May 10, 2017

Closing Date: Tuesday, May 30, 2017 at 6:00 p.m.

FROM: Acting Vice President and Corporate Secretary

Vietnam – Vietnam Scaling Up Urban Upgrading Project

Project Appraisal Document

Attached is the Project Appraisal Document regarding a proposed IDA credit and Scale-Up Facility credit to Vietnam for a Vietnam Scaling Up Urban Upgrading Project (IDA/R2017-0152), which is being processed on an absence-of-objection basis.

Distribution:
Executive Directors and Alternates
President
Bank Group Senior Management
Vice Presidents, Bank, IFC and MIGA
Directors and Department Heads, Bank, IFC and MIGA

The World Bank

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Report No: PAD2233

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 103.2 MILLION (US$ 140 MILLION EQUIVALENT)

AND A

PROPOSED SCALE UP FACILITY CREDIT

IN THE AMOUNT OF US$ 100 MILLION

TO THE

SOCIALIST REPUBLIC OF VIETNAM

FOR A

VIETNAM SCALING UP URBAN UPGRADING PROJECT

May 8, 2017

Social, Urban, Rural and Resilience Global Practice
East Asia And Pacific Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective { March 31, 2017})

Currency Unit	=	
1 SDR	=	US$ 1.35685
1 US$	=	VND 22,755

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Victoria Kwakwa
Country Director:	Ousmane Dione
Senior Global Practice Director:	Ede Jorge Ijjasz-Vasquez
Practice Manager:	Abhas Kumar Jha
Task Team Leaders:	Hoa Thi Hoang, Gayatri Singh

ABBREVIATIONS AND ACRONYMS

AMT	Aligned Monitoring Tool
CF	Counterpart Fund
CSC	Construction Supervision Consultant
CUP	Community Upgrading Plan
ECOP	Environmental Codes of Practice
EIRR	Economic Internal Rate of Return
EMDP	Ethnic Minority Development Plan
EMPF	Ethnic Minority Policy Framework
EOCC	Economic Opportunity Cost of Capital
ES	Executive Summary
ESIA	Environmental and Social Impact Assessment
ESU	Environmental and Social Unit
FMA	Financial Management Assessment
FMM	Financial Management Manual
GDP	Gross Domestic Product
GFDRR	Global Facility for Disaster Reduction and Recovery
GIS	Geographic Information System
GoV	Government of Vietnam
GRS	Grievance Redress Service
ICT	Information Communications Technology
IDA	International Development Association
IFR	Interim Financial Report
LIA	Low Income Area
M&E	Monitoring and Evaluation
MDR	Mekong Delta Region
MDR UUP	Mekong Delta Region Urban Upgrading Project
MoC	Ministry of Construction
MoF	Ministry of Finance
MOM	Management, Operations and Maintenance
MPII	Ministry of Planning and Investment Inspectorate
MSL	Mean Sea Level
NUDP	National Urban Development Program
O&M	Operation and Maintenance
PCU	Project Coordination Unit
PDO	Program Development Objective
PMU	Project Management Unit
PPC	Provincial People's Committee
PPSD	Project Procurement Strategy for Development
PSC	Project Steering Committee

RP	Resettlement Plan
RPF	Resettlement Policy Framework
RR	Retained Revenue
SOE	Statement of Expenditures
STEP	Systematic Tracking of Exchanges in Procurement
SUUP	Scaling Up Urban Upgrading
TA	Technical Assistance
TDLC	Tokyo Development Learning Center
VND	Vietnamese Dong
VNEP	Vietnam National Economic Procurement System
VUUP	Vietnam Urban Upgrading Project

BASIC INFORMATION

Is this a regionally tagged project?	Country(ies)	Financing Instrument
No		Investment Project Financing

[ ] Situations of Urgent Need of Assistance or Capacity Constraints

[ ] Financial Intermediaries

[ ] Series of Projects

Approval Date	Closing Date	Environmental Assessment Category
30-May-2017	31-Dec-2023	A - Full Assessment

Bank/IFC Collaboration
No

Proposed Development Objective(s)

The PDO is to improve access to infrastructure in priority city areas and improve urban planning in the participating cities

Components

Component Name	Cost (US$, millions)
Tertiary Infrastructure Upgrading in Low Income Areas	62.80
Priority Primary and Secondary Infrastructure	228.90
Resettlement Sites	10.20
Project Management Support	28.00

Organizations

Borrower : Socialist Republic of Vietnam

Implementing Agency :	Construction-investment Project Management Unit of Tan An city Investment Projects Management Unit of Ben Tre city ODA Project Management Unit of Vinh Long province Urban Upgrading Project Management Unit of Long Xuyen city Construction-investment Project Management Unit of Vi Thanh city Soc Trang Department of Construction Construction-investment Project Management Unit of Bac Lieu city

Safeguards Deferral

Will the review of safeguards be deferred?

[ ] Yes [ ] No

PROJECT FINANCING DATA (IN USD MILLION)

[✓] Counterpart Funding	[ ] IBRD	[✓] IDA Credit [ ] Crisis Response Window [ ] Regional Projects Window	[ ] IDA Grant [ ] Crisis Response Window [ ] Regional Projects Window	[ ] Trust Funds	[ ] Parallel Financing

Total Project Cost:	Total Financing:	Financing Gap:
330.00	330.00	0.00
	Of Which Bank Financing (IBRD/IDA): 240.00	

Financing (in US$, millions)

Financing Source	Amount
Borrower	90.00
International Development Association (IDA)	240.00
Total	**330.00**

Expected Disbursements (in US$, millions)

Fiscal Year	2017	2018	2019	2020	2021	2022	2023	2024
Annual	0.00	10.20	15.84	24.12	40.44	64.20	74.40	10.80
Cumulative	0.00	10.20	26.04	50.16	90.60	154.80	229.20	240.00

INSTITUTIONAL DATA

Practice Area (Lead)

Social, Urban, Rural and Resilience Global Practice

Contributing Practice Areas

Governance
Transport & ICT
Water

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

Gender Tag

Does the project plan to undertake any of the following?

a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF

Yes

b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment

Yes

c. Include Indicators in results framework to monitor outcomes from actions identified in (b)

Yes

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Moderate
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Low
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Substantial
7. Environment and Social	Substantial
8. Stakeholders	Low
9. Other	
10. Overall	Substantial

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	✓	
Natural Habitats OP/BP 4.04	✓	
Forests OP/BP 4.36		✓
Pest Management OP 4.09		✓
Physical Cultural Resources OP/BP 4.11	✓	
Indigenous Peoples OP/BP 4.10	✓	
Involuntary Resettlement OP/BP 4.12	✓	
Safety of Dams OP/BP 4.37		✓
Projects on International Waterways OP/BP 7.50	✓	

Projects in Disputed Areas OP/BP 7.60	✓

Legal Covenants

Sections and Description

Institutional Arrangements
Financing Agreement: Schedule 2, Section I.A
Recurrent, Continuous
Obligation of the Recipient, through each Project Province, to maintain a Project Steering Committee and a Project Management Unit with functions, composition, staffing and resources acceptable to the Association.

Subsidiary Agreement
Financing Agreement: Schedule 2, Section I.B
Recurrent, Continuous
Obligation of the Recipient, through MOF to make part of the proceeds of the Credit and the Financing available to the Project Provinces, under terms and conditions acceptable by the Association; exercise its rights under the Subsidiary Agreement in such manner as to protect the interests of the Recipient and the Association and to accomplish the purposes of the Credit and the Financing; and except as the Association shall otherwise agree, not assign, amend, abrogate or waive the Subsidiary Agreement or any of its provisions.

Annual Work Plans
Financing Agreement: Schedule 2, Section I.D.1
Annual, Continuous
Obligation of the Recipient, through the Project Provinces, to finalize and furnish to the Association not later than December 31 in each year, beginning in 2017, an annual work plan; and thereafter implement in a manner satisfactory to the Association such annual work plans as shall have been agreed with the Association.

Project Operations Manual
Financing Agreement: Schedule 2, Section I.D.2
Recurrent, Continuous
Obligation of the Recipient, through the Project Provinces, to carry out the Project in accordance with the Project Operation Manual; and not amend, waive or abrogate any provisions of the manual unless the Association agrees otherwise in writing.

Safeguards
Financing Agreement: Schedule 2, Section I.E
Recurrent, Continuous
Obligation of the Recipient to ensure that the Project is carried out in accordance with the safeguards instruments (as defined in the Financing Agreement); and not amend, abrogate, or waive any of the safeguard instruments

unless the Association agrees otherwise, and report on their status of implementation as part of the semiannual progress reports.

Mid-Term Review
Financing Agreement: Schedule 2, Section II.A.2
Due Date: 36 months after the Effective Date
Obligation of the Recipient, through the Project Provinces, to prepare and furnish to the Association a mid-term report, in such detail as the Association shall reasonably request; review with the Association such mid-term report, on or about the date forty-five (45) days after its submission, and thereafter take all measures required to ensure the continued efficient implementation of the Project and the achievement of its objectives, based on the conclusions and recommendations of the mid-term report and the Association's views on the matter.

Conditions

PROJECT TEAM

Bank Staff

Name	Role	Specialization	Unit
Hoa Thi Hoang	Team Leader(ADM Responsible)	Urban Upgrading	GSU08
Gayatri Singh	Team Leader	Urban Poverty	GSU08
Kien Trung Tran	Procurement Specialist(ADM Responsible)	Procurement	GGO08
Ha Thuy Tran	Financial Management Specialist	Financial Management	GGO20
Adrianus Verweij	Team Member	Disaster Risk Management	GSU10
Andrew John Huckbody	Environmental Specialist	Environment Safeguards	GEN2B
Anjali Acharya	Environmental Specialist	Environment Safeguards	GEN2B
Bunlong Leng	Environmental Specialist	Environment Safeguards	GEN2B
Chau-Ching Shen	Team Member	Disbursement	WFALN
Farah Imrana Hussain	Team Member	Finance	FABBK
Gauri Uday Gadgil	Team Member	Urban Resilience	GSU08

Hanh Thi Ngoc Nguyen	Team Member		EACVF
Hien Thi Phuong Nguyen	Team Member	Economic & Financial	GSU08
Hoa Thi Trinh	Team Member	Environment	GWA02
Hung Sy Pham	Team Member	Engineer	GWA02
Huong Thi Lan Tran	Team Member	Governance	GGO14
Phu Le Vo	Environmental Specialist	Environment Safeguards	GEN2B
Pierre Arnoux	Safeguards Specialist	Social Safeguards	GSU02
Quang Nhat Nguyen	Safeguards Specialist	Social Safeguards	GSU02
Sumila Gulyani	Team Member	Urban Analytics	SACIN
Thuy Cam Duong	Environmental Specialist	Environment Safeguards	GEN2B
Van Anh Thi Tran	Team Member	Transport	GTI02
Van Cong Trinh	Team Member	Disaster Risk Management	GSU08
Yuko Okazawa	Team Member	Urban Planning	GSUDL

Extended Team

Name	Title	Organization	Location
Barjor Mehta	Lead Urban Specialist		
Farah Hussain	Senior Financial Officer		
James Edward Ramsay	Water and Sanitation Consultant		

VIETNAM
VIETNAM SCALING UP URBAN UPGRADING PROJECT

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I. STRATEGIC CONTEXT

A. Country Context

1. **Vietnam's spatial transformation from rural to urban has accompanied rapid economic growth and poverty reduction, with the nation recently graduating to lower middle income country status.** Vietnam's GDP per capita more than tripled from US$560 in 2004 to US$1,800 in 2013. The percentage of people living in poverty dropped from almost 60% in the 1990s to approximately 13.5% in 2014[1] although the Vietnam 2035 Report provides strong evidence that ethnic minorities like the Khmer face significantly lower living standards compared with dominant ethnic groups. Over 34% of the total population (30 million people) lived in urban areas in 2015, as compared to only 24% in 2000 With an urban population growth rate of approximately 3.1% in 2014, it is expected that more than half of the country's population will be living in cities by 2045 (approximately 53 million people).

2. **A network of secondary cities with adequate infrastructure is critical to sustainably continue Vietnam's rural-urban transformation.** While Vietnam's urban population is still primarily concentrated in its three million-plus cities, there is increasing growth in the 21 smaller cities (100,000-500,000). However, access to basic services remains low in secondary cities as compared to large cities, as does the pace of poverty reduction.[2] In 2015, Vietnam announced the countrywide introduction of a multidimensional poverty measurement, including dimensions of access to infrastructure and services,[3] alongside the traditional income-based approach, in order to monitor urban livability across a range of settlement sizes. Recent estimates based on this new measure not only show significant regional differences in the level of multidimensional poverty, but also lower levels of access to basic services and infrastructure in small and medium sized cities.

3. **The Mekong Delta Region (MDR) has strategic importance for the country, given its significant contribution to economic growth, poverty reduction and ongoing rapid urbanization.** In 2014, the population of the MDR was approximately 17.5 million (almost one-fifth of Vietnam's total population). Between 2008 and 2014, the poverty rate in the MDR fell from 12.3% to approximately 9.8%. Still, in absolute terms, poverty incidence in the MDR remains the second highest in the country with 1.7 million poor, particularly among the ethnic minorities. MDR demonstrates the highest level of multidimensional deprivation,[4] including in urban areas. The urbanization rate in MDR is at 25% and has been steadily increasing. Alongside urbanization, the MDR has seen increased industrialization, with the industrial sector's share of GDP contribution increasing from 18% in 2000 to 25% in 2010. However, due to infrastructure gaps and vulnerability to flooding, the region's industrial sector is not expected to meet the government target of 35% share of GDP by 2020. Industrialization has further encouraged rural-urban

[1] Vietnam Household Living Standard Survey 2014
[2] While poverty in Vietnam remains largely a rural phenomenon, (only 8% of the country's poor live in cities) urban poverty is concentrated in smaller cities with 80% of the urban poor living outside of major urban centers
[3] The new measure captures information along dimensions of health, education, housing, water and sanitation, and information, in addition to an income threshold. Information available at http://vpcp.chinhphu.vn/Home/Ban-hanh-chuan-ngheo-tiep-can-da-chieu/201511/17556.vgp
[4] Ha Le and Cuong Nguyen and Tung Phung, (2015) ''Multidimensional Poverty: Evidence from Vietnam'', *Economics Bulletin*, Volume 35, Issue 4, pages 2820-2831.

migration into the MDR's provincial capitals but levels of access to basic services and infrastructure have not kept pace with urban population growth. The capacity of infrastructure in many smaller cities is being stretched beyond its limits and is resulting in an increase in poorly serviced Low Income Areas (LIAs) with the potential to develop into slum-like settlements.

4. **Climate change risks and urbanization in the MDR:** Relative to other regions in Vietnam, the MDR is highly impacted by climate change and is experiencing higher ambient temperatures, abnormal weather conditions, salt water intrusion, and increasing intensity and frequency of droughts and floods (see *Annex 5: Climate Change Resilience).* However, despite increasing climate change risks, city plans do not display risk-informed approaches in land use planning and urban development. Disaster risk management and prevention is often poorly integrated into sectoral and urban master plans at the provincial and city levels, with a lack of capacity in utilizing relevant planning tools to integrate these aspects. There remains considerable room to extend interventions to urban populations most vulnerable to climate risk, particularly the urban poor and near-poor, who have limited connectivity and access to infrastructure and services. *A summary of climate change risks and resilience features being built into the investments is provided in Annex 1.* See also paragraphs 8 and 10.

B. Sectoral and Institutional Context

5. **The Government of Vietnam (GoV) understands the strategic role of sustainable urbanization in achieving its development aspirations** as stipulated and updated in 2009 in the *Framework Master Plan for Urban Development in Viet Nam to 2025 and Vision to 2050* (hereby referred to as the Master Plan). The Master Plan focuses on achieving balanced and strategic growth, through a national urban system consisting of urban centers of various grades and types distributed throughout the country. Specifically, it envisages the development of secondary and tertiary cities as hubs to drive development within larger urban areas and provinces.

6. **In alignment with the Master Plan, a *National Urban Development Program 2011-2020* (NUDP)[5] was created in 2012 with a vision to develop provincial capitals** in different regions as models to boost the local economy and to balance regional development. The Program emphasizes urban development and the efficient use of natural resources to tackle the increased demand for infrastructure and services resulting from ongoing urbanization. It also aims to help the Government respond effectively to climate change and natural disasters affecting urban areas. In this regard, the NUDP is well aligned with Vietnam's first-ever law on "Natural Disaster Prevention and Control," which emphasizes the importance of moving away from the traditional ex-post disaster response approach towards comprehensive and integrated disaster risk management.[6] Targets set for wastewater and drainage through 2020 include: elimination of flooding in Class IV cities and above; 80 percent drainage system coverage: and 60 percent wastewater collection and treatment in Class III cities and above.[7]

[5] Government of Vietnam. Prime Minister Decision 1659/QĐ-TTg National Urban Development Program (NUDP) 2011–2020. November 7, 2012.
[6] Law No. 33/2013/QH13, which became effective on 1st May 2014.
[7] Decision No. 1930/2009/QD-TTg - Orientation Plan for Urban Drainage to 2025 and Vision to 2050.

7. **The NUDP further encompasses the principles of the *National Urban Upgrading Program* (NUUP)[8],** which was approved in 2009 to guide efforts to upgrade low income, poorly serviced and densely populated areas in Vietnam's urban centers. The NUUP was developed as part of a World Bank-funded Vietnam Urban Upgrading Project (VUUP), which piloted a participatory approach to urban upgrading in Nam Dinh, Hai Phong, Can Tho and Ho Chi Minh City. The principles of urban upgrading under NUUP have been operationalized through various urban projects in Vietnam, including two World Bank-funded projects: (i) a results-based National Urban Development Program in the Northern Mountains Region, approved in 2014; and (ii) a Mekong Delta Region Urban Upgrading Project (MDR UUP) covering provincial cities in the MDR, approved in 2012.

8. **While investments under VUUP and MDR UUP have contributed to the betterment of the lives of urban poor, there is a need for urban upgrading interventions to move away from the narrowly focussed basic infrastructure investments in the the current context.** Unlike their larger counterparts, the small and medium sized cities in the MDR present a crucial window of opportunity to develop into compact urban form, direct their expansion to low-risk areas, lower their carbon emissions through public transport and pedistrian oriented development, and incorporate universally accessible infrastructre designs to cater for increasingly elderly populations in the country.

9. **The concepts of integrated urban planning to promote compact cities are new to the Vietnamese system of urban planning that has traditionally favored urban sprawl, as testified by the history of urban expansion in metropolitan cities such as Hanoi and Ho Chi Minh City.** Since land sales are often one of the largest sources of revenue for provinces, and an expansion in administrative boundaries and urban land push a city higher up in the Government's urban hierarchy (e.g. from Class III to Class II), there is an incentive to sell land to private developers and expand outwards without a clear demand or attention to the carrying capacity of the infrastructure networks. Land markets also need to be enabled to work in tandem with the needs of population growth and accommodate for increased in-migration through affordable housing. A strategic urban development agenda dictated by the core principles of integrated urban planning, mixed land use and city connectivity is therefore needed, with an additional emphasis on urban resilience in the care of the MDR.

10. **The Mekong Delta Plan 2011 has created a space for dialogue around integrating climate change perspectives into land use planning.** The Plan emphasizes the need for "no-regrets" and priority measures to adapt land and water use patterns to changing climatic conditions with a vision until 2050. However, most city plans in the MDR do not yet adequately incorporate planning around climate change and disaster risk resilience. Flood risk is exacerbated as MDR cities continue to develop in an ad hoc manner and with lagging infrastructure (particularly drainage). Tertiary infrastructure gaps in LIAs also increase the vulnerability to frequent flooding. Within the MDR cities, LIAs are largely characterized by substandard housing, inadequate access to basic urban infrastructure and services, widespread disposal of garbage into open drains, overflowing sewage, dilapidated tertiary roads, and low connectivity to the wider city-level network infrastructure (*see Annex 1 for key city statistics*).

11. **A comprehensive approach to urban upgrading that is capable of addressing tertiary infrastructure gaps, enhances city-level (primary, secondary and tertiary) infrastructure connectivity,**

[8] Government of Vietnam. Prime Minister Decision 758/QD-TTg. Approval of the National Program on the Upgrading of Urban Centres, 2009-2020. June 2009.

and reduces vulnerability to disaster risk will require moving away from the current sector-specific, uncoordinated model of planning. For example, inundation prevention solutions at the tertiary infrastructure level (such as in LIAs) are often not combined with broader measures of tide prevention, maximization of storm water storage and provision of the necessary drainage capacity in the larger catchment area to systematically reduce flood risk. Such holistic solutions are only feasible when planning is done in an integrated manner and not in sectoral silos. *An assessment of barriers to integrated planning provided in Annex 1*.

12. **The proposed Scaling Up Urban Upgrading Project (SUUP) builds on the Bank's on-going MDR UUP operation in six provincial cities, and will extend upgrading efforts in the remaining seven provincial cities of *Bac Lieu, Ben Tre, Long Xuyen, Soc Trang, Tan An, Vi Thanh and Vinh Long*.** These cities serve as economic hubs for trade, services and industries in the region and have consequently experienced growth due to in-migration from rural areas. Take for example Ben Tre, which has seen a 10 percent increase in in-migration while the rate of natural increase has remained the same. Lack of basic infrastructure translates into low living standards and poor quality of life for LIA residents, while suboptimal connectivity adds to the exclusion of the urban poor. In addition to addressing the needs of LIAs, it is critical for these smaller, rapidly urbanizing MDR cities to focus on densification and compact urban design in order to improve accessibility within the urban core, and guide development away from high-risk and flood prone areas.

13. **The project goes beyond a business-as-usual approach to urban upgrading by promoting a new generation of investments in these secondary cities of the MDR.** First, urban infrastructure developed under this project will integrate resilience measures by promoting a comprehensive approach to climate adaptable, green infrastructure investments and enhancing universal accessibility. Second, the project will support the cities in revising their master plans over the project life cycle by applying the principles of integrated and risk-informed urban planning. Significant capacity building of local governments is built into the project design to ensure that these cities continue to grow sustainably and plan in a way that optimizes the efficiency of their existing urban footprints by prioritizing investments that enhance the connectivity of networked infrastructure. National government has expressed a strong interest in learning and institutionalizing these principles as a means to plan for and mitigate against climate change. As such, the project will aim to leverage national knowledge sharing platforms (such as the National Urban Forum of the MOC) in order to mainstream these principles of urban design into future urban upgrading operations based on lessons learnt from the project.

C. Higher Level Objectives to which the Project Contributes

14. **The proposed project supports Vietnam's 2011-2020 Socio-Economic Development Strategy** that aims to identify measures to achieve high quality and sustainable economic growth. Specific objectives to which this project is well aligned include: (i) Quickly develop infrastructure, including transportation infrastructure (4.5), (ii) Harmoniously and sustainably develop regions, build up new urban and rural areas (4.6), and (iii) Protect and improve environment quality, actively and effectively deal with climate change (4.11).

