were estimated for each city based on statistics and/or interviews. The value of time was expected to increase with GDP growth in each of the cities. Traffic demand was calculated using the widely used transport forecasting system in Vietnam, the Japan International Cooperation Agency (JICA) System for Traffic Demand Analysis (STRADA).

At AF, the same methodology applied in conducting the economic efficiency of the added subproject investments, including the 12 percent discount rate (although the table in Annex 4 noted a 10 percent discount rate). The NPVs of the added investments ranged from US\$0.9 million to US\$7.4 million and the EIRRs from 13.0 to 20.6 percent.

At closing, the incremental quantifiable economic benefit streams were estimated for each sub-project, following those used at appraisal. 'Incremental' referred to the difference between the 'with' and "without" subproject scenarios. VOCs were updated using values for 2021. Estimates for average speed and the average value of passenger time and the traffic demand were updated using actual traffic count data on the project roads in 2022.

At closing, the economic efficiency of the subprojects was assessed consistent with the methodologies applied at appraisal. The Bank updated its Guidance Note on Discounting Costs and Benefits in Economic Analysis of World Bank Projects in 2016. and the assessment at closing used the recommended 10 percent discount rate. At closing, the NPV of the subproject investments ranged from US\$0.50 million to US\$64.39 million with EIRRs from 11.4 to 60.4 percent.

The Bank team clarified that the benefit streams estimated at closing showed that the project contributed to poverty reduction. The previously impoverished areas were provided with clean water, spacious roads, and convenient transportation. Savings in direct healthcare benefits were calculated considering the health expenditure as a percentage of income. Savings in productive time were calculated based on a decrease in the days that residents from the affected areas had to take time off from work due to illness caused by flooding. The baseline assumption was 3 days/year consistent with other World Bank and Asian Development Bank projects in Vietnam. The project's impact on reducing the Value of Time (VOT) boosted economic activities. The improved infrastructure reduced commuting and transit time. People engaged in more productive and income



generating activities. Indirectly, the project supported the growth of tourism and business by making the city more attractive and accessible.

Administrative and Operational Efficiency: Between 2011 and 2017, the project experienced slight delays in completing some investments in Lao Cai City and Phu Ly City. Vinh City experienced significant delays during this period. Staffing and management of the PMU was less than adequate in the project’s first year, causing implementation delays. Government commitment to counterpart financing also experienced some delays. Foreign exchange losses occurred, and the project sought AF to fill in financing gaps. The project was extended three times and closed five years after the original closing date, bringing the implementation period from 5 to about 11 years (ICR, paragraph 45). The June 2018 extension was to give the cities, especially Vinh City, more time to complete the purchase of land for some of the construction and rehabilitation activities. The December 2020 extension was to complete sanitation and classroom improvement works in Lao Cai City and Phu Ly City because the government delayed allocating counterpart funds in 2018 and 2019 for these activities. After the AF was approved, all three cities experienced delays, necessitating two more extensions of the closing date. The project realized some administrative efficiencies because of low turnover of PMU staff and directors. The Vinh City PMU had one director for the duration of the project. The Lao Cai City and Phu Ly City PMU directors changed once with minimal disruption. The procurement packages were redesigned and realized cost savings. For example, Vinh City redesigned five transportation packages and reduced costs from \$35.49 million in August 2014 to \$31.09 million in November 2015 but achieved targets.

While there were operational and administrative delays during the first part of the implementation period, these delays were overcome through the significant efficiencies gained during the AF implementation period. The ERRs at appraisal and closing were not directly comparable because of the large number of activities added by the AF, e.g., schools/public sanitation, wastewater drainage, roads, and water supply. Hence, the EIRR figures were not provided below.

Overall, the project efficiency was **substantial**.

Efficiency Rating

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 <input type="checkbox"/> Not Applicable
ICR Estimate		0	0 <input type="checkbox"/> Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome



The relevance of objectives is rated Substantial. The efficacy of the project to achieve its objective is rated Substantial based on the achievement of the revised outcome targets under the expanded project scope. A shortcoming was the national government's continuing discouragement of increasing tariffs for water and wastewater infrastructure in cities that resulted in persistent underbudgeting of O&M. Efficiency is rated Substantial with moderate shortcomings in operational and administrative inefficiencies that resulted in implementation delays. The project was extended by 54 months, but this extension resulted in substantial economic efficiencies that helped to overcome the operational deficiencies. The overall outcome is rated **Satisfactory**.