15. **The proposed project is consistent with the World Bank Group's Country Partnership Framework for 2017-2021 for Vietnam that builds upon the key priority areas highlighted in the 2016**

Systematic Country Diagnostic (SCD). Specifically, the project is well aligned with the following three priorities highlighted in the SCD: (i) build productive infrastructure and competitive cities; (ii) augment resilience to climate change and benefits from mitigation; and (iii) adapt service delivery to new expectations and to an aging population, through improved municipal infrastructure services for the urban poor, attention to sustainable urban development of secondary cities and greater citizen participation in the local planning process. It is also consistent with the recommendations made under the *Vietnam 2035 Towards Prosperity, Creativity, Equity and Democracy* to promote the development of secondary cities in an environmentally sustainable manner as well as to enhance equity and social inclusion in urban areas. In addition, the project is aligned with the report's aim of shaping urban policies and investments to enhance coordinated urban planning and infrastructure connectivity.

16. **The proposed project is closely aligned with the Bank's Twin Goals** of eliminating extreme poverty and boosting shared prosperity through economic growth among the bottom two quintiles. The project will specifically target LIAs with high concentrations of urban poor (ranging from 10-35%) and near poor who are vulnerable to external shocks, such as natural disasters, that may push them back below the poverty line. Other residents of the LIAs who largely fall within the bottom 40%, will share the benefits of improved living conditions and connectivity.

II. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

17. The PDO is to improve access to infrastructure in priority city areas and improve urban planning in the participating cities. For the terms of evaluation, the 'access to infrastructure' portion of the project is weighted 70% and 'urban planning' is 30%.

B. Project Beneficiaries

18. The project will have an estimated 500,000 direct beneficiaries and a further one million estimated indirect beneficiaries from the extended infrastructure networks and environmental improvements. Beneficiaries include persons living in the targeted LIAs and those located near project-financed primary and secondary infrastructure, who will benefit from citywide infrastructure improvements and new social and economic facilities.

C. PDO-Level Results Indicators

19. **PDO-level indicators for the proposed project include the following:**

- People Provided with Improved Living Conditions[9] (of which female, of which bottom 40%);
- Number of people with access to improved basic urban infrastructure facilities and services in targeted low income areas (of which female, of which bottom 40%);

[9] Definitions of indicators provided in Section VII. Results Framework and Monitoring

- Increased user satisfaction with the quality of basic infrastructure constructed under the project (of which female, of which bottom 40%);
- Number of Low Income Areas with Community Upgrading Plans prepared and implemented in accordance with the participatory process;
- Number of cities with revised master plans developed and approved.

20. **Intermediate level indicators** will measure a range of infrastructure investments including improved drainage, sanitation, canal embankments, roads etc. They also will take into account the principles of citizen engagement, gender inclusion, and capacity building for risk-informed urban planning.

III. PROJECT DESCRIPTION

21. **The project will strengthen the integrated planning capacity of the seven project cities which are in the early stages of urbanization** (Bac Lieu, Ben Tre, Long Xuyen, Soc Trang, Tan An, Vi Thanh and Vinh Long), improve connectivity of priority infrastructure in the urban core and upgrade selected LIAs. The selection of infrastructure sub-projects has been prioritized to ensure: (i) benefits to the urban poor; (ii) alignment to long-term sustainable urban development goals and attention to urban resilience; (iii) adherence to key principles of compact urban design and universal accessibility; and (iv) technical and economic soundness. Selection of LIAs has prioritized those located in the urban core as well those where upgrading needs are more complex. Upgrading activities will occur in a subset of nearly 30 of the 65 total LIAs across all project cities. These activities will be complemented by technical assistance to local governments to enhance the cities' capacities in urban planning, land management and city resilience in order to strengthen the design of investments and promote long-term sustainability. *Annex 1 provides city-specific statistics on poverty, infrastructure gaps and climate risk profiles*.

22. Investment designs will incorporate climate and disaster risks, and all master plans developed will seek to steer future urban growth into less hazardous areas and incorporate low carbon development principles. The design of feasibility studies has been supported by a grant by the Global Facility on Disaster Reduction and Recovery (GFDRR), to ensure that resilience aspects are integrated within the technical design of investments. The GFDRR grant is also being used to carry out an overall assessment of coordinated urban planning capacity of each of the seven local governments, with an aim to highlight the needs for capacity building and recommendations for revision of the master plans. In addition, incorporation of universal accessibility for the elderly and disabled within designs of roads and upgraded urban space is being carried out in collaboration with the Tokyo Development Learning Center (TDLC). The task team has also initiated discussions with SECO to seek bilateral grant support for the project, given that the objectives of the project are fully aligned with the Pillar 4 for SECO's 2017-2021 prioritization plan.

23. **Climate Change Co-Benefits:** The World Bank Climate and Disaster Risk screening tool was used to complete climate screening and identify 'increased flood risk' as the primary threat that climate change poses to investments under this project. The level of exposure of infrastructure investments to flooding exacerbated by climate change varies across project cities based on elevation and proximity to the sea (*see Annex 1 for city-specific details*). Mitigation measures incorporated into design include (i) Increasing the drainage capacity of canal systems, and (ii) Preserving green spaces for water retention within city

limits. Climate-all engineering designs will incorporate climate and disaster risks. All master plans developed will take into account climate and disaster risks, seek to steer future urban growth into less hazardous areas and incorporate low carbon development principles. *Specific measures under each project component are detailed in Annex 5 on Climate Change Resilience and will be used to determine climate adaptation co-benefits.*

A. Project Components

Component 1: Tertiary Infrastructure Upgrading in Low Income Areas (Total Cost: US$ 62.8 million, of which Bank financing: US$ 54.2 million)

24. The Project will support tertiary investments in approximately 30 LIAs, covering about 650 ha, including: (i) construction, rehabilitation, and upgrading of roads and lanes; (ii) construction and rehabilitation of drains; (iii) improvements to environmental sanitation by rehabilitating or constructing public sewers, constructing septic tanks, providing access to septic management services, and house connections to public sewers; (iv) improvement of water supply including the installation of metered domestic connections; (v) provision of metered domestic connections for electricity and public lighting in residential lanes and streets; and (vi) construction and rehabilitation of social infrastructure facilities such as schools, markets, community halls, public places and green spaces.

25. The package of tertiary investments in each LIA is determined in conjunction with a Community Upgrading Plan (CUP) which is based on extensive community consultations and social surveys to identify priority investments. Investments are designed with flexible standards and attention to universal accessibility, and are screened to minimize social and environmental impacts. Inundation solutions at the tertiary investments are aligned with recommendations from the hydraulic calculations at the primary and secondary scale. The consultation process and updating of CUPs is integrated in the Project Operation Manual (POM) and will continue throughout the project life, from upstream identification through to construction. The POM is being prepared and is expected to be ready by effectiveness.

Component 2: Priority Primary and Secondary Infrastructure (Total Cost: US$ 228.9 million, of which Bank financing: US$ 170.1 million)

26. Component 2 provides support to improve priority networked infrastructure in line with the broader city development agenda, and with a view to increasing connectivity of primary and secondary infrastructure with tertiary infrastructure in LIAs. Social infrastructure facilities such as markets, community halls, public places, schools and green spaces will also be included to benefit urban poor, where needed. An initial hydraulic model will be developed for the catchment areas of the upgrading sites and integrated with existing urban plans for flood and salinity intrusion control, drainage, and waterways investments. Investments that increase urban connectivity of roads and drainage networks are prioritized to encourage compact urban development and reduce flood risk within the core city and particularly for populations living in LIAs.

Component 3: Resettlement Sites (Total Cost: US$ 10.2 million, of which Bank financing: US$ 8 million):

27. This component will include the construction of resettlement areas for affected persons, including construction of primary, secondary and tertiary infrastructure and public facilities. An estimated 1,200 households will be resettled across the seven project cities (refer to Annex 1 for further information on status of resettlement site by city).

Component 4: Project Management Support (Total Cost: US$ 20 million, of which Bank financing: US$ 7.7 million):

28. The physical investments of the project will be complemented by a Technical Assistance (TA) package under Component 4, which is intended to provide implementation support as well as enhance the cities' capacity to manage urban development in a risk informed manner, thereby reinforcing urban resilience. Component 4 will also support dissemination of lessons learned from implementation on urban upgrading and planning as well as international best practices. The subcomponents are as follows:

29. *Subcomponent 4.1: Implementation Support.* This subcomponent will provide technical assistance for the overall project implementation and management at the provincial and city level, including monitoring and evaluation, monitoring of environmental and social safeguards, audits, construction supervision, and contract management.

30. *Subcomponent 4.2: Support for Investment Design and Integrated Urban Planning.* Given that the central government has requested cities to revise urban planning to take into account climate change, this subcomponent will provide technical assistance to cities to enhance cross-sectoral planning and support the implementation of the more innovative aspects of infrastructure design, such as green infrastructure and universal accessibility features. The support will be in the form of expert inputs/advice, trainings etc.

31. The technical assistance for master plan revision will be provided to at least two cities to support the revision of their master plans for approval by the provincial peoples committees. The selection of the priority cities will be based on a combination of factors, including commitment by the city, readiness to undertake this exercise (especially with respect to the integration of the CCAP), and assessment of capacity. All cities have expressed the need for integrating master plans with sectoral infrastructure projects and environmental, social and economic considerations highlighted in the CCAP, as per the national government requirement. Assessments of city-level planning processes and existing practices are being carried out funded by a GFDRR grant. The aim of the assessment is to identify gaps in institutional capacity to carry out coordinated planning, information sharing practices between departments, and quality of data (particularly spatial data), which will form the basis for the future advisory support provided. (See Annex 1 for more details).

32. Knowledge dissemination of the lessons learnt and best practices developed will be facilitated at the national level to build the capacity of other cities and national government agencies to carry out integrated and risk-informed urban planning. The National Urban Forum, chaired by MOC, is an important platform that is expected to be leveraged to disseminate learning at the regional and national level. Project cities will also be included in trainings provided by MOC to current urban projects across the Vietnam portfolio as a means to encourage peer-to-peer learning and more effectively use the MOC resources. Knowledge events will be facilitated either by external funds.

B. Project Cost and Financing

33. The financing instrument used for the Project will be Investment Project Financing (IPF). The total investment to be made is US$330 million, of which the World Bank will provide: (a) US$140 million equivalent through an IDA credit on blend terms, accounting for 42% of the total investment; and (b) US$100 million through a USD denominated credit with a fixed rate of interest, and a 30-years maturity (including a 9-years grace period) from the IDA SUF[10], making up 30% of the total investment. Counterpart funding will provide US90 million, accounting for 27% of the total investment.

34. Total investment is determined based on project investment proposals and estimates under provisions for norms and unit prices of the cities and implemented projects with similar conditions. These proposals might require adjustment during implementation. A detailed breakdown by component is shown in Table 1 below:

Table 1: Project Cost by Component

Project Components	Project cost	IDA Financing	Counterpart Funding	Proportion of Bank Funding
Component 1: Tertiary Infrastructure Upgrading in Low Income Areas	62.8	54.2	8.6	86%
Component 2: Priority Primary and Secondary Infrastructures	228.9	170.1	58.8	74%
Component 3: Resettlement Sites	10.2	8	2.2	78%
Component 4: Project Management Support	28	7.7	20.3	28%
Total Costs (rounded)	**330**	**240**	**90**	

35. The MOF has proposed the application of a blended mechanism, in which the World Bank financing is partly provided as a grant and the remaining is on-lent to the local governments for the project implementation.

Table 2: Project Finance by City

[10] In March 2016 the World Bank Board of Directors approved a proposal to establish a one-off facility—IDA Scale-Up Facility (SUF)—to provide additional support to IDA clients for the remainder of the IDA17 period. The SUF will finance IDA operations to be approved before the end of FY17. The special category of credits under this facility—IDA Scale-Up Facility Credits—is offered at non-concessional terms to eligible clients.

City	IDA ($ mil)	IDA SUF ($ mil)	Total ($ mil)	Counterpart Funds ($ mil)
Long Xuyen	20	20	40	16.2
Vinh Long	20	15	35	19.5
Soc Trang	20	15	35	11.3
Tan An	20	15	35	8.9
Bac Lieu	20	15	35	11.3
Ben Tre	20	15	35	11
Vi Thanh	20	5	25	11.8
Total	**140**	**100**	**240**	**90**

***** *See Annex 4, Table 2.2 for preliminary calculation of World Bank Funds On-Lent to Project Cities.*

C. Lessons Learned and Reflected in the Project Design

36. The project builds on the following lessons and key principles derived from urban upgrading projects globally, as well as through the implementation of VUUP and MDR UUP:

37. *Integrated urban upgrading improves sustainability of investments and prevents new slum growth, especially when land use policies aim to constrain urban sprawl*. Considerable upgrading experience gained under VUUP and MDR UUP highlights the importance of aligning infrastructure improvements in LIAs with strategic, multi-sector citywide planning as well as paying attention to the needs of the urban poor. Experience from the Philippines shows that investing in improvements and connections to primary and secondary infrastructure is more likely to ensure the sustainability of tertiary infrastructure in LIAs overtime. Slum upgrading work in Kenya highlights how infrastructure maintenance and sustainability, in addition to infrastructure development, are essential for long-term slum prevention. The principle of enhancing the connectivity of networked infrastructure through the upgrading of primary, secondary and tertiary infrastructure has informed the design of Components 1 and 2. In addition, Component 4 will support the revision of master plans with an aim to facilitate compact urban growth.

38. *Minimizing resettlement through in situ upgrading* coupled with flexible technical standards and quality resettlement sites has worked well under the MDR UUP and VUUP to preserve the strong social networks commonly found in LIAs. Additionally, the per capita and per hectare cost of upgrading is also significantly less than that of clearance and resettlement. Minimizing relocation also ensures that social networks are kept in-tact and commitment to keeping neighborhoods well-maintained is ensured, as shown in the case of Sri Lanka and many Latin American countries. Long term infrastructure maintenance of low-income neighborhoods is also likely to prevent slums from developing in the peripheries of these areas. Under Component 3, in-situ upgrading will be prioritized although resettlement will be utilized when necessary, particularly in the case of encroachment along canals that can both increase flood risk and worsen sanitation conditions when communities discharge waste directly into waterways.

Development of resettlement sites in close proximity to the upgrading sites as well as measures to preserve the viability of home-based economic activities will increase the chances of successful relocation.

39. *Strong operations planning will be essential* to avoid substantial project start up delays in the early years of implementation. Experience from VUUP, MDR UUP and projects in Kenya shows that without a good understanding of the Bank's procedures, especially procurement, projects are likely to encounter delays. Substantial implementation support including for procurement, along with capacity building for integrated urban planning has been provided throughout preparation and will be ongoing under Component 4 to ensure that local governments meet the intended project milestones and ensure sustainability of the investments.

40. *Regional clustering of the participating cities* can support frequent interactions between PMUs and key stakeholders, facilitate coordination and support efforts, and reduce transaction costs for the Bank. Additionally, Bundling of TA packages to attract international firms to act as construction supervision consultants is easier when working with a cluster of cities, which has helped reduce transaction costs for the cities as well as the Bank in previous upgrading projects in Vietnam. This is particularly useful for smaller and less experienced PMUs, such as those in the participating cities. The project design focuses on a cluster of seven MDR cities with similar urban development needs. Already during project preparation, workshops with technical staff and city leadership allowed for the facilitation of peer-to-peer learning in a workshop setting; this will continue under Component 4.

41. *Importance of strong political commitment and government capacity.* Experience from Brazil, Kenya and Indonesia as well as VUUP and MDR UUP shows that strong commitment from and coordination between government agencies is critical to success. The project enjoys a high degree of support from GoV, as it is aligned with GoV priorities, as well as commitment from national, provincial and local governments due to demand for urban upgrading, capacity building for urban planning and an urgent need for developing and implementing a coherent urban development agenda. Continued government support for sustainable urban development will be bolstered by the capacity building activities included under Component 4.

42. *Adopt disaster risk-informed, universal accessibility and green infrastructure design for investments*. Singapore and South Korea provide examples of green infrastructure design for increased urban livability and resilience. Experience from MDR UUP and Can Tho Urban Development and Resilience highlights the importance of introducing risk-informed design at the planning stages of the project to reduce delays and increased costs during implementation. Experiences from Japan show that attention to enhancing universal accessibility in infrastructure design early on is much cheaper than retrofitting such elements. Ongoing grants from GFDRR and collaboration with TDLC, along with TA provided under Component 4 aims to strengthen the capacity of cities to conceive of well-designed upgrading plans that incorporate appropriate resilience and accessibility design measures.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

43. The project will be implemented in a decentralized manner under the direction of city administrations and cities will become the project owners except in the case of Soc Trang and Vinh Long, where the project will be implemented at the provincial level with the province as the project owner. With the agreement of all participating cities, it has been agreed that Vinh Long will assume a coordination role and will be responsible for coordinating trainings and monitoring and evaluation with the support of consultants.

44. **Project Steering Committee.** In each project city, the Provincial People's Committee has established a Project Steering Committee (PSC) to guide, support, and supervise the respective PMUs. The PSC will be chaired by a senior PPC official and include director/deputy director–level representatives of key provincial departments and agencies.

45. **Project Management Unit.** Each city has established a Project Management Unit (PMU), which will be responsible for implementation of all project components. Each PMU is comprised of the PMU director, deputy directors, chief accountant, chief engineer, senior procurement specialist, financial specialist, environmental specialist, social safeguards specialists and supporting staff for coordination and planning. The PMUs will be provided with capacity building in various aspects of project management including procurement, financial management, and contract management. Clearly defined indicators, baselines and targets have been agreed upon.

46. **Project Implementation Readiness.** Cities have completed feasibility studies and draft basic designs. Draft TORs and bidding documents for the first 18 months of proposed works have been developed by the project cities and are expected to be finalized by effectiveness. The project cities have submitted for review 30% of the draft technical detailed designs of the total investment and selected draft bidding documents, which are anticipated to be finalized by effectiveness to ensure project implementation readiness. The project cities are utilizing counterpart funding for the preparation of remaining investments including preparation of feasibility studies, detailed technical designs, and bidding documents.

B. Results Monitoring and Evaluation

47. The overall M&E system will be implemented and managed by each city PMU with support from consultants contracted by MOC. The M&E methodology and tools developed under VUUP and MDR UUP will be updated and utilized. Training will be provided by MOC hired consultants during the first year to ensure that each city sets up a dedicated M&E system for tracking project inputs, activities, outputs and assessments across all project components. Each PMU will collect and compile data to assess progress as per the Results Framework. Given the low capacity of cities, lessons learned during VUUP and MDR UUP indicate the need for extensive training of the project cities on the M&E framework and data collection. An M&E consultant in each city will play a key role in monitoring the implementation progress. The coordinating city will take the lead in developing an M&E implementation plan for staffing requirements, costs, budget, methods and monitoring of key indicators. Additionally, the coordinating city, with assistance from MOC hired consultants, will consolidate data at the project level (including key outcome and intermediate results) and will be responsible for reporting the progress of project implementation and outcomes on a quarterly and annual basis.

48. Baseline socio-economic surveys were conducted during preparation stages to assess demand and determine project investments. The methodology of the surveys was established during the previous two urban upgrading projects. Survey results have been reviewed and complied. Any updates to the baseline data will be made prior to the start of project implementation. Potential use for geospatial products for M&E will be explored during implementation. (*See also Annex 2*)

C. Sustainability

49. *Institutional Sustainability*. Institutional sustainability will be enhanced through: (i) intensive capacity building efforts at the local level for effective project management, (ii) community participation in planning and decision-making, and (iii) institutional arrangements for the handover of project infrastructure to relevant line departments or government entities through the O&M strategy and action plans developed (see para 50 below).

50. *Financial Sustainability*. Financial sustainability will be enhanced through: (i) Cost-Recovery mechanisms and user fees from newly connected households, (ii) the expected rise in property values and increased city revenues resulting from upgraded primary and secondary infrastructure, (iii) O&M strategy and action plans will be submitted by each project city with explicit institutional arrangements for each project component and investment type in the case of primary and secondary infrastructure; (iv) O&M arrangements for tertiary infrastructure which are agreed upon by beneficiary communities will be included in the CUPs, and (v) the solicitation of participation from the private sector to contract out O&M and incentives for PPP participation to invest in improved infrastructure. In addition, fiscal analysis has been carried out to confirm the capacity of local governments to bear incremental O&M expenditure on project financed assets (*Annex 4*). It is important to ensure that key central agencies are engaged in the implementation and O&M of city infrastructure and services. Other interventions such as training programs for implementing agencies will strengthen staff capacity for O&M planning.

51. *Technical Sustainability*. Technical sustainability will be enhanced through: (i) project development in line with city master-plans, (ii) hydraulic modelling to consider relevant local flooding conditions, (ii) intensive consultations with beneficiary communities to ensure that technical designs present optimum solutions for real needs, (iii) maximizing connectivity in LIAs to optimize performance and efficiency, and (iv) capacity building at the city level to ensure replication of the project's approach for future infrastructure investment.

D. Role of Partners

52. **Partnership Arrangements.** There are limited investments at the city level in the seven project cities and SUUP remains the primary donor. In anticipation of future demand, capacity will be built in cities. The Steering Committees established under SUUP can gain the necessary experience in order to provide clear donor coordination in the future. The task team is coordinating with GIZ and ADB to align the hydraulic modeling done with GFDRR support with these agencies ongoing and planned technical assistance initiatives. Wastewater collection and treatment projects have been undertaken by ADB in the cities of Vinh Long and Ben Tre. In Long Xuyen, GIZ is supporting an update of the master plan and the drainage plan with SECO support. The task team is closely coordinating with the GIZ team to ensure that efforts can be augmented and synchronized rather than duplicated. During preparation workshops with

the cities, the importance of ensuring that the same hydrological modelling is used for all future investments has been emphasized. Finally, the team is actively seeking external grant support to finance directly or provide – as part of implementation support –technical assistance for the investment design and integrated urban planning activities under component 4, with promising discussions with SECO. (See Annex 1 for a summary of key Action Plan points).

V. KEY RISKS

A. Overall Risk Rating and Explanation of Key Risks

53. The SORT table in the Data Sheet provides the overall risk rating of the project (**Substantial**) as well as the individual ratings of the various risk categories. Risks pertaining to institutional capacity for implementation and sustainability, fiduciary, and environmental and social are rated as substantial, and are described below.

54. **Institutional Capacity for and Implementation and Sustainability.** Capacity of the project cities to prepare and implement a complex multi-sectoral World Bank project is relatively low. Construction delays are common in the Vietnam portfolio due to: low procurement readiness and protracted procurement processing ; weak contract management; complicated procedures; difficult site conditions; delays in the issuance of the necessary city permits; slow land acquisition and site compensation processes; and unforeseen natural disasters or catastrophic events. These factors resulted in delays during the first two years of MDR UUP implementation. Lessons learned from that project have been translated into mitigating measures included in current project design including: (i) procurement and contract management capacity building and technical assistance for PMUs; (ii) support from Bank specialists during land acquisition processes and consultation with stakeholders; and (iii) close support and monitoring of construction by cities during implementation. Additionally, Bank staff engaged with cities repeatedly on procurement requirements during project preparation missions (see Paragraphs 64-66).

55. An additional area of institutional risks is noted due to a pending formal agreement by the cities on the revision and adoption of the master plan, and institutionalization of an integrated planning process. However, master plan revision has been discussed with all cities during workshops and local and provincial governments have confirmed their commitment. Several cities such as Vinh Long and Bac Liu have requested immediate support to revise master plans and integrate sectoral plans. Given the existing provincial mandate to integrate master plans with CCAP, there is an official impetus that mitigates this risk to a large extent. Additionally, the task team is pursuing formal commitment letters for master plan revision from each of the project cities. Due to a lack of borrowing for capacity building by the National Government, a further risk pertains to ensuring the quality of master plan revision unless external grant funds can be raised by the task team to support the cities. To mitigate this risk, the task team has been engaged in efforts to raise additional funds for subcomponent 4.2. Ongoing efforts have been positive, particularly with respect to the discussions with SECO, where the task team has been requested to develop an Action Plan for the proposed master plan revision and technical assistance to enhance integrated, risk informed urban planning.

56. **Fiduciary.** The assigned project implementation agencies lack experience in procurement and FM capacity, which could lead to procurement delays, shortcomings in project internal controls, slow disbursements, and poor quality and timeliness of financial reporting. In addition, there are corruption risks in the urban development and water sectors, such as the use of false claims for "ghost" services by local sub-consultants as discovered in a number of INT cases. In recognition of the level of fiduciary risk, Bank staff have held workshops with provincial leadership, city leadership and key city staff throughout preparation to emphasize the importance of having experienced procurement and financial management specialists in the PMU. Questionnaires have been administered to assess the financial management and procurement capacity of the PMUs. A specific action plan on governance and integrity will be developed and implemented by relevant agencies. In addition to the measures to strengthen transparency and participation of third parties throughout the project cycle, as part of the governance and integrity action plan relevant city agencies and PMU staff will continue to receive training on Bank procurement, financial management and governance practices.

57. **Environmental and Social Safeguards.** The project has an overall Category A classification and the project cities require significant guidance with respect to the Bank's safeguards policies. Due to the scale of resettlement, the limited experience of the project cities with safeguards policies and the presence of vulnerable households as well as ethnic minority households in two cities, the social risk is considered to be substantial. Bank staff have provided guidance during preparation to develop resettlement plans that comply with Bank requirements. Mitigation measures successfully employed in VUUP and MDR UUP, such as the use of independent monitoring agencies, will be used during project implementation to ensure that policies detailed in the Resettlement Policy Framework (RPF), Ethnic Minority Policy Framework (EMPF), Resettlement Plans (RPs), CUPs, and Ethnic Minority Development Plans (EMDPs) are implemented in a satisfactory manner (see Annex 2 for further detail).

VI. APPRAISAL SUMMARY

A. Economic and Financial Analysis

58. An economic feasibility analysis was carried out for the proposed investments, and yielded satisfactory overall findings. A selection of investments were analyzed in Component 1 (tertiary infrastructure for low-income areas) and all subprojects were analyzed in Component 2A (secondary infrastructure for environmental sanitation) and Component 2B (secondary roads and bridges). The cost of Component 3 (resettlement) was excluded from the economic analysis to avoid double counting.[11] The cost of Component 4 (project management support) was allocated to Components 1, 2A or 2B, except for capacity building. The Economic Internal Rate of Return (EIRR) of investments in these components exceeded the minimum required Economic Opportunity Cost of Capital (EOCC) of 10% in all project cities. In most project cities, adverse changes to key parameters (defined as any combination of a 10% reduction in the project cost, 10% increase in MOM costs or a delay in benefits by one year) would not cause the EIRR to drop below the threshold value of 10%, with the exception of Component 2A in Soc Trang (the

[11] Cost estimates for Components 1 and 2B already include compensation payments. Persons requiring permanent resettlement may choose (but do not have) to move to a resettlement site prepared by the project town. If they wish to do so, they will have to pay a market price for land. As the cost of resettlement infrastructure would already be reflected in the land price, adding Component 3 would, in effect, count the compensation payment twice.

EIRR of this component would drop to 8.3% because expected land prices increases are relatively low compared to investment costs). *Further details of the economic analysis have been provided in Annex 4*.

59. A fiscal analysis was conducted to ascertain the ability of project cities to deliver counterpart funding and repay the credit. The total cost of SUUP is estimated at US$330 million. This amount would be financed from IDA and IDA SUF (US$240m) and counterpart fund (CF) contributions (US$90m). Of the IDA and IDA SUF credits, US$104m would be on-lent to PPCs, and the remainder would consist of sub-grants from the central government to the PPCs. Six of the seven participating PPCs have the fiscal capacity to: (i) cover debt service on proposed sub-loans for SUUP, and (ii) provide the minimum required counterpart fund contributions for investment and incremental management, operations and maintenance costs. Assessment at the time of appraisal had highlighted high levels of existing debt for the seventh city Bac Lieu due to which there was a risk that the PPC of Bac Lieu would breach one of the lending limits imposed by the Ministry of Finance (MoF) in 2020. Following the suggested mitigation measures, Bac Lieu PPC consulted with MOF to rearrange the city's debt. According to the latest data provided by the Province after rearrangement of debt repayment plan, the risk of Bac Lieu breaching the debt limit is minimal. *Results of the fiscal analysis are provided in of Annex 4*.

B. Technical

60. The designs for the project follow current GoV plans for the urban sector. Relevant technical options were compared and analyzed during the preparation of the feasibility studies, and the outcome is reflected in the works that have been selected for project financing.

61. The project incorporates the impacts of natural disaster and climate change scenarios in its technical design to effectively mitigate against key water related threats in the Mekong, namely: (i) Flooding - due to a combination of locally heavy rainfall, high tides, from surrounding rivers, and poor urban drainage; (ii) Saltwater intrusion - during dry season impacts water supply, irrigation, and ecosystem degradation; (iii) Progressive impacts of climate change and sea level rise; (iv) Land subsidence, aggravating drainage problems. Within detailed design, hydraulic modeling will be taken into account to identify appropriate infrastructure design that maintains flood control and city drainage capacity with an emphasis on utilizing green embankments, preserving space for retention ponds, and improving underground and open drainage networks.

62. The project enhances transport-related efficiencies and reduces transport costs through the construction of missing road links and longitudinal/horizontal axles. Transport investments will be used to proactively guide urban growth and development to low flood risk areas on higher ground. Increased accessibility and connectivity as a result of new and improved transport infrastructure will improve the living conditions within LIAs, and also increase land values and investment opportunities along the transport corridors.

C. Financial Management

63. The Financial Management (FM) assessment was conducted during the preparation stage and identify the following key FM risks: (i) the Project implementing agencies have limited experience with Bank funded projects; (ii) fully decentralized design requires more FM capacity and accountability of

provinces especially with regards to fund flow monitoring and financial reporting requirements; and (iii) no government body acting to coordinate, consolidate and monitor Project FM works. Therefore, a "Substantial" residual FM risk rating has been assigned to the Project. In order to meet the minimum Bank financial management requirements, as stipulated in OP/BP 10.00, a proposed FM action plan is required to be implemented by the participating provinces to ensure that an adequate financial management arrangement acceptable to the Bank will be maintained to provide reasonable assurance that the Bank's financing proceeds will be used for intended purposes. Major FM actions include (i) appointing accounting staff with adequate qualifications and experience in all participating provinces to be in charge of Project finance and accounting works; (ii) developing a Project Financial Management Manual (FMM) for application in all implementing agencies; (iii) selecting the most competent accounting software for the Project accounting and reporting requirements; (iv) preparing audit TORs (both internal and external audits) to conduct audit activities for the Project and submit to the Bank for review; and (v) training for the FM staff of all Project implementing agencies on Bank FM and disbursement requirements and procedures. All FM requirements, except for action (iii) (accounting software) have been completed. FM action (iii) is expected to be completed by Project effectiveness, and will be monitored by the Bank during implementation.

D. Procurement

64. The seven PMUs in the project cities will be directly responsible for the day-to-day implementation of their respective subprojects, including procurement. The assessment of the procurement capacity of project agencies identified the following key risks: (i) noncompliance, delays and compromised integrity and mismanagement of contracts due to inadequate procurement readiness; (ii) time-consuming clearance/approval process; and (iii) inexperience and weak capacity of the PMUs. The current (pre-mitigation) procurement risk is rated High.

65. To mitigate the above-mentioned risks, the following measures, agreed upon with the project cities, are being implemented: (i) strengthening the organization and staffing of PMUs, (ii) streamlining the technical appraisal/approval responsibility and accountability within relevant departments (ii) hiring qualified consultants to support the PMU on procurement and contract management, (iii) preparing and adopting POM including detailed guidance on procurement procedures, (iv) regular trainings of PMU staff; (v) carrying out appropriate measures to safeguard the transparency, fairness and integrity of the procurement and contract management processes; (vi) engaging internal and external auditors (possibly including Ministry of Planning and Investment Inspectorate) to regularly review and audit the PMU's performance.

66. Procurement for the proposed project shall be carried out in accordance with the World Bank's *"Guidelines: Procurement of Goods, Works and Non-Consulting Services Under IBRD Loans and IDA Credits & Grants by World Bank Borrowers"* dated January 2011, revised July 2014 (the Procurement Guidelines); and *"Guidelines: Selection and Employment of Consultants Under IBRD Loans and IDA Credits & Grants by World Bank Borrowers"* dated January 2011, revised July 2014 (the Consultant Guidelines) and the specific provisions stipulated in the Financing Agreement. The procurement arrangements for the project are presented in Annex 2. All the procurement activities under the proposed project will be entered into, tracked and monitored online through the Bank's Systematic Tracking of Exchanges in Procurement (STEP) system.

E. Social (including Safeguards)

67. The socio-economic survey, social impact assessment and community upgrading plan were conducted in all seven cities during project preparation as a part of the project feasibility studies. The recommendations were taken into account in the technical designs as well as in developing social safeguards. The project is expected to have significant positive social impacts by developing policies for ensuring consultation and participation and promoting social inclusion of the poor and vulnerable people living in the project area (in particular in the 30 LIAs) as well as by upgrading urban infrastructure (roads, drainage, water supply and sanitation, public facilities, and power supply) based on community priorities. Adverse impacts of the project will be caused by unavoidable land acquisition in all seven of the project cities, including impacts on Khmer ethnic minority peoples in two of the six cities. As a result, OP 4.12 on Involuntary Resettlement and OP 4.10 on Indigenous People are triggered.

68. *Involuntary Resettlement.* Significant resettlement impacts are expected due to the proposed investments, particularly under Component 2. Data collected during RP preparation indicates that the project will affect a total of 10,166 households (44,730 persons), of which 1,201 households (5,300 persons) are to be relocated. Nearly 53% of relocations are due to canal improvements including dredging, and embankment and road construction under Component 2. Households in these areas are squatters on the canals and are generally living in precarious conditions without tenure security or access to amenities; in-situ relocation is not possible.

69. Fully serviced resettlement sites are available or planned in all the 7 cities to accommodate households that will be relocated. Due to the small size of the 7 cities, resettlement sites are mostly located close to city centers and generally within 1- 4 km of the location of the proposed investments, which will minimize economic and social disruption. The need for resettlement sites was confirmed through surveys conducted during RP preparation. In all cities, the majority of households preferred relocation in a serviced resettlement site. In Long Xuyen, Soc Trang and Bac Lieu, the existing sites are not sufficient to receive all relocated households and new sites will be developed under Component 3. A total of 84 HH will be affected by the construction of these 3 sites (mainly through loss of agriculture land); only 2 households will need to be relocated. Land acquisition for these 3 sites was addressed under the RPs prepared for these three cities. In Ben Tre city, a new resettlement site will be built using local funds; land acquisition and compensation for this site will follow the provisions of the RPF. In the other cities, plots of land will be purchased in existing sites for relocated households.

70. During project preparation, the safeguards team performed a thorough screening of non-Bank financed and potentially linked ancillary projects along with due diligence reviews in all seven cities to assess if compensation and livelihood restoration was consistent with World Bank policy and to ensure that there are no legacy issues. Due diligence reviews were conducted for all existing resettlement sites, in Long Xuyen, Soc Trang, Tan An, Vinh Long and Vi Thanh, developed by local funds but to be used for relocated HH under the SUUP. Due Diligence was also conducted for another linked project in Tan An City: the construction of Huynh Van Nhut road along the Bao Dinh river where investments under the SUUP are planned. Due Diligence includes review of land acquisition activities to ensure that land acquisition activities were conducted in line with GoV regulations and are consistent with the WB OP 4.12 objectives. No legacy issue was identified in these existing RS to be used for relocated HH under the SUUP. In Ben Tre

city, a new RS will be built using local funds for relocated HH under the SUUP; land acquisition and compensation for this RS will follow the provisions of the RPF.

71. *Indigenous Peoples OP 4.10* is triggered for the cities of Bac Lieu and Soc Trang. In these two cities, significant populations of ethnic minorities (mainly Khmer but also Chinese and some Cham) are present accounting for 36% and 21% of the total population in Soc Trang and Bac Lieu respectively. Among the three ethnic minority groups, the Khmer are the poorest and most vulnerable. In the project areas, a total of 191 ethnic minority households (118 Khmer, 69 Chinese and 4 Cham) will be affected in Soc Trang City and 185 in Bac Lieu City (136 Khmers and 49 Chinese) as well as 13 in Soc Trang and 5 in Bac Lieu (all Khmer). Drawing from the lessons learned in implementing the VUUP and the MDR UUP, specific actions will also be designed to benefit the EM.

72. A number of social safeguard instruments and assessments have been prepared, including a RPF, an EMPF, seven RPs and two EMDPs. SIA were conducted in all cities as a part of the ESIA process. All social safeguard instruments have been reviewed and cleared by the World Bank and subject to public disclosure per the World Bank's requirements (details in paragraph *Public Consultation and Information Disclosure*).

73. *Public Consultation and Information Disclosure*. The affected people, communities and other relevant stakeholders were consulted on the RPF, EMPF, RPs, and EMDPs. Minutes have been prepared for each public meeting and are included in the RPs/EMDPs. CUPs were prepared in each city and are based on extensive community consultations and social surveys to identify priority investments in LIAs. The feedback from the consultations were incorporated into the project design, the final draft RPF, EMPF, RPs, and EMDPs. Prior to appraisal, the draft environmental and social safeguards instruments were disclosed both locally at, the PMUs, Cities/Wards in the sub-project areas on 10 January 2017, and through the InfoShop in Washington, DC on 12 January 2017. The final environmental and social safeguards instruments, approved by the GoV and cleared by the Bank, have been disclosed locally in Vietnamese at the PMUs office, Cities/Wards in the sub-project areas and at the InfoShop in English language on May 04, 2017. The Appraisal Stage Integrated Safeguards Data Sheet of the project have been disclosed at the InfoShop.

74. ***Gender***. Concrete actions have been taken to mainstream gender in all phases of the project. During project preparation, CUPs were developed through consultations with a minimum participation requirement of 60% of LIA residents and equal representation between genders. Negative livelihood impacts resulting from project implementation and resettlement were judged to disproportionately affect women constrained to running home-based businesses due to household management and childcare responsibilities. Options for possible mitigation measures (cash assistance during transition periods to resettlement sites or preferred business locations within resettlement sites) are being explored with city administrators and will be included in the resettlement plan of each city. The project will solicit the participation of women's union groups in disseminating project information and providing feedback on implementation as well as serving as a liaison between the community and PMU. The Women's Union is a well-established social network that operates at the central, provincial, district, and commune/ward level and has a record of strong grassroots organization. Finally, during project evaluation, the project team will monitor indicators disaggregated by gender.

75. ***Citizen Engagement***. The project has several unique elements of engaging with citizens. Firstly, extensive consultations in the design phase of the project informed the CUP developed by each selected LIA to identify key priority investments. Community consultations will continue throughout implementation, especially in the development of cities' integrated urban planning, to ensure a closed feedback loop. Collaboration with mass organizations during the CUP consultation process will ensure that men and women have an equal opportunity to provide input on project design. Communities will also reach an agreement regarding modest in-kind or financial contributions to the project or towards O&M. Their contributions are included to create a sense of ownership and responsibility for the investments, and are similar to arrangements under previous Bank investments in the MDR, including processes with careful monitoring by the Bank's safeguards specialists. Finally, as part of project monitoring and evaluation, satisfaction surveys are planned at mid-term and project completion to evaluate the results of the project. The ESIA will provide a baseline for assessing satisfaction levels of citizens in the project areas. Innovative approaches using available low cost information technology, such the use of mobile phones and social media, to reach out to and solicit feedback from citizens will be leveraged throughout the project implementation. Citizen engagement with elderly and disabled populations is also planned for finalizing and implementing the universal accessibility designs of tertiary infrastructure.

76. **Governance**. Taking into account the lessons learned from other projects in the sector, the PMUs and participating provinces are committed to strengthening project governance through a number of measures. Process control activities, including internal audit functions shall be instituted at all PMUs. Necessary trainings and strong risk mitigation measures on project governance and integrity will be conducted during the project preparation and implementation. Measures to strengthen governance and integrity have been discussed with the cities and were included in the POM for implementation throughout the project cycle by the participating provinces and PMUs. (Further details in Annex 2, paragraphs 56-57).

F. Environment (including Safeguards)

77. OP/BP 4.01 Environmental Assessment is triggered due to the potential adverse impacts associated with construction activities under Component 1, 2, and 3, requiring the identification, mitigation and monitoring of potential adverse environmental and social impacts. The infrastructure interventions proposed under the project are of small or medium scale. Concretely, the proposed roads are short; the canals/rivers to be upgraded are small and narrow and do not include any of the region's main waterways. The project investments, which are primarily upgrading of existing tertiary infrastructure and support to primary and secondary infrastructure, are expected to require only small to medium scale earthworks. The environmental assessment of the project concludes that the project does not have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. However, the overall project is classified as a category A due to its significant impacts related to land acquisition and resettlement issues.

78. Seven Environmental and Social Impact Assessments (ESIAs), including the Environmental and Social Management Plans (ESMPs), for the participating cities subprojects and one Executive Summary (ES) for the whole project have been prepared based on the agreed Terms of Reference and disclosed. The ESIAs are in accordance with the Bank's safeguard policies and national regulations. The ESIAs include the World Bank Group Guidelines on Environmental, Health and Safety, due diligence review of the related

projects, as well as cumulative impact assessment of potential environmental and social impacts. Prior to appraisal, the draft ESIAs of the seven cities and the Executive Summary were disclosed both locally at, the PMUs office, Cities/Wards in the sub-project areas on 10 January 2017, and through the InfoShop in Washington, DC on 12 January 2017. The final environmental and social safeguards instruments, approved by the GoV and cleared by the Bank, have been disclosed locally in Vietnamese at the PMUs, Cities/Wards in the sub-project areas and at the InfoShop in English language on May 04, 2017.

G. Other Safeguard Policies (if applicable)

79. OP/BP 4.04 Natural Habitat is triggered. The project will not impact any protected area nor will it affect important/endangered flora or fauna species or biodiversity areas of high value. The ESIA process confirmed that natural habitats are present in the project areas. However, the subprojects would not have impacts on any protected area nor would they affect important/endangered flora or fauna species or biodiversity areas of high value. Construction and operation of the embankments and dredging activities would have some moderate potential impacts on the natural habitats of the rivers and canals including loss of benthic habitats and disturbance of benthic organisms. Impacts and mitigation measures have been included in the relevant subproject ESIAs and ESMPs to address these impacts.

80. OP/BP 4.11 Physical Cultural Resources is triggered. It is not expected that the project will necessitate relocation of physical cultural resources (PCRs) such as monuments, temples, churches, religious/spiritual and cultural sites. However, the project will involve the land acquisition of the yard and fence of some pagodas in Soc Trang and Vinh Long cities. In addition, the project will involve relocation of graves which are also considered PCRs. In all seven cities there are temples, pagodas, and churches located within the area under direct influence of the project. The potential impacts during construction would be decreased aesthetic values; disturbance caused by the workers' presence and activities, or noise and vibration from construction machineries and vehicles; traffic safety risks to local people, particularly at peak hours; and increased traffic safety risks. In addition, vibration could also cause the risks on structure cracking/collapse to the gates and fences of certain PCRs and sensitive receptors located within the immediate vicinity to the constructed work (about 5 m distant). The impacts and risks are temporary, could be mitigated and prevented by application of appropriate construction method and good construction practices. Since the project includes dredging and excavation activities, which may result in chance finds. The cities ESMPs have included site-specific measures to reduce impacts during grave relocations, land acquisition from the pagodas, and the construction related impacts as indicated above. In addition, a chance finds procedure has been included in the subprojects ESMPs.

81. OP/BP 7.50 Project on International Waterways is triggered, as the Mekong River is an international waterway, and some of the proposed interventions in six cities (i.e. Ben Tre, Long Xuyen, Soc Trang Tan An, Vi Thanh, Vinh Long) will be implemented on its river basin. During project implementation, some potential negative impacts on the water quality of these canals/rivers in the Mekong River basin are expected due to dredging and embankment activities. The adverse impact to the Mekong River during the construction period is assessed as short-term, localized, minor, and insignificant. As the proposed project area is located in the furthest downstream section of the Mekong River, the project investments will not affect the water quality or flow in the upstream riparian countries. Therefore, it is assessed that the project falls within the riparian notification exception under paragraph 7(a) of OP 7.50, and that no

riparian notification is required. The exception to the riparian notification requirement was approved by the Regional Vice President on December 30, 2016.

H. World Bank Grievance Redress

82. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit *http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service*. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY : Vietnam
Vietnam Scaling up Urban Upgrading Project

Project Development Objectives

The PDO is to improve access to infrastructure in priority city areas and improve urban planning in the participating cities

Project Development Objective Indicators

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: People Provided with Improved Living Conditions (of which female, of which bottom 40 percent)		Number	0.00	500000.00	YR1-2-3-4-5-6	PMUs	PMUs
Description: The cumulative number of people living in urban areas that have been provided with access to improved services, neighborhoods, public spaces, parks, resilience, and/or urban environmental conditions, through the direct interventions of operations supported by the World Bank. Year 1 is 2018. Year 6 is end of Project.							
Name: Number of people with access to improved basic urban infrastructure facilities and services in		Number	0.00	90000.00	YR1-2-3-4-5-6	PMUs	PMUs

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
targeted low income areas (of which female, of which bottom 40 percent)							
Description: Estimate of direct beneficiaries of Component 1. Men/Women based on estimates of gender ratio from 2009 census.							
Name: Increased user satisfaction with the quality of basic infrastructure constructed under the project (of which female, of which bottom 40 percent)		Percentage	0.00	80.00	Year 3 and End of project cycle	Social sample survey and focus groups, including by gender	PMUs
Description: Results from beneficiary satisfaction survey administered to people receiving infrastructure and services under this project. Data collection disaggregated by sector and gender							
Name: Number of Low Income Areas with Community Upgrading Plans prepared and implemented in accordance with the participatory process		Number	0.00	30.00	YR1-2-3-4-5-6	PMUs	PMUs
Description: Community Upgrading Plans are designed to enhance the role of the community in the planning for infrastructure upgrading within LIAs, incorporate lessons learnt from past projects, and create sufficient community buy-in to ensure overall sustainability of investments through successful construction and maintenance of tertiary infrastructure. Requirement for completing plans includes at least 60% participation from communities, at least 45% of which are women.							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Number of cities with revised master plans		Number	0.00	3.00	End of project cycle	Check the content of draft master plan	Consultant evaluation team
Description: Measured by number of cities that have drafted document in line with the project's key principles of integrated urban planning and citizen participation. Plans will be submitted to the relevant Provincial People's Committee for review and approval.							