a. Outcome Rating
Satisfactory

7. Risk to Development Outcome

Following are risks to the development outcomes:

- **Financial and fiscal constraints:** This is a substantial risk. Two of the three cities - Lao Cai and Vinh - did not enact sufficient O&M budgets to manage their completed infrastructure assets. These would include producing regular technical updates of new infrastructure assets to maintain efficiencies. The availability of financial resources would also be important to address the risk from natural hazards based on changes in global weather patterns.
- **Government commitment and implementation capacity** This is a substantial risk both at the national and local levels. Water and wastewater tariff collection was limited. National-level policies discouraged increasing tariffs to meet expenditures. Continued fraud and corruption risk also undermine the development impact.
- **Environmental and social risks:** This is a substantial risk. Vietnam is highly vulnerable to the effects of climate change and natural disasters. Global weather patterns, rising temperatures, sea level rise, and more frequent and severe floods and droughts, affect human lives, the economy, and investments. For example, heavy rains in 2016 and 2017 caused flooding and limited workers mobility in Vinh City and Phu Ly City. Heavy rains in 2020 and 2021, and a 63-year record heavy rainfall event in October 2020, led to heavy flooding around the Coc Leu and Duyen Hai Ward Road in Lao Cai City that affected transporting excavated materials to embankment sites. Adequate availability of financial resources would help address the risk from natural hazards through increased focus on resilience, climate change adaptation, and implementing safeguards procedures to strengthen national capacity to manage environmental and social aspects of completed assets.
- **Macroeconomic instability:** This is a moderate risk for the participating medium sized cities in this project. The country overall faces inflationary pressures and external vulnerabilities that may have negative effects on macroeconomic stability and affect cities down the line. For example, the country is susceptible to the global economic slowdown brought by the war in Ukraine and rising interest rates. These inflationary pressures may affect how subnational governments continue to expand its



infrastructure investments and implement its institutional reforms, while its residents face inflationary pressures in meeting basic needs.

8. Assessment of Bank Performance

a. Quality-at-Entry

The Bank team aligned project design to the country's plans and the Bank's strategy in the country by targeting poorer communities in the three-target medium sized cities. The Bank team designed the project informed by lessons from similar operations in the country and elsewhere in the region. These included: (i) readiness to implement avoids delays; (ii) strong ownership and coordinated management boost integrated projects; (iii) realistic cost estimates are helpful; (iv) effective project management requires adequate expertise in project management, financial management, and procurement; (v) a simple project structure helps; (vi) urban plans may not align well with needs (e.g., land use, cost effectiveness, transport planning, pedestrian safety); and (vii) adequate attention to sustainable management of urban assets is useful (PAD, paragraph 22).

The Bank assessed implementation risks and ensured readiness to implement a simplified design but did not count on the implementation capacity of the PIUs that were not familiar with Bank procedures. City level project preparation units coordinated closely with provincial and national sector agencies and were transformed into Project Implementation Units (PIUs) after receiving training. For at least 30 percent of the proposed works, feasibility studies, detailed designs, and procurement documentation using the Bank's Project Preparation Technical Assistance Facility were completed. However, some mitigating measures were insufficient to overcome the risk associated with challenges to allocating adequate O&M budgets. The FA included a covenant to mitigate this risk by requiring an action plan and a roadmap towards tariffs using cost recovery principles and developing asset management plans. Cities were to adopt and implement these plans. The Bank team adequately designed the M&E system with an appropriate plan for monitoring although lacking in outcome indicators that would have supported outcomes of the project interventions (see Section 9 M&E Design below). The team was to address capacity shortcomings with training.

However, the project timeline and counterpart costs were underestimated, which were evident from the eventual delays in implementation related to the initial low capacity of PMUs and challenges with the cost and time required for land acquisition as noted.

Overall, the quality of Bank performance at entry is rated **Satisfactory** with moderate shortcomings in the design of the outcome indicators. Adequate mitigating measures addressed implementation risks, The Bank designed a simple multi-sector project focusing on the government's priority to meet the needs of poorer urban residents, informed by lessons from previous similar projects. The team could not predict the exchange rate losses that left financing gaps. The team addressed this at implementation with an AF (see below).