Intermediate Results Indicators

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Length of new or improved lanes in LIAs		Kilometers	0.00	60.00	Annual	Construction Reports	PMUs
Description: Lane widening and/or surfacing improvements, under Component 1							
Name: Length of new or rehabilitated drainage canals in LIAs		Kilometers	0.00	19.00	Annual	Construction Reports	PMUs
Description: The total length of tertiary canals upgraded under component 1							
Name: Households with new or improved household		Number	0.00	15000.00	Annual	Construction Reports	PMUs

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
connections to sewer lines							
Description: Calculated based on average household size. Under Component 1							
Name: Number of direct beneficiaries in LIAs with enhanced protection from rainfall flooding		Number	0.00	90000.00	Annual	Semi-Annual reports	PMUs
Description: This indicator will measure the number of people that directly benefit from investments to enhanced embankments and drainage systems that reduce rainfall flood risk							
Name: Length of new or improved primary or secondary roads		Kilometers	0.00	48.00	Annual	Construction Reports	PMUs
Description: Meters of trunk (primary) or link (secondary) roads constructed or upgraded under the component 2							
Name: Length of rehabilitated or newly constructed drainage		Kilometers	0.00	32.00	Annual	Construction Reports	PMUs
Description: Total length of new and updated drainage, under Component 2							
Name: Length of new or rehabilitated canal		Kilometers	0.00	29.00	Annual	Construction report	PMUs

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
embankment (of which designed and installed with 'green infrastructure principles")							
Description: Total length of canals upgraded under component 2. Green infrastructure principles includes soft-embankments.							
Name: New serviced plots constructed		Number	0.00	310.00	Annual	Construction reports	PMUs
Description: Based on estimated plots to be constructed under Component 3							
Name: Serviced plots provided to relocated households		Number	0.00	380.00	Annual	PMUs	PMUs
Description: Based on estimated households to be resettled under Component 3							
Name: Number of O&M strategy and action plan developed and submitted		Number	0.00	7.00	Annual	PMUs	PMUs
Description: O&M strategy and action plans will be submitted by each project city with explicit institutional arrangements for each project component and investment type. O&M responsibilities of tertiary infrastructure under Component 1 will be agreed upon between the LGs and communities under the Community Upgrading Plans (CUP). Within the CUP, the LG and the community will have to confirm how the community donations will be spent, how maintenance will be carried out as well as clarifying the future financial sustainability arrangements.							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Number of workshops/trainings provided for participating cities to utilize hydraulic models		Number	0.00	2.00		YR2 &YR3	
Description: This indicator will measure the number of workshops held on utilizing the results of the hydraulic model in risk-informed infrastructure design							
Name: Number of workshops/trainings provided for participating cities to enhance integrated planning		Number	0.00	2.00	YR2 & YR3		
Description: This indicator will measure the number of workshops held to create a common understanding of the key principles of integrated planning, discussion of processes and strategies needed to enhance coordination across agencies.							
Name: Number of national workshops organized to disseminate lessons learned		Number	0.00	2.00	YR3 & YR6		
Description: This indicator will measure the number of workshops coordinated through MOC to disseminate lessons learnt from SUUP on a national platform							

Target Values

Project Development Objective Indicators

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	YR6	End Target
People Provided with Improved Living Conditions (of which female, of which bottom 40 percent)	0.00	0.00	25000.00	100000.00	200000.00	300000.00	500000.00	500000.00
Number of people with access to improved basic urban infrastructure facilities and services in targeted low income areas (of which female, of which bottom 40 percent)	0.00	0.00	4000.00	18000.00	36000.00	54000.00	90000.00	90000.00
Increased user satisfaction with the quality of basic infrastructure constructed under the project (of which female, of which bottom 40 percent)	0.00			60.00			80.00	80.00
Number of Low Income Areas with Community Upgrading Plans prepared and implemented in accordance with the participatory process	0.00	0.00	2.00	6.00	12.00	18.00	30.00	30.00
Number of cities with revised master plans	0.00				1.00	3.00		3.00

Intermediate Results Indicators

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	YR6	End Target
Length of new or improved lanes in LIAs	0.00	0.00	3.00	12.00	24.00	36.00	60.00	60.00
Length of new or rehabilitated drainage canals in LIAs	0.00	0.00	1.00	4.00	7.00	11.00	19.00	19.00
Households with new or improved household connections to sewer lines	0.00	0.00	750.00	3000.00	6000.00	9000.00	15000.00	15000.00
Number of direct beneficiaries in LIAs with enhanced protection from rainfall flooding	0.00							90000.00
Length of new or improved primary or secondary roads	0.00	0.00	2.00	10.00	19.00	29.00	48.00	48.00
Length of rehabilitated or newly constructed drainage	0.00	0.00	1.00	6.00	13.00	19.00	32.00	32.00
Length of new or rehabilitated canal embankment (of which designed and installed with ‘green infrastructure principles”)	0.00	0.00	1.00	6.00	11.00	17.00	29.00	29.00
New serviced plots constructed	0.00	0.00	15.00	62.00	124.00	186.00	310.00	310.00
Serviced plots provided to relocated households	0.00	0.00	19.00	76.00	152.00	228.00	380.00	380.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	YR6	End Target
Number of O&M strategy and action plan developed and submitted	0.00	0.00	0.00	1.00	3.00	4.00	7.00	7.00
Number of workshops/trainings provided for participating cities to utilize hydraulic models	0.00		1.00	2.00				2.00
Number of workshops/trainings provided for participating cities to enhance integrated planning	0.00		1.00	2.00				2.00
Number of national workshops organized to disseminate lessons learned	0.00			1.00			2.00	2.00

ANNEX 1: DETAILED PROJECT DESCRIPTION

COUNTRY : Vietnam
Vietnam Scaling up Urban Upgrading Project

Project Overview

1. The proposed project is designed to enable the GoV to take advantage of the limited window of opportunity to ensure climate and disaster risk-informed urban development within the seven selected provincial capitals of the Mekong Delta Region (MDR), given their early stages of urbanization. The project is part of the World Bank's long-term engagement in urban upgrading programs within the MDR including the Vietnam Urban Upgrading Program (VUUP) and its successor the Mekong Delta Region Urban Upgrading Project (MDR UUP). This current iteration of urban upgrading will build on past achievements while introducing measures to better target integrated urban planning, risk-informed design, and green infrastructure.

Map 1.1: Project Cities

2. The seven participating cities (Bac Lieu, Ben Tre, Long Xuyen, Soc Trang, Tan An, Vi Thanh and Vinh Long) are characteristic of small and medium-sized cities in Vietnam with populations ranging from approximately 75,000 to 285,000. The cities are of strategic importance as they are economic hubs for trade, services and industries in the region. Detailed socio-economic data for each city is provided in Table 2.1 below.

Table 1.1: City Socio-Economic Profiles

	Bac Lieu	Ben Tre	Long Xuyen	Soc Trang	Tan An	Vi Thanh	Vinh Long
Total Population	154,154	120,749	285,100	137,588	136,233	74,996	141,136
Area (km^2)	175.26	71.12	115.43	76.16	81.95	119.06	48
Poverty Rate (%)	5	5	4.6	9	2.5	4.4	3.32
Near Poverty Line Rate (%)	3.9	4.5	7	10.1	7.4	17.4	6.69
Road <2.5km (%)	60	75	65	10.2	4.3	5.5	70
Soil-road (%)	30	40	75	2.6	0.3	2.3	30
Non-water supply rate (%)	25	40	5	8	10	28.6	6
Non-drainage rate (%)	40	65	90	35	90	75	65
Non-lighting rate (%)	40	50	50	40	70	45	50
Non-waste collection rate (%)	30	25	35	40	25	30	30

3. LIAs within project cities are characterized by sub-standard housing and poor quality tertiary infrastructure (including water supply, drainage, roads and wastewater management systems). Much of the tertiary infrastructure network has limited connectivity to primary and secondary infrastructure, and many LIAs are not well connected to other parts of the city. Lack of basic infrastructure translates to low living standards and poor quality of life for the LIA residents, while suboptimal connectivity with the city adds to the exclusion of the urban poor.

Project Components

Component 1: Tertiary Infrastructure Upgrading in Low Income Areas

4. This component will finance the upgrading of infrastructure in nearly 30 selected LIAs throughout the seven project cities focusing primarily on the upgrading of tertiary roads, canals and drainage, but also making provisions for street lighting and public spaces. Infrastructure that promotes connectivity with other parts of the core city or within the LIA will be prioritized. Cities are encouraged to incorporate design elements targeting vulnerable groups, particularly the elderly and disabled as an additional means to promote connectivity and accessibility.

Table 1.2: Summary of Component 1 Proposals

	Bac Lieu	Ben Tre	Long Xuyen	Soc Trang	Tan An	Vi Thanh	Vinh Long
Total area of LIAs	70.33	118.5	74.78	132	52	126.1	49.9
LIA Population	14,370	7,200	24,396	9,790	5,672	7,732	21,217
Total LIA Households	3,342	1,835	5,421	2,176	1,418	1,718	4,715
Total length of improving canal (km)	0.80	2.97	1.50	3.17	2.25	3.51	5.09
Length of new or improved lanes in LIAs (km)	6.61	14.11	11.40	9.084	2.15	13.03	5.36
Area of new or improved lanes in LIAs (m2)	28336	31,127	32,563	31,024	8536	40,502	15,161
Households served by new or improved household connections to sewer lines	3342	1,835	3,087	2,176	1418	1718	2,020
Direct beneficiaries	14,370	7,200	24,396	9,790	5,672	7,732	21,217
In-direct beneficiaries	62,194	51,230	98,472	18,130	22,688	28,741	12,577

5. Investments are agreed upon through a participatory process outlined in the Community Upgrading Plan (CUP), designed to enhance the role of the community in the planning for infrastructure upgrading in LIAS. Incorporating lessons learnt from past upgrading projects, the CUP process ensures sufficient buy-in from the local community to ensure both successful construction and maintenance of project investments. Guidance from task team as well as support from consultants will enable cities to develop a robust community engagement policy. The steps involved in the development of the CUP are shown below.

Table 1.3: Development Process for Community Upgrading Plan

Introducing the project
• Organize meetings with relevant departments and wards to make introduction on content, objective, principles, standards, methods, timing of the project • Provide documents and brochures on the project for the agencies and the ward/commune within the project area • Publish information on the press about the project.
Determining the needs to upgrade the community environment
• Organize community meetings with representatives of governments, unions, executive board of the population group, representatives of people in the community; at the meeting, participants will discuss and determine the wishes of the community involved in the project and formally propose the upgrading needs of the community environment; • Perform sociological survey on the status of low-income residential areas and carry out in-depth interviews with the advisory support of the unions and the population groups to learn more about the community's situation, needs and ability to participate
Developing technical options to meet the requirements of the community
• The proposed plan will be approved by PMU, authorities and committees of the City, the branches, the government and the Chamber of the city urban management.

• The proposed plan will be transferred to the community so that people can get reference for the consultation meeting.
Consultation with community to get comments on the upgrading plan
• The proposed method will be disclosed to the community and meetings with the population and individuals will be organized so that every household can participate and give comment on the plan basing on the training content from Representative of the group. Any comments and selected solution or votes during the meeting will be recorded and sent to the Consultant. • The Consultant will study comments of the community to adjust to get appropriate proposal and adjusting design. • The adjusted plan will be sent to the ward authority and the community for reference and give out final comments.
Agreement on the selected solution
Representatives of the PMU, consultants, ward leaders and community representatives will hold a meeting to: • Adopt the preliminary design after comments from the community • Agree on the selected plan based on technical design, contributions, compensation policies. • Agree on institutional management, implementation, and monitoring • The agreed content will be reflected in the CUP. • The PMU, Consultant, representative of the ward authority and representatives of the community will sign the Minutes of agreement on selected plan. • The content of the Minutes will be sent to every household.

Component 2: Priority Primary and Secondary Infrastructure

6. Component 2 provides support to improve priority networked infrastructure in line with the broader city development agenda, and with a view to increasing connectivity with tertiary infrastructure in LIAs. An initial hydraulic model will be developed for the catchment areas of the upgrading sites and integrated with existing urban plans for flood and salinity intrusion control, drainage, and waterways investments.

Table 1.4: Summary of Component 2 Proposals

	Bac Lieu	Ben Tre	Long Xuyen	Soc Trang	Tan An	Vi Thanh	Vinh Long
Road							
Rehabilitated(km)	13.8	-	-	1	7.3	2.3	1.9
Construct new road (km)	1	6.39	2.1	2.6	2.5	4.3	3.3
Bridge							
Rehabilitated (PCS km)	-	-	-	-	1 (0.2)	9 (0.22)	-
Construct new bridge (PCS km)	-	3 (0.3)	-	2 (0.24)	1 (0.07)	4 (0.12)	-

Drainage							
Rehabilitated and construct new Sewer network (km)	-	-	4.2	7.12	9.8	-	10.4
Rehabilitated of Outlet (PCS)	-	-	-	1	-	-	-
Rehabilitated canal							
Rehabilitated canal (km)	4.8	3.27	6.4	6.4	2.5	4.3	1.3
Water Supply							
Rehabilitated water supply network (km)	-	-	-	-	2.5	-	-
Park							
Construct new Parks, Lakes, green areas (ha)	-	-	-	-	1	3	-
Direct beneficiaries	**59,145**	**67,306**	**144,361**	**22,470**	**13730**	**48,015**	**77,613**
In-direct beneficiaries	**95,009**	**84,772**	**136,501**	**115,429**	**168,515**	**27,002**	**63,523**
Total beneficiaries	**154,154**	**152,078**	**280,862**	**137,899**	**182,245**	**75,017**	**141,136**

Component 3: Resettlement Sites

7. Although in-situ upgrading remains a guiding principle of this project, there is significant resettlement due to the nature of infrastructure upgrading proposed by the cities. Resettlement sites developed under Component 3 will include primary, secondary and tertiary infrastructure and measures will be taken to accommodate loss of livelihood as dictated by city-specific Resettlement Plans. See Annex 2 (paragraphs 39-45) for additional information on Resettlement.

Table 1.5: Summary of Component 3 Proposals

	Bac Lieu	Ben Tre	Long Xuyen	Soc Trang	Tan An	Vi Thanh	Vinh Long
Component 1							
Fully affected households	12	6	34	0	10	21	4
Partially affected households	579	1211	125	591	356	958	392
Total	***591***	***1217***	***159***	***591***	***366***	***979***	***396***
Component 2							

Fully affected households	80	97	240	247	188	254	189
Partially affected households	1533	809	440	636	537	962	902
Total	***1613***	***906***	***680***	***883***	***725***	***1216***	***1091***
Component 3							
Fully affected households	7	0	2	0	0	0	0
Partially affected households	78	0	22	0	0	0	0
Total	***85***	***0***	***24***	***0***	***0***	***0***	***0***
Fully affected households	***99***	***103***	***276***	***247***	***198***	***275***	***193***
Partially affected households	**2190**	**2020**	**587**	**1227**	**893**	**1920**	**1294**
Total	**2289**	**2123**	**863**	**1474**	**1091**	**2195**	**1487**

Component 4: Project Management Support

8. *Subcomponent 4.1: Implementation Support*. Activities under this subcomponent will improve government capacity for project implementation. The city selected as the coordinator for implementation will receive additional support for taking on this role. While there is a reduced coordination role of the MOC as compared to previous urban upgrading operations, the agency will provide consultants using existing funds from ongoing urban upgrading projects such as MDR UUP to support the coordinating city in the initial two years of the project, in line with the MOC mandate. This will include consultants to support activities such as for monitoring and evaluation to track urban indicators

9. *Subcomponent 4.2: Support for Investment Design and Integrated Urban Planning.* Based on preliminary assessments, the following gaps in the cities' capacity to carry out integrated urban planning have been identified through GFDRR funded assessments conducted during project preparation:

Enhancing inter-departmental coordination as the basis for integrated planning:

a) **There is considerable room for improvement in cross-sectoral coordination in the development of urban master plans and sector plans for the cities.** At present, the urban planning process appears to be fragmented, with the city's master plans and sector plans developed in silos. While there is some cross-sector consultation on the plans, this is only done during advanced planning stages, providing limited opportunities for mobilizing expertise from different departments in the early stages. Institutionalization of the process of early-stage consultations with representatives from other government departments, sector representatives and external experts (e.g. from academia and research institutes) is required. Coordination and consultation with other

departments (e.g. DARD on natural hazards, DONRE on climate change) would be highly relevant to enhance resilient urban planning.

b) Spatial data bases presently available at the Province and City level authorities are not linked with non-spatial data. For example, while socio-economic data (published by the Census department) has informed the master plans at a macro level, data such as age profile (children between 0-11 years of age and the elderly), gender distribution and location of physically challenged persons is unavailable. For risk informing the master plans and sectoral plans, disaggregated data is essential and this data is presently unavailable. It is desirable to conduct primary surveys to document this data and link this to the geo-spatial data base.

c) **There is no standard process for sharing of data and information between government departments**. It is possible to do so via a formal approval request or informally between department staff but this can be time consuming and may require approval from the city leadership.

Quality and Inconsistency of data as a barrier to integrated planning

d) **A key barrier to data sharing is that the maps and processes used vary across departments, which can make cross-sectoral coordination difficult.** In Ben Tre city, for instance, base maps of different scales are used by each department for planning purposes (e.g. 1:500 for drainage planning, 1:2,000 for transport planning, 1:10,000 for city planning), which makes them difficult to integrate. These data bases sometimes remain incompatible since they do not follow the nationally prescribed projection systems, viz., VN 2000. In addition, although spatial vector data (cadastral maps, topographic maps, digital elevation models) of the city have been made available by DONRE in 2010, these maps and models are not updated nor shared proactively with potential users as MONRE has not provided guidance on how they should be further used. Finally, different mapping software are used by different departments (Microstation, AutoCAD, etc.), preventing them from being used interchangeably and digitally across departments.

Capacity to utilize spatial data for planning

e) **All cities have emphasized the need for GIS capacity building:** plans to enhance increased use of spatial information have been articulated in every city but there is limited capacity to do so internally. However, the GIS capacity must go hand in hand with the alignment of software across departments and improvements in data sharing processes in order to carry out integrated and more strategic planning.

10. *Revision of Master Plans in Selected Cities*. Several cities have articulated the need to revise their master plans within the project cycle, particularly with a view to incorporating a climate risk-informed perspective. In some cities such as Vinh Long, initial preparation for revisions have begun and the task team is exploring the provision of expert consultants to support the cities from the GFDRR grant.

11. Subcomponent 4.2 will support the cities in their need to revise master plans to incorporate CCAP, and simultaneously strengthen the integrated urban planning processes through this exercise. Additional grant funds will need to be raised by the task team to ensure a greater hands-on support to the cities for a credible re-drafting the master plans in line with the principles of compact city design, public transport

oriented development, mixed land use and future needs for affordable housing. To this end, the task team has had promising conversations with SECO. The objectives of the project are completely aligned with the Pillar 4 for SECO's 2017-2021 plan. Capacity building activities will further enable cities to ensure the sustainability of investments under Components 1 and 2 as well as carry forward lessons learnt to future development opportunities.

12. With support from the GFDRR grant, an action plan is being developed on the basis of assessments to outline the activities and tasks needed to support targeted areas of capacity building. Target areas of support based on preliminary assessments include, among others: (i) creating disaggregated data, linking socio-economic data with spatial data and enhancing data sharing and coordination, (ii) providing recommendations for city to consider the adoption of necessary regulations to support cross-departmental coordination in the project lifetime, (iii) establishment of inter-departmental working support to promote coordination and information alignment , (iv) assistance to implement the design of green and resilient infrastructure developed under the project; (v) supporting universal accessibility design for selected infrastructure investments for disabled and elderly, (vi) and (vii) strengthening the capacity of cities with regard to leveraging ICT in city planning functions.

13. The following paras provide a summary of the Indicative Action Plan being developed to facilitate integrated and risk informed planning within the project cities in a phased manner, such that initial interventions are provided in cities that are ready for master plan revision and have higher capacity for absorption of such technical assistance. A short list of the priority cities will be developed based on these criteria. The Action Plan is aimed at supporting the ongoing revision of master plans in the cities aimed at aligning them with the CCAP.

- **Dovetailing Capacity Building program with Master Plan/ Sectoral Plan revisions:** The capacity building program would be effective if it is dovetailed with the preparation of the revised Master Plans and Sectoral Master Plans, rather than as stand-alone workshops and training sessions.
- **Cross department target teams for collaborative planning:** The strategy is also to identify the target teams across various departments concerned with coordinated plan preparation and implementation. This will include officials and staff from DoC, DoNRE, DoT, Water Companies, and companies' in-charge of Sanitation, Information and Communication Technology, Disaster Risk Mitigation, the Project Management Units established etc. This strategic design of target teams will help build a collaborative platform for enabling integrated planning and plan/ project implementation. While the DoC would remain in-charge of undertaking integrated planning and implementation, cities each expressed varied views on ownership of spatial data infrastructure. While some suggested DoC as the owner, cities such as Tan An suggested that the Department of Information Technology must be engaged as coordinator or data management.
- **A two pronged approach to session design:** The capacity building sessions have been conceived within a two pronged approach; first, orientation sessions for senior officials, and, second, job on hands training on GIS enabled integrated planning for staff of the concerned departments. The orientation sessions will form platforms for deliberating upon strategic areas of coordination between departments, identifying areas of regulatory amendments needed, areas of institutional overlaps and gaps etc. Job on hands training for staff will focus on capacitating the staff to handle collection of disaggregated data for addressing environmental and social vulnerabilities, GIS data

base preparation and data updating and management. Through this process they shall be exposed to multi-criteria analysis using GIS platform for risk informing cities.

- **Capacity building agenda:** Capacity building shall address four domains, technical, human resource, equipment and institutional coordination. The main agenda is GIS enabled integrated planning and project implementation. The technical capacity augmentation will need to be accompanied by establishment of adequate equipment including hardware and software; human resource capacities also need to be enhanced for data collection and GIS data management/ data sharing.
- **A two stage capacity building agenda** has been proposed: first, in the short term, (within 0 to 6 months to 01 year), a Technical Assistance program is proposed, in order to define dimensions of integration of Master Plans and Sectoral Plans with CCAP. This will first include high level policy briefings at Ministry level for establishing the macro level protocols and obtaining necessary approvals for undertaking integrated revisions to Master Plans and Sectoral Plans along with a capacity building program; second, post TA assignment, in the mid-term (6^{th} month to 18^{th} month), offer technical support for establishment of the revisions to the Master Plans and Sectoral Plans and for conducting the capacity building program.

14. **Indicative steps for operationalization of Technical Assistance activities: In the short term (1^{st} year)**, a Technical Assistance program is recommended at the Province and City levels for integration CCAP, into Statutory Master Plan and Sectoral Master Plans;

- At the outset, as a common agenda for cities of the Mekong Delta, conduct a High Level Policy Briefing at the Ministry level to discuss policy imperatives for integration of CCAP with revised Master Plan and Sectoral Plans.
- Conduct series of consultative workshops at the ministries at the Central Government levels, with MoC, MoNRE, MoIT, MoH, MoT et al and National Institutes for Informatics and Geomatics, to understand their mandates/ challenges and share initial observations from field; develop frameworks for exploring new urban development planning practices and importance of data for development;
- Conduct consultative workshops between government and non-government organizations to explore areas of synergies;
- Conduct a workshop to promote peer-to-peer learning between Can Tho and the seven MDR cities given the enhanced capacity of Can Tho due to the ongoing activities under the Can Tho Urban Development and Resilience Project. A key aim of the workshop will be to help the cities understand the importance of cross-departmental data sharing and experiences of doing so in Can Tho
- Evaluate possibility and necessity of establishing data centers at the Province level; evaluate financial, institutional, legal and policy barriers for their establishment; integrate efforts with national and international research institutes for this purpose;
- Develop a framework for integration of Master Plans and Sectoral Plans with the recommendations of the CCAP;

- This TA exercise should include engagement with MoC for establishing data centers at Province level for the Province and City, including financial outlays and phasing of investments for the purpose, if these data centers are seen as necessary.

15. **In the medium term (2nd to 3rd year)** as follow up actions, technical support is proposed for dovetailing revision of the master plans, sectoral plans with CCAP and simultaneously assisting the capacity building program. **Indicative steps include:**

- Step 00: Conduct series of consultative workshops for officials of DoC, DoNRE for the concerned province, at the central government level and expose them to data sets currently available and benefits of GIS enabled planning (0-3rd month);
- Step 01: Establish GIS cell/working group at Province level office of the DoC (with minimum equipment, software etc.) (0-6th month);
- Step 02: Orientation sessions: Exposure to Integrated Master Planning – relevant international examples and arriving at what is feasible, with the target team, for the city (3-6th month);
- Step 03: Detailed assessment of vector data available with DoC and all line departments (3-6th month);
- Step 04: List primary surveys for data collection and area of interest (6-8th month);
- Step 05: Integrate 'minimum' disaggregated data collected from sectoral primary surveys (6th to 18th month);
- Step 06: Creation of a GIS Data base including detailed spatial and non-spatial data, at City level, for the city, depending on the capacity of the city (06 to 12th month);
- Step 06: Creating suitable data and maps for generating climate change scenarios/ simulations (06th to 12th month);
- Step 07: Revision of Statutory Land Use Master Plan and integration with CCAP using GIS based technology platform in cities where the integration has not taken place (12th to 18th month);
- Simultaneous revision of key Sectorial Master Plans and integration with CCAP using GIS based technology platform (depending on the capacity of the city) (12th to 18th month);
- Pilot project (optional, depending on the needs and capacity of the city): Urban Design Scheme at watershed levels as subsets of the Statutory Land Use Master Plans and Sectorial Master Plans, using geo-spatial data structure (12th to 18th month);
- Training & Capacity Building Program in use of GIS software, accompanying the above projects: Workshops and job on hands training sessions at DoC for DoC, DoNRE, PPC, CPC staff (06th to 18th month).

16. The expected activities and outputs are as follows:

- Experts, including international consultants, will be engaged to support master plan revision in the form of hand-on work with the cities, and provision of written recommendations and technical

inputs into the revised masterplan. Greater emphasis will be paid on two of the cities whose revision process is aligned with the project cycle and that have the capacity to implement the processes that ensure cross-sectoral integration.

- Manuals on key aspects of master planning will be prepared for use in training.
- Series of workshops to test usability of manuals on principles of risk-informed design and integrated will be carried out.
- Use of planning manuals will be piloted in 2-3 cities selected as test cases for master plan revision using a risk-informed approach.
- In these selected cities, additional support will be explored to develop ICT platforms for enhancing data sharing across departments.
- Implementation and sustainability action plan for mainstreaming integrated and risk-informed planning processes

Table 1.6: Project Financing by Component

	ODA	Share	GoV	Share	Total
C1: Tertiary Infrastructure Upgrading in LIAs	54.2	.86	8.6	.14	62.8
C2: Primary and Secondary Infrastructure	170.1	.74	58.8	.26	228.9
C3: Resettlement Sites	8	.78	2.2	.22	10.2
C4: Implementation Support and Capacity Building	7.7	.28	20.3	.73	28
TOTAL (rounded)	240	.73	90	.27	330

Summary of Project Investments by City

A. Bac Lieu

17. Investment Proposal: Total investment cost, USD 46.3 million; IDA, USD 20 million; SUF, USD 15 million; and counterpart fund, USD 11.3 million.

Table 1.7: Bac Lieu Investment by Component

Component 1
Tertiary infrastructure upgrading for 5 LIAs (LIAs 1, 2, 3, 5, and 6) with a total area of 70.33 ha and 14,370 residents.
Component 2
• Upgrading and rehabilitating lanes with total length of 7.1 km; • Constructing drainage pipelines with total length of 7.1 km; • Upgrading and rehabilitating channel with total length of 0.9 km; • Rehabilitating clean water pipelines with total length of 7.1 km; • Constructing and rehabilitating electricity and public lighting with total length of 7.1 km • Collecting wastewater and connecting with total number of 3,342 HHs;
Component 3
Constructing the new resettlement area in ward 1, total area of 3.04 ha and availability for 98 land plots .

18. *Urban Connectivity*: Connectivity in the city core is weak due to missing links and deterioration of roads. De Lo Road, which includes a bridge crossing the Bac Lieu river, will increase the connectivity between the northern and southern sections of the city. Lo Bo Tay Road will connect the city center to the newly developing “sea economic zone” in the southern coastal area of the city which includes a port, historic sites and tourism areas. The road would also serve as an evacuation route away from coastal areas in the case of severe storms.

19. *Resilience and Climate Change*: Bac Lieu has frequent flooding problems resulting from combinations of high tides and heavy rainfall. The city drains to the Bac Lieu River by gravity. During high tides on the river, the river levels rise above the water levels in the drainage system. Most likely, backflow occurs at high tides. The Bac Lieu River has an open connection to the sea, bringing high tides and salinity to the city area. Moreover, the most important drain of the city, Cau Xang Canal, has a number of sluices, which appear to be closed due to the need to store fresh water for irrigation. As a result of all these factors, the city is frequently flooded to depths of up to 50 cm.

Table 1.8: Bac Lieu Risks

Current drainage/flooding problems	Severe
Water quality drains	Moderate
Tidal range	3.00 m
Town land level	1.5 m +MSL
Risk MSL rise (flooding)	High

Risk MSL rise (salt intrusion)	High
Risk soil subsidence	Very High
Risk Super Storm impact	High
Available model	SIWRR-Mike
National WL monitoring station	At Ganh Hao

B. Ben Tre

20. Investment Proposal: Total investment cost, USD 46 million; IDA, USD 20 million; SUF USD 15 million; and counterpart fund, USD 11 million.

Table 1.9: Ben Tre Investment by Component

Component 1
Tertiary Infrastructure Upgrading for 4 LIAs (LIAs 1, 2, 6, and 7) with a total area of 118.5ha and 7,200 people. • Upgrading and rehabilitating lanes with total length of 11.4 km; • Constructing drainage pipelines with total length of 10.68 km; • Upgrading and rehabilitating channel with total length of 2.97 km; • Rehabilitating clean water pipelines with total length of 16.78 km; • Collecting wastewater and connecting with total number of 1,835 HHs; • Constructing and rehabilitating electricity and public lighting with total length of 12.23 km
Component 2
• Rehabilitated Chin Te Canal, length L=2,80 km; • Rehabilitated 30-4 Canal, length L=0,77km; • Construct Dong Tay Avenue, length L=2,15km; • Construct branch road N6 (length L=1,31km) and N18 (length L=1,32km); • Construct Extension Ngo Quyen road, length L=1,61km;
Component 3
Arranging resettlement in existing resettlement areas which have been constructed with infrastructure in Phu Tan ward with total area of 1 ha.

21. *Urban Connectivity*: The city proposed improvements and construction of four road sections which are in accordance with the city's Master Plan. The proposed roads are all located in the city core and will ensure horizontal and longitudinal connectivity in the urban road network. These roads also enhance the connectivity of four LIAs and a resettlement area under the project.

22. *Resilience and Climate Change*: Ben Tre has minimal flooding and drainage problems. Gravity drainage is possible even during high tides, as the land level is approximately 2 m above MSL. However, with an expanding city the drainage distance to the sea will increase, as well as drainage volumes. For this reason city planning has to be accompanied by updates to the urban drainage plan.

Table 1.10: Ben Tre Risks

Current drainage/flooding problems	Limited
Water quality drains	Moderate
Tidal range	3.00 m
Town land level	2.0 m +MSL
Risk MSL rise (flooding)	Moderate
Risk MSL rise (salt intrusion)	High
Risk soil subsidence	Small
Risk Super Storm impact	Moderate
Available model	SIWRR-Mike
National WL monitoring station	No

C. Long Xuyen

23. Investment Proposal: Total investment cost, USD 56.2 million; IDA, USD 20 million; SUF, USD 20 million; and counterpart fund, USD 16.2 million.

Table 1.11: Long Xuyen Investment by Component

Component 1
Tertiary infrastructure upgrading for 4 LIAs (LIAs 1, 3, 5, and 6) with a total area of 74.78 ha and 24,396 residents. • Upgrading and rehabilitating lanes with total length of 11.43 km; • Constructing drainage pipelines with total length of 12 km; • Collecting wastewater and connecting with total number of 3,087 HHs; • Rehabilitating clean water pipelines with total length of 17.1 km; • Constructing and rehabilitating electricity and public lighting with total length of 13.7 km • Installing new dustbin with total number of 60 sets and dustcarts with total number of 18 sets
Component 2
• Extended Hung Vuong street with length of 1.2 km • Tran Quang Dieu road with length of 0.9 km • Embankment of Long Xuyen canal with length of 2.3 km • Rehabilitating Cai Son canal with length of 1.5 km • Rehabilitating Ba Bau canal with length of 1.1 km • Rehabilitating Ong Manh canal with length of 1.6 km
Component 3
• Phase 1: Arranging resettlement in existing resettlement areas which have been constructed with fully infrastructure in Bac Ha Hoang Ho resettlement area for 50 land plots. • Phase 2: Constructing the new resettlement area at the west of university in My Hoa ward, total area of 4.5 ha, total number of 233 land plots

24. *Urban Connectivity*: The city proposed improvements and construction of two road sections which are in accordance with the city's Master Plan. The proposed roads will ensure the accessibility and connectivity of project LIA in city core, and will fill the gap of existing Hung Vuong to connect the city with

southwest area.

25. *Resilience and Climate Change*: Long Xuyen has a severe risk of flooding due to the possible high Mekong flood levels and the open connections with the principal drains. Moreover, existing primary dike levels appear to be low, to be confirmed by model simulations. There is no problem with salt intrusion. Water quality in the drains is rather bad and needs improvement. Long Xuyen is hardly sensitive to impacts of climate change.

Table 1.12: Risks Long Xuyen

Current drainage/flooding problems	Severe
Water quality drains	Bad
Tidal range	1.5
Town land level	2.5 m +MSL
Risk MSL rise (flooding)	Low
Risk MSL rise (salt intrusion)	None
Risk soil subsidence	Small
Risk Super Storm impact	Minor
Available model	SIWRR_MIKE
National WL monitoring station	At Tan Chau

D. Soc Trang

26. Investment Proposal: Total investment cost, USD 46.3 million; IDA, USD 20 million; SUF, USD 15.45 million; and counterpart fund, USD 11.3 million.

Table 1.13: Soc Trang Investment by Component

Component 1
Tertiary infrastructure upgrading for 6 LIAs (LIAs 1, 2, 3, 4, 5, and 6) with a total area of 132 ha and 9,790 residents. • Upgrading and rehabilitating lanes with total length of 11.6 km; • Constructing drainage pipelines with total length of 8.90 km; • Upgrading and rehabilitating channel with total length of 3.17 km; • Rehabilitating clean water pipelines with total length of 10.43 km; • Collecting wastewater and connecting with total number of 2,176 HHs; • Constructing and rehabilitating electricity and public lighting with total length of 13.25 km
Component 2
• Dredging and embankment of Tra Men A Canal with a length of 2.64km; Construct the access road with a length of 1,78 km along the canal and a width of 2m at each side; Construct tidal gates at the outlets to Maspero River. • Dredging and embankment of Hi Tech Canal with a length of 3.2km • Construct the Nguyen Van Linh Bridge with a length of 145m and a width of 14m; and approaching road with a length of 155m and a width of 14m.

	• Rehabilitation and upgrading of drainage system on both sides of Phu Loi Road with a length of 2.94km. • Rehabilitation and upgrading of drainage system on both sides of Tran Binh Trong Road with a length of 1.49km. • Construct a bridge and No.2. Ring road with a length of 1.3km, width of 20, and the ring road bridge with a length of 97m, width of 14m. • Rehabilitation and upgrading of Dien Bien Phu Road: section 1 from Nguyen Van Lin Bridge to National Highway 1A and section 2 from bridge of ring road No.2 to the station of the boat racetrack with widths of 14m and lengths of 1km and 1.9km respectively.
Component 3	
	Construct and expand 1ha resettlement areas including road, water supply and drainage, electricity system and social infrastructure.

27. *Urban Connectivity*: The city proposed improvements and construction of two road sections together with two small bridges which are in accordance with the city's Master Plan. All of these are to connect to and to fullfil the main urban aterial (Dien Bien Phu street) of the city. The first section will significantly improve the connectivity in urban core area, while the second section will ensure the connection of the ring road and the main radial road. It is recommended that the design and scope of the ring road investment be revisited during implementation.

28. *Resilience and Climate Change*: Soc Trang has a high risk of flooding due to the combination of spring tides and monsoon surge, as the urban drainage system has open connections to the tidal rivers. Flood hazard mapping for this city is important to provide insight into the risks. The city is also very sensitive to climate change as dikes may get overtopped more frequently. The already severe problems with salt intrusion will most likely increase.

Table 1.14: Risks Soc Trang

Current drainage/flooding problems	Severe
Water quality drains	Bad
Tidal range	2.5
Town land level	1.5 m +MSL
Risk MSL rise (flooding)	High
Risk MSL rise (salt intrusion)	High
Risk soil subsidence	Moderate
Risk Super Storm impact	Moderate
Available model	SIWRR_MIKE
National WL monitoring station	At Dai Ngai

E. Tan An

29. Investment Proposal: Total investment cost, USD 43.9 million; IDA, USD 20 million; SUF, USD 15million; and counterpart fund, USD 8.9 million.

Table 1.15: Tan An Investment by Component

Component 1
Tertiary infrastructure upgrading for 4 LIAs (LIAs 1, 2, 3, and 4) with a total area of 52 ha and 5,672 residents. • Upgrading and rehabilitating lanes with total length of 4.31 km; • Constructing drainage pipelines with total length of 2.15 km; • Upgrading and rehabilitating the channel with total length of 2.25 km • Collecting wastewater and connecting with total number of 1,418 HHs; • Rehabilitating clean water pipelines with total length of 2.15 km; • Constructing and rehabilitating electricity and public lighting with total length of 2.15 km
Component 2
• Embanking and constructing the park along Bao Ding river with length of 1.3 km, constructing the road with length of 1km. • Rehabilitating Cau Tre canal with length of 1.24 km • Constructing ring road with length of 6.0 km • Rehabilitating and upgrading Luu Van Te road with length of 1.85 km • Constructing the road connecting Tran Phong Sac road and Nguyen Minh Duong road with length of 0.5 km
Component 3
Arranging resettlement in existing resettlement areas which have been constructed with full infrastructure including wards 1 & 3 and Binh Tam resettlement area with total number of 175 land plots

30. *Urban Connectivity*: The extension of Tran Phong Sac Road to Nguyen Minh Duong road fills a gap in connectivity between the roads and is highly justified in terms of improving connectivity within the city core. The widening and upgrading of Luu Van Te road is also justified given its poor condition. This road will both connect National Highway 1a to Nguyen Van Tao road as well as improve the connectivity of Cau Tre LIA to other communities. Ring road construction will reduce the truck traffic through the urban core while also connecting the industrial zone and sports center area to with the city center. This road is expected to support the ambition of the city to become a Class II city in 2020 and a Class I city in 2030 and guide development towards the south where flood risk is lower. However, it is recommended that the design and scope of the ring road investment be revisited during implementation with attention to its potential for urban sprawl.

31. *Resilience and Climate Change*: Tan An is drained to the West Vam Co River via a dense network of canals. Problems with the system are sediment deposits and bank erosion. Also channel encroachment by houses contributes to problems with the drainage. The further development of the drainage network cannot catch up with the high speed of urbanization. Driving forces for city flooding are: local heavy rainfall, East Sea influence with tides and wind setup and Mekong floods influencing the West Vam Co River.

Table 1.16: Tan An Risks

Current drainage/flooding problems	Limited
Water quality drains	Moderate
Tidal range	2.00 m

Town land level	2.4 m +MSL
Risk MSL rise (flooding)	Moderate
Risk MSL rise (salt intrusion)	Moderate
Risk soil subsidence	Small
Risk Super Storm impact	Small
Available model	SWMM
National WL monitoring station	Yes

F. Vi Thanh

32. Investment Proposal: Total investment cost, USD 36.8 million; IDA, USD 20 million; SUF, USD 5 million; and counterpart fund, USD 11.8 million.

Table 1.17: Vi Thanh Investment by Component

Component 1
Tertiary infrastructure upgrading for 4 LIAs (LIAs 1, 2, 3, and 7) with a total area of 126.1 ha and 7,732 residents. • Upgrading and rehabilitating lanes with total length of 13.03 km; • Constructing drainage pipelines with total length of 9.09 km; • Upgrading and rehabilitating channel with total length of 3.51 km; • Collecting wastewater and connecting with total number of 1,718 HHs; • Rehabilitating clean water pipelines with total length of 13.03 km; • Constructing and rehabilitating electricity and public lighting with total length of 15.6 km
Component 2
• Rehabilitating canal 62, L=2.2km; • Rehabilitating canal Cai Nhuc, L=2.0km; • Constructing green park and lake – Tam Giac lake, area F=3.0ha; • Constructing extended Nguyen Hue street (03 segments), L= 2.4km; • Expanding road 1/5 (Section from Quan Mieu to NH61C), L= 2.60km;
Component 3
Arranging resettlement in existing resettlement areas which have been constructed with full infrastructure including ward 4 and Lien Minh resettlement area with total number of 1,500 land plots.

33. *Urban Connectivity*: NH61, Nh61b, PR931, and PR933 run through the city providing connectivity within the city and with other regions. Vi Thanh is a planned city has perfect conditions (small city with short travel distances, large sidewalks, roads along canals) to encourage cycling and pedestrian oriented development, with attention to increased accessibility for the disabled and the elderly. In particular, Nguyen Hue and Le Hong Phong roads can be designed and constructed in such a way so as to create a cycle paths along the canal.

34. *Resilience and Climate Change*: Vi Thanh has frequent local flooding problems. These are caused by combinations of heavy rainfall, high tides and floods arriving from the Bassac River. The land level is

only just above the maximum tide and flood level of the wide Xa No canal passing through the city. At Vi Thanh, the tidal range is approximately 0.5 m. Due to the large water storage capacity in the O Mon Xa No area, this is less than at the South Sea, which has a tidal range of approximately 1 m. Other problems related to water at Vi Thanh are salt intrusion and poor drainage water quality. For newly developed urban areas, land levels will be raised to at least 1.80 m above reference before construction. The level of 5 main roads has recently been raised by 0.70 m. Before, these roads were often flooded at depths of 0.20 – 0.30 m. However, this does not solve the flooding of the terrain around these roads.

Table 1.18: Vi Thanh Risks

Current drainage/flooding problems	Severe
Water quality drains	Bad
Tidal range	0.50 m
Town land level	0.5 m +MSL
Risk MSL rise (flooding)	High
Risk MSL rise (salt intrusion)	High
Risk soil subsidence	Small
Risk Super Storm impact	Small
Available model	SIWRR-Mike
National WL monitoring station	No

G. Vinh Long

35. Investment Proposal: Total investment cost, USD 54.5 million; IDA, USD 20 million; SUF, USD 15 million; and counterpart fund, USD 19.5 million.

Table 1.19: Vinh Long Investment by Component

Component 1
Tertiary infrastructure upgrading for 3 LIAs (LIAs 1, 3 and 4) with a total area of 49.9 ha and 21,217 residents. • Upgrading and rehabilitating lanes with total length of 5.47 km; • Constructing drainage pipelines with total length of 5.36 km; • Upgrading and rehabilitating channel with total length of 5.1 km; • Rehabilitating clean water pipelines with total length of 10.7 km; • Constructing and rehabilitating electricity and public lighting with total length of 5.1 km; • Collecting wastewater and connecting with total number of 2,020 HHs; • Installing new dustbin with total number of 50 sets and dustcarts with total number of 10 sets
Component 2
• Rehabilitating Kinh Cut river with total length of 0.54 km; • Rehabilitating Cau Lau river with total length of 0.86 km; • Constructing bordering road between ward 2 – ward 9 (Nguyen Truong To street) with total length of 1.75 km; • Constructing Bo Kenh road (riverside road) in ward 3 with total length of 1. 5 km; • Constructing Vo Van Kiet street with total length of 0.62 km

Component 3
Arranging resettlement in existing resettlement areas which have been constructed with full infrastructure including ward 4 resettlement area with total number of 128 land plots

36. *Urban Connectivity*: Two road sections are proposed for upgrading and one for new construction under this project. These roads are located in the urban core, although they are short in length, they will contribute to improvement of the connectivity in urban core area as well as the transport network development. The project roads will ensure the accessibility to education, healthcare, and cultural activities for the poor residents.

37. *Resilience and Climate Change*: Vinh Long has a high risk of flooding due to the combination of spring tides and monsoon surge, as the urban drainage system has open connections to the tidal rivers. Fortunately, possible super storms will only have a limited impact on flooding of the city. The city also faces severe salinity problems. The risk of soil subsidence is moderate, though it will have immediately an impact on flood risk. Vinh Long is also very vulnerable to the impacts of climate change.