Quality-at-Entry Rating



Satisfactory

b. Quality of supervision

The Bank team conducted 22 supervision missions over the 11-year implementation period, with virtual missions during the COVID-19 pandemic. The Bank Task Team leader changed seven times over this period but all key stakeholders, central government agencies, the local governments, and communities, noted consistency in supervision as reported in the country's satisfaction surveys. The Bank supervision missions consisted of operational and technical experts. The team delivered training and guidance tailored to the needs of each PMU, especially in FM, procurement, and safeguards as well as at the national, city, and community levels as needed. Supervision missions included field visits. The Bank team reported on project status and the MTR identified implementation challenges. The team responded with AF and scaled up the project scope to achieve the PDOs. The Bank team used the AF to include Bank scorecard indicators (gender and citizen participation). To mitigate the risk of inadequate O&M funding, the Bank team refined an outcome indicator to include "with an approved annual budget for adequate O&M" (see Section 9 M&E Design below). The Bank team underestimated the time required for the following activities - land acquisition and resettlement processes, processes in providing counterpart funds, and implementing asset management plans. These and the initial low capacity of the PIUs led to delays. The Bank team responded by extending the closing date three times. Negotiations were underway for a follow-on project in Vinh City, the Vinh City Priority Infrastructure and Urban Resilience Development Project (P174157). This follow-on project would adopt a similar model of support for Class-2 and Class-3 cities in Vietnam.

Overall, the Bank performance at supervision is rated **Satisfactory**. The financing gaps that led to implementation challenges were adequately addressed by the AF and an increase in the scope of project activities to achieve the PDO.

With both quality at entry and supervision rated Satisfactory, the overall Bank performance is rated **Satisfactory**.

Quality of Supervision Rating

Satisfactory

Overall Bank Performance Rating

Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The project designed an adequate monitoring and evaluation (M&E) framework using the results framework as proxy to the Theory of Change. The objective was clearly stated. The results framework provided the causal link between the inputs and outputs and the expected outcomes of the project interventions. M&E design used quarterly progress reports; semi-annual subproject M&E evaluations; city level mid-term and



final project evaluations; plus, a beneficiary survey. Construction supervision consultants were to assist each PMU to monitor the indicators in the results framework (PAD, paragraph 25). The intermediate results indicators adequately monitored component progress to capture their contributions to achieving the expected project outcomes. These indicators were specific, measurable, time bound, and relevant. Annex 1 did not report the baselines, but the ICR reported that baseline values were gathered at appraisal. Indicators and targets were realistic. Four PDO-level Indicators measured the outcomes of the interventions but was not all encompassing of all possible outcomes from the project-financed activities. The ICR acknowledged the weaknesses in M&E design included the omission of gender disaggregated beneficiary indicators and missing intermediate results indicators that AF addressed (see Implementation below).

b. M&E Implementation

Each city PIU implemented the M&E design noted above. AF introduced additional core IDA outcome indicators. AF also increased the target population based on the growth experienced with the investments implemented in the target areas. The PIU collected data in a timely manner supported by third-party monitors as planned. The PIUs prepared six-monthly reports covering progress using the results framework indicators and addressed identified environmental and social risks. All the indicators in the results framework were measured and reported. The Bank team highly rated the timeliness and quality of the mid-term reports, completion reports, and associated beneficiary surveys. AF adjusted the M&E design shortcomings in terms of target beneficiaries - the number of people provided with access to improved water sources, to improved sanitation, and the number of school students provided with access to newly built or improved classrooms (ICR, paragraph 72). The AF also added an Intermediate Result Indicator to measure the progress of the asset management plans' development activity. However, additional outcome indicators that would have bolstered the outcome of the interventions were not added during M&E implementation. For example, outcomes that local officials reported as having been achieved (see Section 4 Efficacy above for details). These indicators had no baselines or targets. The ICR acknowledged that the target level of the PDO-level Indicator 1, measuring the water source access outcome, could also have included beneficiaries of planned water pipe investments in Phu Ly City and Vinh City.

c. M&E Utilization

The Bank team and the government used the M&E data to inform corrective measures identified in bottlenecks highlighted in the M&E reports. (ICR, paragraph 71). The Bank team used M&E data to prepare implementation progress to inform Bank management and justify the expanded scope of the AF and restructuring decisions.