Table 1.20: Risks Vinh Long

Current drainage/flooding problems	Severe
Water quality drains	Moderate
Tidal range	2.5 m
Town land level	1.5 m +MSL
Risk MSL rise (flooding)	Moderate
Risk MSL rise (salt intrusion)	High
Risk soil subsidence	Moderate
Risk Super Storm impact	Small
Available model	SIWRR_MIKE
National WL monitoring station	At My Thuan

Table 1.21: Detailed Project Cost by Component

NO	Work Items	Bạc Liêu (USD)			Bến Tre (USD)			Long Xuyên (USD)			Tân An (USD)			Sóc Trăng (USD)			Vị Thanh (USD)			Vĩnh Long (USD)			Tổng		
		IDA	IDA SUF	Counter part's fund	IDA	IDA SUF	Counter part's fund	IDA	IDA SUF	Counter part's fund	IDA	IDA SUF	Counter part's fund	IDA	IDA SUF	Counter part's fund	IDA	IDA SUF	Counter part's fund	IDA	IDA SUF	Counter part's fund	IDA	IDA SUF	Counter part's fund
I	**Component 1**	**5.40**	**-**	**1.20**	**5.60**	**-**	**1.20**	**5.20**	**-**	**0.50**	**5.90**	**-**	**0.90**	**5.50**	**-**	**2.10**	**4.80**	**-**	**1.40**	**6.80**	**5.80**	**0.80**	**39.20**	**5.80**	**8.10**
1.1	Civil works equipment	5.10	-	-	5.30	-	-	5.00	-	-	5.70	-	-	5.30	-	-	4.60	-	-	6.20	5.80	-	37.2	5.8	0
1.2	Consultant	0.30	-	-	0.30	-	-	0.20	-	-	0.20	-	-	0.20	-	-	0.20	-	-	0.60	-	-	2	0	0
1.3	Land acquisition resettlment	-	-	1.20	-	-	1.20	-	-	0.50	-	-	0.90	-	-	2.10	-	-	1.40	-	-	0.80	0	0	8.1
II	**Component 2**	**9.90**	**10.40**	**6.50**	**10.10**	**12.40**	**6.10**	**6.80**	**16.50**	**9.60**	**9.30**	**12.40**	**4.90**	**10.50**	**11.80**	**5.30**	**10.80**	**4.10**	**7.30**	**9.40**	**5.90**	**14.10**	**66.8**	**73.5**	**53.8**
2.1	Civil works equipment	8.90	10.40	-	8.80	12.40	-	5.60	16.50	-	9.00	12.00	-	9.40	11.80	-	10.20	4.10	-	8.50	5.90	-	60.4	73.1	0
2.2	Consultant	1.00	-	-	1.30	-	-	1.20	-	-	0.30	0.40	-	1.10	-	-	0.60	-	-	0.90	-	-	6.4	0.4	0
2.3	Land acquisition resettlment	-	-	6.50	-	-	6.10	-	-	9.60	-	-	4.90	-	-	5.30	-	-	7.30	-	-	14.10	0	0	53.8
III	**Component 3**	**0.10**	**2.00**	**0.40**	**-**	**-**	**-**	**3.40**	**-**	**1.50**	**0.93**	**-**	**-**	**0.20**	**-**	**0.10**	**-**	**-**	**-**	**-**	**-**	**-**	**4.63**	**2**	**1.90**
3.1	Civil works equipment	-	2.00	-	-	-	-	3.20	-	-	0.90	-	-	0.20	-	-	-	-	-	-	-	-	4.3	2	0
3.2	Consultant	0.10	-	-	-	-	-	0.20	-	-	0.03	-	-	0.01	-	-	-	-	-	-	-	-	0.34	0	0
3.3	Land acquisition resettlment	-	-	0.40	-	-	-	-	-	1.50	-	-	-	-	-	0.10	-	-	-	-	-	-	0	0	1.90
IV	**Component 4**	**1.10**	**-**	**2.40**	**0.90**	**-**	**2.50**	**1.10**	**-**	**2.80**	**0.40**	**-**	**2.10**	**0.40**	**0.60**	**2.60**	**1.00**	**-**	**1.90**	**0.40**	**0.70**	**2.60**	**5.3**	**1.3**	**16.90**
	Toatl of I+II+III+IV	**16.50**	**12.40**	**10.50**	**16.60**	**12.40**	**9.80**	**16.50**	**16.50**	**14.40**	**16.50**	**12.40**	**7.90**	**16.60**	**12.40**	**10.10**	**16.60**	**4.10**	**10.50**	**16.60**	**12.40**	**17.50**	**115.93**	**82.60**	**80.70**
C	VAT (10%)*	1.70	1.20	0.25	1.60	1.20	0.20	1.70	1.70	0.30	1.70	1.20	0.20	1.60	1.20	0.20	1.60	0.40	0.20	1.60	1.20	0.20	11.50	8.10	1.6
D	Contigency cost (10%)	1.80	1.40	0.55	1.80	1.40	0.90	1.80	1.80	1.50	1.80	1.40	0.80	1.80	1.40	1.00	1.80	0.50	1.10	1.80	1.40	1.80	12.60	9.30	7.7
E	**Sum**	**20.00**	**15.00**	**11.30**	**20.00**	**15.00**	**10.90**	**20.00**	**20.00**	**16.20**	**20.00**	**15.00**	**8.90**	**20.00**	**15.00**	**11.30**	**20.00**	**5.00**	**11.80**	**20.00**	**15.00**	**19.50**	**140.0**	**100.0**	**90**
F	**Total of funding sources**	**35.00**		**11.30**	**35.00**		**10.90**	**40.00**		**16.20**	**35.00**		**8.90**	**35.00**		**11.30**	**25.00**		**11.80**	**35.00**		**19.50**	**240.0**		**90**
G	**Total investment amount**	**46.3**			**45.9**			**56.2**			**43.9**			**46.3**			**36.8**			**54.5**			**330**		
	Ratio	*43.2 %*	*32.4 %*	*24.4 %*	*43.6 %*	*32.7 %*	*23.7 %*	*35.6 %*	*35.6 %*	*28.8 %*	*45.6 %*	*34.2 %*	*20.3 %*	*43.2 %*	*32.4 %*	*24.4 %*	*54.3 %*	*13.6 %*	*32.1 %*	*36.7 %*	*27.5 %*	*35.8 %*	*42.4 %*	*30.3 %*	*27.3 %*

ANNEX 2: IMPLEMENTATION ARRANGEMENTS

COUNTRY : Vietnam
Vietnam Scaling up Urban Upgrading Project

Project Institutional and Implementation Arrangements

1. The project will be implemented in a decentralized manner under the direction of city administrations. In the case of Soc Trang and Vin Long, the project will be implemented at the provincial level.

2. **Project Steering Committee**. In each project city, the Provincial People's Committee has established a Project Steering Committee (PSC) to guide, support, and supervise the respective PMUs. The PSC will be chaired by a senior PPC official and include director/deputy director –level representatives of key provincial departments and agencies including the Departments of Planning and Investment, Industry and Trade, Construction, Agriculture and Rural Development, Transport, Natural Resources and Environment, and Finance. The PSC is responsible for guidance, support and supervision of the project investments and the PMU.

3. **Project Management Unit.** Each city has established a Project Management Unit (PMU) drawing on staff from existing City Infrastructure Investment PMUs. Members include the PMU director, deputy directors, chief accountant, chief engineer, senior procurement specialist, financial specialist, environmental specialist, social safeguards specialists and supporting staff for coordination and planning. These city administrators have experience in the construction of public infrastructure and are familiar with the context and challenges in their cities, though they lack capacity and experience in managing large ODA projects financed by the World Bank. PMUs will be provided with capacity building in various aspects of project management including procurement, financial management, and contract management in order to successfully implement all components of the project.

4. **Capacity Constraints and Consultant Support**. Robust consultant support will be provided during implementation to train PMUs in the areas of project management, social and environmental safeguards and monitoring and evaluation.

5. **The PMUs, supported by consultants, are responsible to collect and interpret the Project's outcome and results indicators**. The Project monitoring indicators were developed recognizing the capacity, availability of data, and costs of M&E. The project city elected to assume the project coordination role, in conjunction with a consultant team, consolidating all M&E indicators to track project-wide results.

6. **Partnership Arrangements.** There are limited investments at the city level in the seven project cities and SUUP remains the primary donor. In anticipation of future demand, capacity will be built in cities. The Steering Committees established under SUUP can gain the necessary experience in order to provide clear donor coordination in the future. At present, the task team has reached out to ADB and GIZ to align the hydraulic modeling done with GFDRR support with wastewater collection and treatment projects undertaken by ADB in the cities of Vinh Long and Ben Tre; and the ongoing GIZ Flood Proofing

and Drainage project in Soc Trang, Long Xuyen. During preparation workshops with the cities, the importance of aligning the modelling for future investments has also been emphasized.

Financial Management

7. **The Financial Management Assessment (FMA) identified the following key risks associated with the Project**: (i) The proposed cities or provincial Project implementing agencies have no prior experience in working with Bank funded projects and are therefore not familiar with the FM requirements of the Bank; (ii) The Project follows a fully decentralized design which provides more flexibility and autonomy to provinces but also requires more capacity and accountability of provinces especially with regards to fund flow monitoring and financial reporting requirements. This requires good FM management and coordination between Project implementing agencies; (iii) There is no government body acting to coordinate, consolidate and monitor Project FM works. Instead, each participating province has to take full responsibility for Project FM works. Therefore, a '**High**' FM risk is assigned to the Project prior to the completion of the mitigation measures.

8. The main mitigation actions required are: (i) acceptable FM staff should be appointed at all implementing agencies and receive the necessary training on Bank FM requirements and disbursement procedures; (ii) a Project FMM shall be developed as a part of the POM describing the details of the roles and responsibilities of parties concerned and specifying the FM procedures and regulations of the Project; (iii) Project accounting software shall be upgraded and installed and training provided to all accounting staff; and (iv) Audit TORs (both internal and external audits) to conduct audit for Project activities shall be developed and reviewed by the Bank. It is expected that after these measures are fully implemented, the Residual Risk will be reduced to **Substantial**.

9. **Project staffing.** By appraisal stage, PPMUs at all provincial levels had assigned FM staff with acceptable accounting qualifications and experience to be responsible for Project accounting works. Training on Bank FM requirements and disbursement procedures have also been provided to the relevant FM personnel at the proposed implementing agencies during preparation.

10. **Budgeting and counterpart funding arrangements.** Commitments on counterpart funding arrangements for the Project at all provinces have been provided to ensure Project counterpart funds are available during and after Project implementation. Budgeting procedures, including roles and responsibilities of each position within PPMUs, the budgeting process, and the link between the procurement plan, the physical plan, the financial plan, and the disbursement plan shall be developed in the Project FM Manual.

11. **Accounting system.** For the Project, a consistent accounting system will be applied including accounting policies and procedures following the Accounting System for Investment Owner, Decision 195 of the Ministry of Finance (MoF) at provincial level. The chart of account will be modified when necessary to meet the Bank FM requirements.

12. **Accounting software.** A computerized accounting system will be upgraded and installed for use at all implementing agencies to provide a consistent accounting and reporting function to the investment owner and the Bank.

13. **Internal controls.** Internal control procedures are established in the Project FM Manual.

14. **Financial reporting.** Semi-annual Interim Financial Reports (IFRs): Each implementing agency at provincial level will prepare a Project semi-annual Financial Monitoring Report (FMR). The project FMRs will cover all Project activities, including counterpart funding. The FMRs will be based on the Aligned Monitoring Tool (AMT), which is regulated by the Ministry of Planning and Investment, and sent to the Bank within 45 days of the end of reporting period.

15. **Annual Project Financial Statements.** Each implementing agency at provincial level will prepare an annual financial statement covering all Project components and activities. The annual Project financial statements are required to be audited and submitted to the Bank within 6 months of the end of each financial year.

16. **Internal Audit**: Under this Project, the Project investment owner (either cities or provinces) will be responsible for assigning an internal audit team to be in charge of conducting internal audit for the Project. The TOR of the internal auditors will be approved by the Bank. The capacity of the assigned internal auditors will be built through relevant trainings in other Bank Projects. The internal audit activities shall be conducted on semi-annual basis and the internal audit reports shall be prepared and submitted to the Bank within 30 days of the end of the internal audit period.

17. **External Audit.** Each provincial Project implementing agency will appoint an independent auditor acceptable to the Bank. The Project financial statements will be audited annually in accordance with International Auditing Standards and acceptable terms of reference. The auditors' reports will be made available to the Bank within six months of the close of the fiscal year.

18. **Measures to address fraud and corruption**. The implementing agencies will implement strict contract management to avoid overpayment/overrunning contract budgetary allocations. The contract management will be part of IFRs. The following will be carried out to mitigate the risks of fraud and corruption: (a) clear FM responsibilities in the FM Manual; (b) internal and external audits; and (c) enhanced disclosure and transparency of financial information.

Disbursements

19. **Designated Accounts**. Seven (07) Designated Accounts (DAs) will be opened in US Dollars (US$) at commercial banks under terms and conditions satisfactory to IDA. Seven (07) provinces including Ben Tre, Bac Lieu, Long Xuyen, Soc Trang, Tan An, Vi Thanh and Vinh Long will maintain separate DAs. The Designated Accounts will have variable ceilings based on one (1) quarter's forecast within approved annual financing plan.

20. **Funds Flow Arrangements**. The Project will use the following disbursement methods as stipulated in the Disbursement Letter: advance, reimbursement, special commitment and direct payment. The PMU/PPMUs will report to the Bank on the operation of the DAs on a quarterly basis or more often if required. Reporting on the use of advances and requesting reimbursement would be documented based on the Statements of Expenditures (SOEs), together with required statements or records. The Minimum

Application Size for Reimbursement, Special Commitment and Direct Payments will be specified in the Disbursement Letter.

21. The Project will have a Disbursement Deadline Date (final date on which the Bank will accept applications for withdrawal from the borrower or documentation on the use of credit proceeds already advanced by the Bank) four months after the Closing Date. This "Grace Period" is granted in order to permit the orderly project completion and closure of the Credit Account via the submission of applications and supporting documentation for expenditures incurred on or before the Closing Date. Expenditures incurred between the Closing Date and the Disbursement Deadline Date are not eligible for disbursement. A table outlining the allocations and disbursement percentages for the different disbursement categories is as follows:

Category	Amount of the Credit (Credit No. 6056 - VN) Allocated (expressed in USD)	Amount of the Financing (Credit No. 6055 - VN) Allocated (expressed in SDR)	Percentage of Expenditures to be financed (inclusive of Taxes)
(1) Goods, works, non-consulting services, and consultants' services, for Bac Lieu under Components 1, 2, 3 and 4.1 of the Project	15,000,000	14,742,857	100%
(2) Goods, works, non-consulting services, and consultants' services, for Ben Tre under Components 1, 2, 3 and 4.1 of the Project	15,000,000	14,742,857	100%
(3) Goods, works, non-consulting services, and consultants' services, for Long Xuyen under Components 1, 2, 3 and 4.1 of the Project	20,000,000	14,742,857	100%
(4) Goods, works, non-consulting services, and consultants' services, for Soc Trang under Components 1, 2, 3 and 4.1 of the Project	15,000,000	14,742,857	100%
(5) Goods, works, non-consulting services, and consultants' services, for Tan An under Components 1, 2, 3 and 4.1 of the Project	15,000,000	14,742,857	100%

(6) Goods, works, non-consulting services, consultants' services, for Vi Thanh under Components 1, 2, 3 and 4.1 of the Project	5,000,000	14,742,857	100%
(7) Goods, works, non-consulting services, and consultants' services, for Vinh Long under Components 1, 2, 3 and 4.1 of the Project	15,000,000	14,742,858	100%
TOTAL AMOUNT	**100,000,000**	**103,200,000**	

22. Counterpart funding of $90 million will be used to finance expenditures across all four project components. The majority of funding (about $58 million) will finance land acquisition under components 1, 2 and 3. Additionally, counterpart funding will also be used for consultant services and operating costs for such activities as PMU operating costs, monitoring of environmental and social safeguards, construction supervision, contract management, workshops and training etc. that are not covered by Bank financing.

Procurement

23. **Procurement Capacity and Risk Assessment:** The seven PMUs in the project cities will be directly responsible for the day-to-day implementation of their respective subproject including procurement. The Bank carried out an assessment and found that (i) while the PMUs have already been established and are operational, they still lack both qualified procurement staff and experience with Bank procurement and contract management; (ii) procurement readiness is low with regards to investment lists, detailed designs, and bidding documents which are yet to be finalized; (iii) internal clearance and approval procedures, especially for technical issues, might be time-consuming affecting timeliness of procurement activities; (iv) there were a rather high number of procurement complaints including allegations of fraud and corruption received under similar projects in the past. The main risks identified are noncompliance, delays and compromised integrity and mismanagement of contracts due to inadequate procurement readiness; time-consuming clearance/approval process, and weak capacity of the implementing agencies. The procurement risk for the proposed project is rated **High** prior to mitigation measures.

24. **Risk Mitigation Measures:** To strengthen the procurement capacity and mitigate the identified risks, the following major mitigation measures have been agreed with the PCU/PMUs and are being implemented. It is expected that after these measures are fully implemented, the Residual Risk will be reduced to **Substantial**.

No	Actions	Responsible Agency	Expected Date of Completion
1	Strengthening the organization and staffing of PCU/PMUs: each PMU should appoint at least **two**	Project Cities	Effectiveness

	qualified Procurement Specialists and **one** staff responsible for STEP; develop a set of clear operational regulations including detailed job descriptions for each key expert and appropriate detailed ethical requirements in accordance with the national laws		
2	Delegating the procurement responsibility and accountability to the Project Cities and streamlining the technical appraisal/approval responsibility and accountability of the Project Provinces' relevant departments	Project Provinces and Cities	During the first year of implementation
3	Hiring qualified procurement consultants to support the PMUs	Project Cities/PMUs	During project preparation and throughout project procurement implementation period
4	Developing a POM including a detailed guidance on each step of procurement process for PMU staff's regular reference	PMUs	Ongoing and expected to be ready by effectiveness
5	Hiring qualified consultants to prepare FS, detailed designs, Procurement Plan and bidding documents in a timely manner	PMUs	Draft detailed design for the first 30% investments and draft bidding documents for selected contracts were made available and are expected to be finalized by effectiveness; design consultants for remaining 70% works to be hired 12 months after effectiveness.
6	Regularly updating Procurement Plans, closely track and monitor PCU/PMU procurement performance through STEP	Bank/PCU/ PMUs	Throughout project implementation
7	Regularly training staff and officials in the PCU/PMU and in the Cities' relevant departments on STEP, procurement and contract management, anti-fraud and corruption	Bank/Project Cities/PCU/ PMUs	Throughout project implementation period
8	Carrying out appropriate measures to safeguard the transparency, fairness and integrity of the procurement and contract management processes. Such measures include, but are not limited to: disclosure of procurement information in the Project websites, increasingly using the National Electronic Procurement System (VNEP) including e-	PMUs	Throughout project implementation

	tendering, arranging a highly secured room for keeping bid/proposal documents during procurement process, having bid evaluators sign and execute a Code of Conduct when performing their duties, carrying out due diligence prior to awarding contracts, strictly managing contracts, establishing an effective mechanism to receive and handle procurement complaints, acceptable to the Bank.		
9	Employing qualified international/national consulting firms for construction and contract management	PMUs	Supervision consultants for Phase 1 hired by 6 months after effectiveness; consultants for other works hired 18 months after effectiveness.
10	Engaging internal and external auditors (including the Ministry of Planning and Investment Inspectorate (MPII) if appropriate) to regularly review and audit the PMU's performance (including procurement post review	Bank/ PMUs	Throughout project implementation

25. **Procurement Arrangements:** Procurement for the proposed project shall be carried out in accordance with the World Bank's "Guidelines: Procurement of Goods and Non-consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers" dated January 2011, revised July 2014 ("Procurement Guidelines"), and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers" dated January 2011, revised July 2014 ("Consultant Guidelines"). The specific procurement methods, their application thresholds, and the thresholds for the Bank's Prior Review to be applied for the proposed project are indicated in the Table below:

Category	**Applicable Procurement Method Thresholds***	**Bank's Prior Review Thresholds***
Works	ICB: NCB** Shopping: <US$0.2 m/contract Direct Contracting (DC): exceptional circumstances	Above US$10 m
Goods and Non-Consulting Services	ICB: NCB** Shopping: <US$0.1 m /contract Direct Contracting (DC): exceptional circumstances	Above US$2 m

Consulting Services***	QCBS: preferred method QBS: by nature & complexity LCS: by nature & complexity CQS: <US$0.3 m/contract SSS: exceptional circumstances Individual Consultant (IC): by nature & complexity	Above US$1 m for firms and above US$0.3 m for individual consultants

* These procurement method and prior review thresholds are indicative and subject to change based on the PPSD by the PMUs and risk assessment by the Bank. Contracts below these Prior Review thresholds shall be subject to Post Review. The Bank will carry post reviews annually with a minimum coverage of 20 percent of these post-reviewed contracts.
**The NCB procedures shall be those set forth in Vietnam's procurement laws and regulations, but subject to modifications, waivers, and exceptions as set forth in the NCB Annex to the Financing Agreement
***Shortlists for contracts below US$0.5 million/contract may comprise entirely national consultants.

26. **PPSD and Procurement Plan**: The PMUs prepared a Project Procurement Strategy for Development (PPSD) for the project. This PPSD assessed that project procurement activities are of simple technical nature and low to medium values. These activities are not attractive to foreign firms but local ones and there are sufficient capable local bidders available. The PPSD therefore determined that open competitive bidding with national market approach is the best approach to help support the project development objectives of the project and deliver the best value for money. The PPSD however identified the following key risks that could negatively impact the procurement implementation: (i) low procurement readiness (detailed design, bidding documents); (ii) low capacity of PMUs; (iii) delays in internal procurement clearance and approval; and (iv) selection of unqualified contractors/consultants. Key measures proposed address these risks include early recruitment of consultants for preparation of detailed designs and bidding documents, intensive training for PMUs, streamlining of internal clearance and approval procedures, suitable contract packaging and due diligence in procurement and contract management. The PPSD will be updated during the project implementation based on actual procurement progress and further developments on operational context, institutional capacity, market conditions.

27. Based on the above PPSD, the PMUs have prepared a draft detailed Procurement Plan for the initial 18 month period of project implementation (refer to the separate document attached). This 18 month Procurement Plan has been discussed and found acceptable to the Bank. The Procurement Plan shall also be updated throughout the duration of the project at least annually by including contracts previously awarded and to be procured in the next 12 (twelve) months. The Procurement Plan and their updates or modifications shall be subject to Bank's Prior Review and no-objection. The updating of Procurement Plan and monitoring and tracking of procurement activities will be conducted through the Bank's STEP system. The Bank shall arrange after project negotiations, the publication on the Bank's external website of the agreed initial procurement plan and all subsequent updates.

Environmental and Social (including safeguards)

Environmental (including Safeguards)

28. The subprojects' overall potential socio-environmental impacts would be positive as they are expected to bring about: (i) improved environmental sanitation and urban landscape in the public areas and LIAs; (ii) increased wastewater collection and urban drainage capacity; (iii) minimize discharge of untreated wastewater into the environment; (iv) reduction of public health risks associated with water-borne diseases and related healthcare costs; (v) reduction of safety risks and asset loss caused by inundation; (vi) increased accessibility of local people to nearby areas; (vi) additional economic, social, environment and aesthetic benefits from the construction of linear parks along river/canal/lake embankments.

29. The potential negative environmental and social impacts are associated with the proposed physical investments. These include commonly known construction impacts and risks, such as: (i) disturbance to the habitats of aquatic species; (ii) increased levels of dust, noise, vibration; (iii) pollution risks related to the generation of waste and wastewater, particularly moderate amounts of non-contaminated excavated/dredging materials; (iv) traffic disturbances, and increased traffic safety risks; (v) risks of bank erosion and embankment subsidence as well potential negative impacts to existing weak facilities during the river/canal embankment process; (vi) interruption of existing infrastructure and services such as water and power supply; (vii) disturbance to daily socio-economic activities in the project area; (viii) health and safety issues related to the public and the workers at construction sites; and (ix) social impacts associated with land acquisition and construction disrupting businesses, agriculture and aquaculture activities as well as waterway traffic due to construction related activities and mobilization of workers to the site.

30. The main issues during the operation of project investments includes the small amount of sludge generated from sewage and drainage systems; management of the small amount of wastewater and domestic solid waste from the upgraded LIAs and resettlement areas; traffic management during the operation of the newly constructed roads and bridge; maintenance to ensure the stability of the embankments and aesthetic values of the rehabilitated canals/rivers/lakes and ponds. These impacts are long-term, moderate and manageable.

31. *Potential Impacts on Natural Habitats*. The subprojects under SUUP are located in the urban area and will not impact any sensitive forest or critical terrestrial natural habitat. Some of civil works will be implemented on existing water courses such as Long Xuyen Canal in Long Xuyen, Bao Dinh river in Tan An; Muong Lo, Cai Nhuc and No 62 Canals, Tam Giac Lake in Vi Thanh; Cau Lau and Kenh Cut Canals in Vinh Long, etc.; these works would potentially impact the natural habitat. Thus, the policy on natural habitat is triggered. The project is anticipated to have potential positive impacts on the natural environment of the rivers, canals, lake within or running through the city as it includes interventions on water environmental sanitation i.e. wastewater collection, dredging and embankment activities. The embankment of the canals, rivers, lake, and pond will reduce soil erosion on the shore banks, reduce the pollution load and prevent the encroachment of local people on the water courses.

32. The results of the ESIAs process indicated that the proposed project would not impact any protected area nor will it affect important/endangered flora or fauna species or biodiversity areas of high

value. The impact of the dredging process could cause the loss of benthic habitat and disturbance of benthic organisms during the construction process. It should be noted that the watercourses are polluted by unregulated, untreated domestic effluents and could be exacerbated during dredging by remobilization of sediments and increased turbidity. The impacts are localized, varying from a minor to a moderate scale depending on whether dredging is conducted in dry or wet conditions. In the long term, the water quality will be enhanced during operation and the impacts are therefore assessed as temporary and reversible and could be mitigated by good construction and management practices.

33. *Potential impacts on Physical and Cultural Resources*: In all seven cities there are temples, pagodas, and churches located within the area under direct influence of the project. The potential impacts would be decreased aesthetic values; disturbance caused by the workers' presence and activities, or noise from trucks; traffic safety risks to local people, particularly at peak hours; and increased traffic safety risks.

34. The project will involve grave relocation in cities subprojects, which are considered as PCR in the Vietnamese context. The numbers of graves for each city are: Bac Lieu: 43; Ben Tre: 92; Long Xuyen: 27, Vi Thanh: 87; Vinh Long: 168. The project implementation will result in land acquisition of some yards and fences of religious facilities; i.e. in Soc Trang: 328 m2 of gardening land of the Van Dien religious facility; 100 m2 of gardening land and 200m of fence of the Ngoc Hung pagoda; 36 m2 of Long Hung Pagoda; and in Vinh Long city, 130 m2 garden land of the Hung An Tu Pagoda. In addition, the project involves dredging and excavation activities and may therefore result in chance finds. Mitigation measures to address impacts to PCRs and a chance finds procedure have been included in the subproject ESMPs and RP.

35. *Lessons learned from MDR UUP*. Under the MDR-UUP, the environmental safeguards implementation in the six participating cities has been assessed as "Moderately Satisfactory" or better. Drawing on the experience gained so far in environmental management and supervision, the following lessons will be applied for the SUUP during preparation:

- From an early stage, close monitoring and guidance from the Bank's safeguards team is necessary to ensure proper functioning of the safeguards management system;
- Full supervision of ESMP implementation by Construction Supervision Consultant (CSC) is necessary to ensure project progress in accordance with the safeguard requirements;
- Close monitoring and enforcement by PMUs is important in ensuring compliance with safeguards standards. Each city established an Environmental and Social Unit (ESU), with which the Bank team have worked closely to ensure continued compliance and maintenance of adequate safeguards standards;
- Mobilization of Independent Environmental Monitoring Consultant (IEMC) has been delayed. In order to ensure the delivery of consistent and effective training for stakeholders from city subprojects, mobilization of IEMC shall be carried out rapidly and in a timely manner during the early stages of project implementation.
- While compliance of contractors has increased over time, the repetition of several safeguards issues over the monitoring period necessitates more stringent monitoring by CSCs and PMUs. A safeguards compliance framework has been included in ESIAs of SUUP in order to enhance compliance.
- In terms of land acquisition and resettlement, working closely with local authorities to understand

outstanding issues or complaints from affected households and to gain a full understanding of and implementation of RPFs/RPs is critical

36. Environmental and Social Management Plans (ESMP). Seven ESMPs have been prepared as integral parts of the seven subproject ESIAs. The ESMPs consist of the set of good practice mitigation measures to address common construction related impacts which are referred to as Environmental Codes of Practices (ECOP), site-specific environmental and social measures to deal with the impacts specific to the subproject areas and activities. The ESMPs also include monitoring, and institutional measures to be taken during implementation and operation to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels. Each subproject ESMP includes a Compliance Framework which lays out the role and responsibilities of the contractor and a penalty system to address cases of non-compliance with the environmental management requirements of the subproject by the contractor. The ESMPs include the budgets for their implementation, including for capacity building on project environmental management.

37. The subproject owners, which are the provincial City Project Management Units (PMUs), will include content of the corresponding ESMPs in the standard tender documents to be used as a basis for contractors to implement environmental management during the construction phase. The PMUs will be responsible for overall supervision and monitoring of the subproject including implementation of the ESMPs and will provide safeguard training to the subproject staff.

38. To facilitate effective implementation of the ESMPs, the city subproject PMUs will: (a) establish an Environment and Social Unit (ESU) responsible for ensuring timely implementation of the ESMP, including monitoring, reporting, and capacity building related to safeguards; (b) hire the Construction Supervision Consultant (CSC) to be responsible for supervision of the contractor's safeguard performance as part of the construction contract and this requirement will be included in the CSC terms of reference (TOR); and (c) hire a qualified Independent Environmental Management Consultant (IEMC) to assist the ESU in performing these tasks.

Social (including Safeguards)

39. Social Impact Assessment. The socio-economic survey, social impact assessment and poverty mapping exercises were conducted in all seven cities during the project preparation as a part of the project's feasibility studies. The participatory methods used in these exercises included focus group discussions, structured interviews, household visits and workshops. In addition, the assessment team sought to increase awareness of local beneficiaries and the project affected households on the project interventions and impacts. The recommendations from these social exercises have been taken into account in the project technical designs as well as for development of social safeguard documents, i.e., the Resettlement Policy Framework (RPF), the Ethnic Minority Policy Frameworks (EMPF), the seven Resettlement Plans (RPs), and the two Ethnic Minority Development Plans (EMDPs).

40. Investments under Component 1 will directly benefit 90,377 persons living in the 30 low-income areas (LIAs) selected for upgrading. Most of the HHs are partially affected due to the limited scale of the project interventions with a relatively low number of HHs (170 HHs, 740 persons) requiring resettlement. The project is expected to have significant positive social impacts by developing policies for ensuring consultation and participation and promoting social inclusion of the poor people living in the project area

as well as by upgrading urban infrastructure (roads, drainage, water supply and sanitation, public facilities, and power supply) based on community priorities.

41. Involuntary Resettlement OP 4.12. During the preparation phase technical options were carefully analyzed in all cities to minimize the scope of resettlement and its consequent impacts. A Resettlement Policy Framework for the project and Resettlement Plans (RPs) for seven cities were prepared. The RPF and RPs are being developed in accordance with the Bank's OP 4.12 on Involuntary Resettlement.

42. Significant resettlement impacts are expected due to the proposed investments, particularly under Component 2. Data collected through Inventory of Losses (IOL) conducted during RP preparation, indicates that the project will affect a total of 10,166 households (HHs) (44,730 persons) in the 7 cities; the number of affected HH in each of the participating cities range from 863 (Long Xuyen) to 2,169 (Ben Tre). Most of the PAH (8,965 HH, 88.2%) are partially affected; only a part of their land will be acquired under the SUUP, without relocation. A total of 157 ha of land including 26.1 ha of residential land, 81.5 ha of agriculture land and 47.2 ha of public land will need to be acquired. The number of relocated HHs for the 7 cities range from 58 (Soc Trang) to 275 (Vi Thanh) for a total of 1,201 HHs (5,300 persons). Most of the relocated HH (1,105, 92%) are affected under Component 2. Canal improvements (including dredging embankment and roads along both sides) are the primary sources of relocation (634 HH 53%). A large part of these HH are encroaching on the RoW of the canals which will be upgraded. Households in these areas are squatters on the canals and are generally precarious conditions and they typically lack secure tenure or access to amenities; in-situ relocation is not possible. Assistance for relocation in serviced RS, with improved amenities, will enhance the welfare of these HH and will ensure security of tenure. Encroachers are also characterized by unstable livelihoods (i.e. hired labors, vendors). In the 30 LIAs under Component 1, most of the HHs are partially affected due to the limited scale of the project interventions and a relatively low number of HHs (94 HHs, 415 persons for the 30 LIAs) have to be resettled. Level of poverty in LIAs range from 10 to 30%, however, HH in LIAS will directly benefit from the proposed investments and their livelihood will generally not be affected.

43. The construction of new roads in peri-urban areas under Component 2 and the development of new Resettlement Sites (RS) under Component 3 will lead to loss of productive land (81.5 ha mainly annual crops land). A total of 779 HH are considered as severely affected (losing more than 20% of their productive land (more than 10% for vulnerable HH)). A total of 518 businesses will need to be relocated; two-thirds of these businesses are not registered. They are mainly household based business: small retail shops, clothes shops, coffee shops, beauty salons, hair dressers etc. This is especially the cases for HH based business encroaching along canals in Vi Thanh, Tan An and Vinh Long cities. Such HH are often encroaching on canals without LURC and will be relocated in serviced RS to ensure security of tenure. Each RP includes an Income Restoration Program (IRP) with measures to mitigate these impacts and to assist HH to restore their livelihoods (i.e. vocational training, credit program, assistance to find jobs etc.).

44. A total of 531 vulnerable HH will be affected by the SUUP in all the 7 cities. Most of them (268 PAHs) are Ethnic Minority HH (Khmers) concentrated in Soc Trang (136 PAHs) and Bac Lieu (118 PAHs). 121 poor HH, 77 women head of HH with dependent and economic difficulties, 58 social policy HH, 3 disabled Head of HH and I elderly alone have also been identified. Specific support for these HH are provided in each of the RP

45. The elaboration of the RPs involved the collection of qualitative and quantitative information through: inventory of losses; survey of replacement cost; socio-economic survey of affected households, and qualitative information gathered during consultations. Consultations undertaken during project preparation with project-affected persons supported a meaningful participation. Project-affected persons' recommendations and perceptions were incorporated as part of the RPs, reaching agreements on the project's intervention scope, proposed components, proposed compensation and rehabilitation measures for project impacts. The project will establish independent land valuation expertise, responding to a shared concern among affected people, to ensure adequate land replacement costs. All RPs were disclosed before appraisal, among the project- affected persons. Per the RPs, the number of households and impacted persons is as follows:

City	Affected Households		Relocated Households	
	Households	Persons	Households	Persons
Back Lieu	2,092	9,205	98	431
Ben Tre	2,169	9,544	103	453
Long Xuyen	863	3,797	276	1,214
Soc Trang	917	4,035	58	255
Tan An	901	3,964	198	871
Vi Thanh	1,920	8,448	275	1,210
Vinh Long	1,304	5,738	193	849
Total	**10,166**	**44,730**	**1,201**	**5,284**

46. Regarding the construction of Huynh Van Nhut road along the Bao Dinh river where investments under the SUUP are planned, corrective actions were proposed in the RP for Tan An City to ensure compliance with the RPF. Some other planned projects have also been identified as linked to the SUUP (i.e. the ring road and construction of Bao Dinh river embankment, in Tan An City; construction of Vo Van Kiet road in Vinh Long City). The time required for implementation of these projects is not yet known. Once implemented, land acquisition and compensation should follow the provisions of the RPF

47. Fully serviced Resettlement Sites are available or under construction in five cities to accommodate the needs of the 1,201 relocated households. In Long Xuyen, Soc Trang and Bac Lieu, the existing RS are not sufficient to receive all relocated HH and new RS will be developed under Component 3. In other cities, plots will be purchased in existing RS for relocated HH under the SUUP. Due to the small size of the seven cities, RS are generally located close to the city center and generally within 1-4 km of the location of the proposed investments, which will minimize economic and social disruption. The need for RS was confirmed through surveys conducted during RP preparation. In all cities, the option of relocation to a serviced RS was preferred by the majority of HH to be relocated.

48. Households that are allocated plots (with subsidized price of land) in the RS have 5 years to payback the cost of the plot. As per project policy, all households, including squatters, will receive compensation for the residential land they use in addition to other compensation/assistance (i.e. for land, houses, structures, trees, land and various allowances). The expectation is that households could finance the construction of a new house in the RS. In general, HH use most of the compensation received to build their house and payback the land within 5 years. The compensation effectively serves as a kind of credit for households and has worked successfully in previous upgrading projects.

49. Allowances are further given to relocate households in the form of support for life stabilization (e.g. cash equivalent to 30kg rice /person/month for 6 months). Relocated business are also provided with support based on their income (e.g. 50% of their actual annual income for registered business). Non-registered business are also provided with financial support. All resettlement plans include an income restoration program (i.e. vocational training; credit program etc.) with beneficiaries including: relocated households, relocated business; households losing more than 20% of their productive land and vulnerable households.

50. Voluntary Donations. The Project's direct beneficiaries, may to contribute to the upgrading as per the principles described below; these were determined based on consultations with the communities.

a. Households are provided full information on project compensation and resettlement policy. Information on compensation and voluntary donation will be disseminated in public places accessible to the community.
b. Land donations by residents must be voluntary through informed consent and freely agreeing to participate in the project. They will have the option to agree or disagree on land acquisition without adverse consequences being imposed.
c. Community households decide the scope of land acquisition for the Project and the scope of their voluntary land donation.
d. The scope of affected land should be small (less than 10% of their land holding and DPs are not relocated).
e. The project will provide a suitable scheme for claims and the resolution of problems.

It is noted, though, that, following the consultation conducted during RP preparation and through the preparation of Community Upgrading Plans in LIAs, 5 cities decided not to apply land donation under the SUUP. Details of the process of voluntary land donation will be described in the operations manual.

51. *Tracking and monitoring*. The PMU has to report on the voluntary donation of land to the CPC and the World Bank for review before commencement of this exercise through the Community Upgrading Plan (CUP). Independent monitoring must be conducted for about 20% of the voluntary households. Details of the steps and protocol will be part of the operational manual.

52. *OP4.10 Indigenous Peoples*. An EMPF and two EMDPs were prepared to ensure that the proposed project impacts are mitigated/compensated and that the benefits are enhanced. The project carried out meaningful and culturally appropriated consultations with affected EMs and key stakeholders to enable EMs to pose their demands and preferences.

53. Khmers are concentrated more in the LIAs proposed for upgrading under Component 1, while the Hoa and Cham are scattered across the two cities. . In Bac Lieu city, 98 Khmer HH (83%) among the 118 affected Khmer HH are concentrated in LIA 6 to be upgraded. Due to the small scale of the project interventions, resettlement and social impacts in LIAs are limited and no significant and differential impacts on Khmer communities is anticipated. In addition, the Khmer communities in upgraded LIAs will

benefit directly from the proposed investments which will improve living conditions and empower communities through consultation and participation in project activities. Proposed investments under Component 2 will also affect individual ethnic minority households.

54. *Consultation and disclosure*. Consultations with the project affected households and other stakeholders were carried out during development of the RPs, EMDPs, CUPs (Community Upgrading Plans for LIAs). Information on the project's objective, potential impacts, and relevant features of compensation and resettlement policy frameworks, and ethnic minority policy, were widely disseminated. A participatory approach was used to reach consensus on the resettlement policy and entitlements for various adverse impacts for the RPs and EMDPs. A similar participatory approach will be pursued during project implementation to ensure effective implementation of the project's RPF, EMPF, RPs, CUPs and EMDPs.

55. The dedicated social staff/unit of all PCU and PMU implementing agencies will be responsible for implementing and monitoring the social safeguard instruments (RPF, EMPF, EMDP, RP). The implementation of social safeguard instruments will be internally monitored by the implementing agencies in close coordination with the respective Peoples' Committees at different administrative levels and externally supervised by independent monitoring agencies. Implementing agencies must ensure that activities related to social safeguards will be properly tracked, reported and documented.

56. Independent monitoring will start around the same time as implementation of activities and will continue until the end of the project/sub-project. The performance and compliance with social safeguard instruments will also be subject to regular supervision from the Bank Task Team. During project implementation, appropriate trainings will be provided to PMUs, consultants and local community representatives on the safeguard instruments applicable to the Project.

57. *Gender*. The project is expected to have significant social benefits by improving the living and environmental conditions of low-income communities. The Project’s design and approach (using participatory planning tools, intensive community consultation, a focus on local disclosure, and the involvement of communities in monitoring) is based on the lessons from MDR UUP and VUUP and solicits equal participation from both genders. The key monitoring and evaluation indicators (including user satisfaction surveys) are disaggregated by gender.

58. Gender analysis will be conducted for each city (SIA as part of ESIA), and also embedded in the social safeguard instruments. The assessment focuses on impacts of the proposed subproject on women (i.e. relocation of home based business mainly managed by women) and identifies proactive measures to address such impacts to be included in the impact management and mitigation plans. Appropriate gender-related interventions will be further developed and explored depending on the findings of those assessments.

59. *Governance*: An assessment of governance and integrity issues in projects in similar sectors across Vietnam identified the following key governance risks throughout the project planning & design, procurement and implementation:

Planning & Design	Procurement	Implementation
Administrative interference	Fraudulent bids	Substandard work
Unnecessary items	Collusion	Inflated or false claims/ Falsified implementation & audit reports
Influenced/restricted specifications and bid evaluation criteria	Biased bid evaluation	Unendorsed agents/subcontractors
Conflict of Interest		

60. In order to mitigate these risks the following measures, agreed with the Project Cities and PMUs, will be carried out throughout the project implementation: (i) training, technical assistance and capacity building to the Project Cities and PMUs; (ii) enhanced disclosure and civil society oversight/community participation, (iii) internal and external controls/audits, (iv) complaint handling systems (v) code of conduct/ ethics and declaration of conflicts of interest, (vi) due diligence during procurement and contract management and (vii) sanctions and remedies. The Bank will closely monitor the implementation of these measures and provide strong hands-on support.

61. Grievances redress mechanisms (GRM) will ensure access for project-affected people to freely pose their questions, concerns and problems. The procedures will ensure both recording and processing of grievances and documenting of all official responses. The project-affected people will be provided with on-going information on the authority of project officials in charge of solving project complaints on land, assets acquisition, physical relocation and income restoration. The project GRM will also be open for complaints related to the project.

Monitoring and Evaluation

62. Baseline socio-economic surveys, based on the questionnaires developed under VUUP and MDR UUP, have been conducted in each of the targeted LIAs. Gaps in information for monitoring progress towards project outcomes have been addressed and baseline information has been updated to include key dimensions of living conditions such as infrastructure profile, unit quality and type of housing, neighborhood level amenities and conditions, tenure, turnover and a socio-economic profile of residents. Remaining baseline data is expected be collected prior to the start of implementation. Capacity building training of the PMUs and consultants hired by the cities to carry out M&E will be taken. The task team will utilize the evaluation of closed and existing upgrading projects to extract lessons to inform M&E implementation more concretely under this project.

ANNEX 3: IMPLEMENTATION SUPPORT PLAN

COUNTRY : Vietnam
Vietnam Scaling up Urban Upgrading Project

Strategy and Approach for Implementation Support

1. A project launch workshop will be organized as part of the first supervision mission shortly after project effectiveness. During implementation, the Bank will field semi-annual supervision missions throughout the project life. Based on the implementation schedule, a midterm review mission will be undertaken in 2020, with the actual date and duration depending on the progress in implementation. The approach for the implementation support plan was built on the experience gained from the previous Bank operations in the country and globally. It has also been developed based on the nature of the project and its risk profile.

Implementation Support Plan and Resource Requirements

2. Based on the project risks identified in SORT table, implementation support will focus on the following areas:

3. *Technical.* Hydraulic modeling, green infrastructure design, flood risk management, water, sanitation, transportation, and other related expertise will be required during implementation. Expert support will be provided to cities where master plans are revised for revisions as well as enhancement of integrated and risk informed planning processes. Support will include expert review of bidding documents and technical proposals, providing technical and engineering advice, and site visits for quality inspections to ensure smooth progress of the construction and implementation.

4. *Fiduciary*. Training will be provided by the Bank's FM and procurement specialists during project implementation. Additionally, the procurement specialist will lead procurement-focused missions depending on the needs and as agreed to with the PMUs. The financial management specialist will review all financial management reports and audits and take the necessary follow-up actions as per the Bank procedures. These team members will also help identify capacity building needs to strengthen procurement and financial management capacity. Formal FM and procurement supervision will be carried out semiannually as part of the overall project supervision.

5. *Safeguards*. The Bank's supervision team includes an environmental specialist and a social safeguard specialist. The Bank team will supervise implementation of the social and environmental management instruments and provide guidance to the PMUs to address any issues. In addition, the Bank team will provide guidance to the independent monitoring consultants and review their reports so as to minimize the potential social and environmental risks.

6. *Implementation Support Plan.* The following ISP reflects the preliminary estimates of the skill, timing, and resource requirements over the implementation period of the project. Keeping in mind the need to maintain flexibility over project activities from year to year, the ISP will be reviewed from time to

time to ensure that it continues to meet the implementation support needs of the project:

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Task Team Leader	12	Two per year, three in first year	Country office based
Co-task Team Leader	12	Two per year, three in first year	Headquarters based
Urban Planning & Design Specialists	12	Field trips as required	International and National Consultants
Transport Specialist	8	Two per year, three in first year	Country office based
Water & Sanitation Specialist	5	Two per year, three in first year	Country office based
Environmental Specialist	8	Two per year	Country office based
Safeguards Specialist	8	Two per year	
Procurement Specialist	5	Two per year	Country office based
Financial Management Specialist	5	Two per year	Country office based
Disaster Risk Management Specialist	4	Two per year	Country office based supported by international consultants
Senior Public Sector Specialist	2	Field trips as required	Country office based
Monitoring and Evaluation Specialist	8	Two per year	HQ Based and local consultants

ANNEX 4: ECONOMIC AND FISCAL ANALYSIS

COUNTRY : Vietnam
Vietnam Scaling up Urban Upgrading Project

Economic Analysis

1. **Overview.** An economic feasibility analysis was carried out for proposed investments in Component 1 (tertiary infrastructure for low-income areas), Component 2A (secondary infrastructure for environmental sanitation) and Component 2B (secondary roads and bridges). This annex describes this methodology in some detail and presents the results of the analyses.

Methodology and Key Assumptions

2. **Methodology.** For components 1, 2A and 2B, the incremental quantifiable economic costs and benefits were estimated (with "incremental" referring to the difference and costs and benefits between the "with project" and "without project" scenarios). Estimates of economic costs and benefits were prepared for a benefit period of 25 years, starting in 2022. The economic internal rate of return (EIRR) of a subproject's economic costs and benefit streams accruing during the benefit period was compared to the economic opportunity cost of capital (EOCC), and a subproject was deemed economically feasible if its EIRR exceeded the EOCC.[12] Following a recently issued Bank guideline, the EOCC was estimated at double the long-term per capita economic growth of Vietnam, or (2 x 5.0% =) 10%.[13] The robustness of the analyses was tested through sensitivity analysis, by assuming an increase in costs by 10%, a decrease in benefits by 10%, and a combination of these. Sensitivity indicators and switching values were also computed. Because the methodology for estimating net economic benefits is different for Component 2B than for the other two components, they are discussed separately.[14] The cost of Component 3 (resettlement) was excluded from the economic analysis to avoid double-counting.[15] The cost of Component 4 (project management support) was allocated to Components 1, 2A or 2B, except for capacity building.