M&E Quality Rating

Substantial

10. Other Issues



a. Safeguards

Environmental Safeguards. The project complied with the Bank's environmental safeguards policies (ICR, paragraph 73). The project triggered an Environmental Assessment (OP/BP 4.01). The project was classified as Category "A" under OP/BP 4.01 (Full Assessment). Construction activities were expected to cause moderate-to-significant environmental impacts and risks, such as generation of dust, noise, solid waste, and wastewater; sedimentation and erosion risks; disturbance to existing infrastructures and related services; and health and safety risks to the workers and local communities. The government prepared an Environmental and Social Impact Assessment (ESIA) and an Environmental and Social Management Plan (ESMP) as part of each ESIA. The government disclosed the ESIA/ESMP documents locally (May 23, 2011) and in the World Bank Infoshop (May 31, 2011). Each PMU designated staff responsible for the environment, health, and safety (EHS) aspects of its respective subproject. Construction supervision firms conducted regular EHS compliance monitoring. The contractors complied with the EHS terms and conditions in construction contracts and implemented corrective measures as cited.

The project also triggered the safeguard policies on International Waterways (OP 7.50). The Red River originates from China and enters Vietnam at Lao Cai City. The project financed a wastewater treatment plant that discharged into the river downstream of the border with China. China was notified on July 6, 2011. The ICR did not report if China responded.

AF triggered an additional safeguard policy on Natural Habitats (OP/BP 4.04) because the added activities (dredging and embankments) were expected to have potential adverse effects on natural habitats of rivers and lakes in the two cities. The government prepared additional ESIA/ESMPs for the proposed works in Lao Cai City and Phu Ly City and disclosed these locally and at the World Bank on November 29, 2016, prior to appraisal of the AF and re-disclosed on April 28, 2017.

Social Safeguards. The project complied with social safeguards policies. (ICR, paragraph 74). The project triggered safeguard policies on Indigenous Peoples (OP/BP 4.10) because Lao Cai City had ethnic minority communities; on Physical and Cultural Resources (OP 4.11) because Vinh City expected to relocate graves; and on Involuntary Resettlement (OP/BP 4.12) because infrastructure works were expected to impact people living nearby. Cities prepared Resettlement Policy Frameworks (RPFs) and Resettlement Plans (RPs) and disclosed them (May 23, 2011 locally and May 31, 2011 at the World Bank InfoShop) and again at AF (November 29, 2016 and April 28, 2017). The project affected 5,367 households and relocated 1,006 households. Lao Cai City and Vinh City implemented land acquisition, compensation, and resettlement activities according to subprojects' RPFs and RPs. Third-party monitoring consultants conducted surveys and reported overall high satisfaction. However, some houses were damaged by construction activities due to works' terrain and geological conditions that led to some disagreements with affected households on compensation packages. Unclear land ownership required lengthy verifications. Some affected households were not cooperative. Several residents demanded excessive compensation. Lengthy coordination between departments and slow disbursement of compensation to affected people required additional time for certain activities, including land acquisition.

The Bank noted that Phu Ly City did not comply with OP/BP 4.12 in 2015 and 2020. The PMU released compensation to acquire illegal structures that did not match its replacement cost; did not provide technical assistance to vulnerable households as required; and did not prepare or submit a compensation plan prior to the start of certain civil works. This was resolved (ICR, paragraph 74 and footnote 36). Lao Cai City prepared and disclosed an Ethnic Minority Development Plan at appraisal, revised at AF and again disclosed at the same time noted above. Lao Cai City reported some delays in implementing the plan in 2021 due to COVID-19 restrictions. Vinh City relocated graves as required. The project established



a Grievance Redress Mechanism (GRM) in the three cities. The PMUs resolved complaints on the timeliness and adequacy of compensation payments (ICR, paragraph 74).

b. Fiduciary Compliance

Financial Management. The project complied with the Bank financial management guidelines and procedures (ICR, paragraph 76). Reviews noted adequate staffing, accounting and internal control systems, maintenance of supporting documents, and implementation of the auditor’s recommendations. The PMUs submitted acceptable quarterly financial reports mostly on time, with occasional revisions. The project’s financial statements were externally audited. The PMUs submitted to the Bank audited annual financial reports with unqualified (clean) audit opinions. The Bank reported that some audit reports raised issues of internal control such as projects behind schedule because of site clearance delay; need to improve management and supervision; improve cash flow forecasting; recover long-term outstanding debt, and validity and evaluation of bidding documents. These issues were resolved (ICR, paragraph 76).

Procurement. The project complied with the World Bank procurement guidelines and procedures (ICR, paragraph 77). Initially, all three PMUs lacked Bank procurement capacity. The Bank and international procurement support consultants were recruited to provide intensive trainings and direct support. Delays in fund allocations, protracted internal review procedures, and delays in land acquisition led to some shortcomings. The PMUs satisfactorily addressed some procurement complaints (ICR, paragraph 77). The central government resolved the slow release of funds, but this contributed to a significant delay in site access for early road contracts and in the completion of the drainage works at Vinh City Citadel. The slow initial progress in Vinh City due to delays in land acquisition, site clearance, and resettlement; relocation of utility facilities, especially high voltage electrical cables, added costs. The project extended its closing date to December 31, 2018 for Vinh City to meet its targets (ICR, paragraph 60).

c. Unintended impacts (Positive or Negative)

d. Other

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	
Bank Performance	Satisfactory	Satisfactory	
Quality of M&E	Substantial	Substantial	
Quality of ICR	---	Substantial	



12. Lessons

The operations identified three lessons, slightly paraphrased below (ICR, paragraphs 83-85):

- **Reasonable O&M budget commitments and the political will to raise tariffs, need to form part of conditionality for investing in project-financed infrastructure investments.** In this project, the cities prepared and implemented an asset management plan for project-financed infrastructure. The cities of Lao Cai and Vinh did not have sufficient O&M resources. Project design did include a covenant that required cities to develop a roadmap towards cost recovery using tariffs, but its implementation was unclear. The underbudgeting of O&M in Vietnamese cities persisted because other expenses were deemed more important. These cities remained marked by a resource-constrained environment. National-level policies continued to discourage increasing tariffs for wastewater and water infrastructure.
- **Clearly delineating the advantages and disadvantages in implementing multi-city projects supports flexible implementation.** In this project, the multi city approach with similar project investments provided some flexibility and economies of scale in implementing the project. A singular overarching PDO supported by a limited number of outcome indicators focused the work toward achieving outcomes. Similar components for each project city, facilitated efficiency in assessing specific needs and capacity. Additional financing to compensate for exchange rate losses and more time required because of land procurement delays allowed targeted reallocation of resources - more funds to build on the momentum of progress achieved. The alternative design was to have three separate city-centered projects with the same development outcomes. The disadvantage would have been higher administrative costs. The advantage would have been customized implementation periods for each city building on progress achieved to inform the design of subsequent implementation periods.
- **Realistic cost estimates usually inform good project design but in subnational level projects in Vietnam, conservative timelines may be more useful when land acquisition and resettlement are involved.** In this project, delays resulted from lengthy land acquisition processes, resettlement needs that were more expensive than anticipated at appraised, and uncertain availability of government resources. Risk assessment underestimated the cost of land and did not foresee delays in the central government's provision of counterpart financing. When using counterpart funds for the purchase of land as a vital factor in successful implementation, conservative timelines may be more appropriate to consider.

13. Assessment Recommended?

No

14. Comments on Quality of ICR



The report provided a clear picture of the project, followed the guidelines, and summarized the salient points of the project outcomes to justify the ratings. The annexes provided additional evidence to support the achievements reported in the main text, including before-and-after pictures in Annex 7. Annex 4 justified the economic efficiencies achieved by the project investments clarifying those achieved under the AF while Annex 3 broke down resource use throughout the lengthy implementation period. Evidence cited sources. The analysis summarized salient points to link evidence to findings and consistent with the ratings. The lessons were clear, useful, and based on evidence in the ICR. The report was results oriented, linked the impact of the project interventions, and reported details of what occurred. The report was internally consistent with aspects of the operation mutually reinforcing the claims surrounding project outcomes. The report offered details to justify the results and the impact attributed to the AF to support the PDO (ICR, paragraphs 22 and 23).

The report had two minor shortcomings. One, the discount rate used to calculate economic efficiency of subproject investments at AF. Annex 4 Table 4.1 noted a 12 percent discount rate but Table 4.9 in the same Annex noted 10 percent. This minor discrepancy did not materially discredit the economic efficiency reached by the subproject investments. Two, the lack of outcome-oriented indicators in the results framework. For example, the number of students was an outcome indicator, but this was an output or an intermediate outcome indicator at best. The assessment of "improved access to roads" could also have benefited from indicators on efficiency in travel, and safety considerations of the beneficiaries. Overall, the quality of the report is rated **Substantial**. The narrative supported the ratings. The Theory of Change traced the causal chain through the various interventions toward the achievement of the project outcomes.

a. Quality of ICR Rating
Substantial