3. **Price basis**. Estimates of economic costs and benefits were expressed in constant mid-2016 prices. Because incomes are expected to increase at higher rates than general price inflation, the analysis allowed for growth of real incomes during the benefit period (which is *inter alia* reflected in a substantial increase in the average value of travel time savings caused by road subprojects). Economic costs and benefits were converted in US Dollars (world price numeraire) at the official mid-2016 exchange rate of 22,300 VND per

[12] If the EIRR of a subproject exceeds the EOCC, the economic net present value (ENPV) of the subproject, discounted at the EOCC, will exceed zero. The statements "EIRR > EOCC" and "ENPV > 0" are thus equivalent.

[13] The recently issued guideline is *Discounting Costs and Benefits in Economic Analysis of World Bank Projects* (World Bank OPSPQ, May 2016). The long-term per capita growth rate was the unweighted average of Vietnam's per capita economic growth rate during 2006-2015, according to Bank's database (http://data.worldbank.org).

[14] A financial feasibility analysis was not carried out, because none of the activities to be financed from the proceeds of the IDA loans for SUUP would generate incremental financial revenue from tariffs or user charges.

[15] Cost estimates for Components 1 and 2B already include compensation payments. Persons requiring permanent resettlement may choose (but do not have) to move to a resettlement site prepared by the project town. If they wish to do so, they will have to pay a market price for land. As the cost of resettlement infrastructure would already be reflected in the land price, adding Component 3 would, in effect, count the compensation payment twice.

US Dollar. This rate is close to the market rate, and adjustments for shadow foreign exchange rate were not considered necessary.

4. **Conversion factors.** Economic costs were derived from financial costs by applying conversion factors to non-traded goods. Because of considerable underemployment in Vietnam, shadow wage rates of 0.70 and 0.97 were applied to the financial cost of unskilled and skilled labor, respectively. Energy continues to be subsidized and a conversion factor of 1.25 was applied to account for this. The economic cost of all other non-traded goods was estimated by applying the standard conversion factor of 0.93. The weighted conversion factor was estimated at 0.90 for the economic investment cost and 0.95 for the economic O&M cost (Table A4.1).

Table A4.1: Conversion Factors, Net of VAT

Cost Item	Investment Cost		O&M Cost	
	Cost Share (%)	Adjustment Factor	Cost Share (%)	Adjustment Factor
Traded goods	30	1.00	10	1.00
Non-traded goods	20	0.93	25	0.93
Skilled labor	5	0.97	20	0.97
Unskilled labor	30	0.70	20	0.70
Energy	5	1.25	15	1.25
Taxes	10	0.00	10	0.00
Conversion factor		**0.90**		**0.95**

Source: World Bank estimates (2016)

Valuation of Economic Costs

5. The economic analysis took into account all incremental quantifiable economic costs that were expected to accrue during the 25-year economic lifetime of a subproject. These costs consisted of incremental investment costs and O&M costs. Investment costs were estimated based on the basic designs prepared during feasibility studies, and include allowances for environmental management, compensation costs, and consulting services. Subprojects would be completed during 2017-2021. The residual value of a subproject was estimated at 40% of the economic investment cost. The annual economic O&M cost was expressed as a percentage of the economic investment cost: 3% for Component 1, 2% for Component 2A, and three different percentages for secondary roads and bridges (1% for routine maintenance, 5% for periodic maintenance once every four years, and 30% for major repairs once every 12 years). See Table A4.2 for an overview of economic investment costs by component and project city.

Table A4.2: Economic Investment Costs
(US$ million, in constant mid-2016 prices)

	2017	2018	2019	2020	2021
Component 1: Tertiary Infrastructure for Low-Income Areas					
Long Xuyen	0.6	1.2	1.8	1.5	0.9
Bac Lieu	0.7	1.4	2.1	1.8	1.1
Ben Tre	0.7	1.4	2.1	1.8	1.1

Vi Thanh	0.5	1.0	1.6	1.3	0.8
Tan An	0.7	1.4	2.1	1.7	1.0
Soc Trang	0.8	1.6	2.3	2.0	1.2
Vinh Long	1.4	2.7	4.1	3.4	2.0
Component 2A: Secondary Infrastructure for Environmental Sanitation					
Long Xuyen	2.3	4.7	7.0	5.8	3.5
Bac Lieu	1.2	2.4	3.6	3.0	1.8
Ben Tre	1.1	2.1	3.2	2.6	1.6
Vi Thanh	1.0	2.0	3.0	2.5	1.5
Tan An	0.6	1.2	1.8	1.5	0.9
Soc Trang	0.8	1.5	2.3	1.9	1.2
Vinh Long	1.4	2.8	4.1	3.4	2.1
Component 2B: Secondary Roads and Bridges					
Long Xuyen	1.9	4.0	2.6	1.2	0.6
Bac Lieu		1.5	5.9	5.4	1.3
Ben Tre	0.7	5.2	8.0	4.7	1.0
Vi Thanh	2.1	4.1	2.7	1.2	
Tan An	2.1	4.1	2.7	1.2	
Soc Trang		2.9	4.8	5.1	3.8
Vinh Long	2.1	5.6	5.1	2.1	0.4

Source: World Bank estimates (2017), based on PMU records.

Valuation of Economic Benefits

6. **Review of economic benefits of Components 1 and 2A.** Through Component 1, the project will finance tertiary infrastructure in 30 low-income areas (LIAs) in the seven participating cities. The proposed infrastructure mostly consists of walkways, drainage and sewerage systems, street lighting, power supply, water supply, and solid waste management. Component 2A covers the rehabilitation and embankment of 14 canals that currently mainly function as open sewers (all cities), and the creation of public spaces along two waterfronts (in Vi Thanh and Tan An). To the population living in the areas affected by the proposed subprojects, the most important economic benefits of Components 1 and 2A are the following:

- **Improved public health.** This is perhaps the most important economic benefit of the project. At present, the vast majority of the population in the project areas live in poor sanitary conditions. Human waste is discharged into the environment without any form of treatment. Because drainage systems either do not exist or do not function adequately, raw sewage builds up in small canals and ponds. This problem is exacerbated by uncontrolled disposal of solid waste, which is usually not collected, and by frequent floods, which often washes contaminated water into houses. As a result, water-borne diseases are, in all likelihood, substantially higher than in areas with well-functioning drainage systems.

- **Avoided flood damage.** Most LIAs are frequently flooded, not only in the rainy reason, but also in during the rest of the year. This is partly because water levels in some LIAs are affected by river tides, but mainly because of poor drainage systems (see above) and the unfavorable location of LIAs. Low-income areas are often lying below the level of adjacent roads (so that storm water from the road runs directly into the LIA) and often just above river level. Flooding is especially prevalent in LIAs in Bac Lieu, Soc Trang and Vinh Long. The rehabilitation of the canals, rivers and lakes under Component 2A will also result in reduced flood damage.
- **Improved accessibility.** For all LIAs covered by the project, an improvement of walkways is proposed, mostly consisting of repaving, widening an existing walkway and building a drainage system underneath. This will improve the accessibility of areas within a LIA, both by pedestrians and (motor-) cycle users.
- **Improved air quality.** In the absence of well-functioning drainage systems, the majority of the population in subproject areas are living permanently in a malodorous environment. Improving drainage systems—combined with investments in solid waste management—would therefore not only result in improved public health and reduced flooding, but also in a more pleasant living environment.
- **Improved security.** This benefit will be provided by improved street lighting.
- **Improved urban amenities.** The creation of public space along rivers and lakes is expected to improve the welfare of the entire city population (in contrast to the other benefits, which are location-specific and mainly accrue to persons living in and around the subproject areas).

7. The combined impact of these realization of these benefits is a major increase in the quality of life of 92,000 persons living in the 30 LIAs and over 360,000 persons living in areas where the project would improve canals and riverfronts.

8. **Constraints to valuation of economic benefits from improved quality of life.** Quantifying the benefits from proposed investments in Components 1 and 2A is constrained by:

- **Methodological problems.** Although methods exist to quantify the benefits of improved air quality, improved security and the availability of new public spaces, there is no consensus about the most appropriate method, and there is usually a wide range in the valuation of such benefits. As will be shown, it is not realistic to exclude benefits from these sources, because they are likely to be significant.
- **Lack of data.** There are generally accepted methodologies to quantify economic benefits from improved public health, reduced flood damage and improved accessibility. Public health benefits are usually valued by the estimated reduction in productive days (working days plus school days) lost due to water-borne diseases. Benefits from avoided flood damage may be computed by estimating the monetary cost of replacing property that damaged or lost by floods. Improved accessibility is usually valued by estimating travel time savings and reductions in vehicle operating costs. Unfortunately, there are no reliable data available to operationalize these methodologies at subproject level. Publicly available data on health and flood damage tend to underestimate these benefits in any case, as many inhabitants of low-income areas do not visit a doctor when they are ill and normally do not report flood damage to government authorities. The disadvantage of conducting surveys to collect these data is that respondents do not provide reliable information about events that occurred longer than 2-4 weeks ago (such illnesses or floods).

9. **Increase in land prices as a proxy for valuation of benefits.** There is substantial variation in land prices within LIAs. In general, land prices at the border of a LIA (provided the border is alongside a main road, which is usually the case) are at least 50% higher than elsewhere in that LIA. This may be explained by the fact that persons living next or near a main road have much better access to the rest of the town than the rest of the LIA, benefit from street lighting, are usually not exposed to flooding (because a main road tends to be located higher than the adjacent LIA), just like other households and business along the main road, normally have access to piped water supply, power and solid waste collection services. Stated differently, households living at the border of a LIA already have access to most of the public services that the project will provide to the LIA, and the benefits of these services are reflected in above-average land prices. Land prices along rivers, canals and lakes exhibit similar characteristics, albeit with a different geographical distribution. Prices are substantially higher along waterfronts that have been embanked, mainly reflecting improved environmental conditions. The increase is highest along the waterfront itself but gradually decreases with distance from the improved waterfront. Because the increase in land prices will, in principle, capture all benefits from the proposed investments (including those that are difficult to value directly, such as improved security or better air quality) and do not suffer (to the same degree) from data collection problems, it was used for the valuation of the quantifiable economic benefits.

10. **Quantifiable economic benefits of Components 1 and 2A.** The estimation of increases in land prices was based on a series of conservative assumptions, the most important of which are the following:

- Land prices are assumed to increase by 50% from the average land prices in a LIA in the ward(s) where a canal, river or lake will be rehabilitated. The is a relatively modest assumption, given that land prices at the border of a LIA are often 100% higher than inside. Rehabilitation of land along a waterway may result in a double or tripling of land prices, as has already been experienced in past World Bank-financed urban upgrading projects in Vietnam, including the first Vietnam Urban Upgrading Project and the Medium Cities Development Project. As expected, land prices are highest in the relatively wealthy cities of Long Xuyen, Tan An and Vinh Long, and lowest in Bac Lieu and Soc Trang (see Table A4.3 for an overview of current land prices).
- The assumed increase in land prices affected 70% of the population of the LIA. By implication, the "border area" accounts for 30% of the LIA, and this area is not subject to price increases.
- For investments in Component 2A, it was assumed that land prices would affect 35% of the population of the ward(s) affected by the investment. This lower share reflects the reality of a significant drop in land prices farther away from the waterfront.

Table A4.3: Land Prices Before Project-Induced Increases (VND million per m^2)

	Long Xuyen	Bac Lieu	Ben Tre	Vi Thanh	Tan An	Soc Trang	Vinh Long
Component 1	2.6	1.5	2.1	0.9	2.0	1.2	3.0
Component 2A	2.2	1.0	2.1	2.4	2.3	1.3	6.3

Source: World Bank (2017), based on estimates provided by PMU consultants.

11. The total number of direct beneficiaries from Component 1 was estimated at about 92,000, more than half of whom were living in Long Xuyen and Vinh Long (Table A4.4). As expected, the total number

of direct beneficiaries from Component 2A was much higher, and was estimated at about 361,400; of these, 37% lived in Long Xuyen. The total number of project beneficiaries was therefore in the order of 450,000, or about 30% of the entire population of the seven project cities. For two reasons, the cost-benefit analysis did not consider so-called indirect beneficiaries: (i) the benefits of Component 1 investments in a LIA are largely confined to that LIA and there is no strong justification for a "spill-over" effect, and (ii) Component 2 investments are meant to enhance the benefits of Component 1 investments, and the most important indirect beneficiaries of these investment are persons living in the LIAs; these benefits, however, are already included in the assumed land prices increases in those LIAs.

Table A4.4: Number of Direct Beneficiaries of Components 1 and 2A ('000)

Project Town	Component 1	Component 2A	Total	% Total
Long Xuyen	24.4	133.2	157.6	34.8
Bac Lieu	14.4	55.1	69.4	15.3
Ben Tre	7.2	40.1	47.3	10.4
Vi Thanh	8.7	28.7	37.4	8.2
Tan An	6.4	31.2	37.6	8.3
Soc Trang	9.8	10.4	20.2	4.5
Vinh Long	21.2	62.8	84.0	18.5
TOTAL	**92.0**	**361.4**	**453.4**	**100.0**

Source: World Bank (2017), based on estimates provided by PMU consultants.

12. **Quantifiable economic benefits of Component 2B.** Estimates were prepared for two main conventional economic benefits of road subprojects: savings in vehicle operating cost (VOC) and savings in passenger travel time (VOT). Vehicle operating costs for project roads were estimated using the HDM4-VOC model with inputs taken from the results of the VITRANSS study, and updated for 2016 (Table A4.5). For 2016 estimates and average speed and average value of passenger time, refer to Table A4.6 and Table A4.7. All secondary roads to be constructed or improved by the project are located on flat terrain and most of the existing roads are paved; a small number of roads is currently unpaved and in poor condition.

Table A4.5: Vehicle Operating Costs

Terrain	Type of Pavement	IRI (m/km)*	(US$/km)				
			Bicycle	Motorbike	Car	Bus	Truck
Flat	Paved	2	0.003	0.037	0.269	0.316	0.325
	Paved	3	0.003	0.038	0.270	0.317	0.327
	Paved	4	0.003	0.039	0.274	0.328	0.339
	Paved	6	0.004	0.042	0.284	0.358	0.368
	Paved	10	0.005	0.046	0.316	0.432	0.436
	Gravel	10	0.005	0.044	0.407	0.516	0.507
	Paved	14	0.007	0.047	0.368	0.512	0.511

	Gravel	14	0.007	0.051	0.435	0.583	0.571

Source: World Bank estimates (2017)
* IRI: International Roughness Indicator

Table A4.6: Average Speeds

Terrain	Type of Pavement	IRI (m/km)*	(km/hour)				
			Bicycle	Motorbike	Car	Bus	Truck
Flat	Paved	2	17.7	64.3	64.6	63.4	55.8
	Paved	3	16.9	64.3	64.6	63.4	55.8
	Paved	4	16.2	64.2	64.6	63.3	55.7
	Paved	6	14.8	63.8	64.2	62.4	55.5
	Paved	10	11.8	57.0	57.1	54.6	51.9
	Gravel	10	8.9	32.3	32.4	32.2	32.3
	Paved	14	8.9	44.0	44.0	42.8	42.4
	Gravel	14	6.0	31.9	31.9	31.3	31.6

Source: World Bank estimates (2017)
* IRI: International Roughness Indicator

Table A4.7: Average Value of Passenger Time

	Bicycle	Motorbike	Car	Bus	Truck
Occupancy (# passengers/vehicle)	1.1	1.2	2.0	20.0	1.5
Value of time (US$/vehicle/hour)	5.1	5.5	8.9	90.0	6.8

Source: World Bank estimates (2017)

13. Traffic demand was estimated on the network using the JICA System for Traffic Demand Analysis (STRADA), a package for transport forecasting that is widely used in Vietnam. The system was used to calibrate current and projected passenger traffic of the city road networks and to assign passenger traffic to each of the project roads in "with project" and "without project" networks. Passenger traffic demand was computed from existing and projected population statistics, passenger occupancies, trip rates and modal shares. The networks comprise project road catchment zones as well as non-project road catchment zones, which are typically outside but adjacent to the road catchment zones. It was assumed that the populations of the cities would grow at around 3% per year on average. Other inputs, including trip rates and modal shares, were taken from HOUTRANS, HAIDEP, and other models, for which extensive surveys were conducted, and which are also widely used in Vietnam for traffic modeling. Freight traffic was derived from passenger traffic based on historic elasticity studies, and validated by traffic counts on similar roads and in similar urban areas. Refer to Table A4.8 for traffic assignments on project roads for 2016. It is important to emphasize that model takes the existing and planned road network effects into account when estimating traffic volumes, instead treating a subproject on a stand-alone basis.

Table A4.8: Traffic Assignment on Project Roads
(Passenger Car Units)

Project Town / Road	2020	2025	2030	2035	2040
Long Xuyen					
- Hung Vuong Road	3,942	6,144	9,587	14,329	19,769
- Tran Quang Dieu Road	7,981	12,396	19,296	28,774	42,552
Bac Lieu					
- Lo Ren Dike Road	11,112	15,152	20,739	27,369	36,180
- Lo Bo Tay Road	3,334	4,660	6,522	8,714	11,652
- Huong Lo 6	14576	19,945	27,387	36,228	47,999
Ben Tre					
- Ngo Quyen Boundary Road	9,894	13,283	17,921	24,039	24,039
- N6 Road	4,270	5,607	7,386	9,694	12,692
- N18 Road	7,126	9,383	12,397	16,304	21,382
- Dong Tay Boulevard	4,598	6,085	8,082	10,674	14,047
Vi Thanh					
- Nguyen Hue Road	2,514	3,513	4,911	6,548	8,654
- Road 1/5	3091	4,323	6,048	8,078	10,690
Tan An					
- Bao Dinh River Bank Road	2,621	4,059	6,301	9,392	13,881
- Phan Van Tuan - QL1 Road	1,338	2,046	3,141	4,648	6,825
- Luu Van Te Road	2,914	4,540	7,084	10,594	15,677
- Tran Phong Sac - Nguyen Minh Duong Road	2,914	4,506	6,983	10,391	15,342
Soc Trang					
- Ring Road No.2	4,919	7,110	10,290	14,385	14,495
- Nguyen Van Linh Bridge	7,171	10,008	13,980	18,715	24,831
- Dien Bien Phu Road, Section 1	4018	5,595	7,798	10,406	13,760
- Dien Bien Phu Road, Section 2	2735	3,770	5,207	6,937	9,176
Vinh Long					
- W2-W9 Boundary Road	3,889	5,473	7,707	10,382	13,846
- Bo Kenh Road	2,319	3,256	4,573	6,143	8,174
- Vo Van Kiet road	8,040	11,329	15,973	21,571	22,839

Source: PMU Consultants (2017)

14. The evaluation models used in the analysis compared “with project” and “without project” economic costs and benefits. It also considered the roads in the existing city networks, specifically the networks road length, condition, and capacity of both the project and alternative roads. Information on

existing road conditions was obtained from surveys. The capacities of all project roads and alternative roads were verified using the Vietnamese Highway Capacity Manual.

Table A4.9: Parameters Used for Economic Analysis of Component 2B

Project Town / Road	With Project	Without Project		
	Length (km)	Alternative	Length (km)	Condition
Long Xuyen				
- Hung Vuong Road	1.2	Tran Hung Dao	1.2	Good
		Thoai Ngoc Hau	1.6	Poor
- Tran Quang Dieu Road	0.9	Ha Hoang Ho	1.6	Good
		Bui Van Doanh	1.4	Fair
Bac Lieu				
- Lo Ren Dike Road	6.0	(none)	6.0	Poor
- Lo Bo Tay Road	6.1	(none)	6.1	Poor
		- Lo Buong Road	8.0	Good
- Huong Lo 6	1.0	(none)	1.0	Poor
Ben Tre				
- Ngo Quyen Boundary Road	1.6	Doan Hoang Minh	2.4	Good
		Dong Khoi	2.6	Good
- N6 Road	1.3	Nguyen Thi Dinh	2.3	Good
		QL60	3.0	Good
- N18 Road	1.3	Nguyen Thi Dinh	2.3	Good
- Dong Tay Boulevard	2.2	Nguyen Dinh Chieu	3.3	Good
		Nguyen Thi Dinh	3.4	Good
Vi Thanh				
- Nguyen Hue Road	4.3	Alternative route	4.3	Good
- Road 1/5	2.3	Alternative route	2.3	Good
		Alternative route	5.1	Fair
Tan An				
- Bao Dinh River Bank Road	1.0	TL828	2.9	Good
- Phan Van Tuan - QL1 Road	4.0	Phan Van Tuan	4.0	Very poor
	2.0	Cu Khac Kiem	2.2	Fair
- Luu Van Te Road	1.9	Luu Van Te	1.9	Very poor
- Tran Phong Sac - Nguyen Minh D. Road	0.5	Nguyen Cuu Van	1.1	Fair
Soc Trang				
- Ring Road No.2	1.3	A1	2.0	Good
- Nguyen Van Linh Bridge	1.6	Tran Hung Dao	3.1	Good
- Dien Bien Phu Road, Section 1		Dien Bien Phu	1.0	Poor
- Dien Bien Phu Road, Section 2	1.0	Pham Hung	3.0	Good

Vinh Long				
- W2-W9 Boundary Road	1.9	Nguyen Hue	2.5	Good
- Bo Kenh Road	2.2	Bo Kenh Road	2.2	Very poor
- Vo Van Kiet road	1.1	QL53	2.7	Good
		Le Thai To	1.8	Good

Source: World Bank estimates (2017)

Results

15. **Base case.** An economic feasibility analysis was carried for proposed investments in Components 1, 2A and 2B, using the same methodology that was used for the preparation of other recent World Bank-financed urban development projects in Viet Nam. For all three components, the EIRR of investments to be financed from the proceeds of the SUUP loan was higher than the EOCC of 10% in all cities. In general, the net economic benefits of Components 2A were higher than those of Component 1, mainly because of higher resettlement costs in relation to the number of direct beneficiaries from this component. The economic internal rates of returns from road proposed to be constructed under the Project range from 15.5% to 19.6%. Nevertheless, the analysis indicates risks of the four roads with lower IRRs, including: Lo Ren Dike Road in Bac Lieu City (7.9%), East – West Corridor in Ben Tre (9.2%), Phan Van Tuan – Highway No1 Ring Road in Tan An (8.7%) and Ring Road No2 in Soc Trang (9.0%). For those subproject roads, it is recommended that further consideration on phasing out the investment or revising more proper designs to ensure economic efficiency. As traffic assignments have been modeled on the network based, it is appropriate to evaluate the road component as a whole. For purposes of monitoring and evaluation, it is therefore proposed that EIRRs will be assesses at component level, not at individual subproject level.

16. **Sensitivity analysis.** Sensitivity indicators and switching values for the combined impacts of a 10% increase in the economic investment cost and a 10% decrease in the quantifiable economic benefits. The sensitivity indicator compares the percentage change in capital costs and project benefits with the percentage change in the NPV. It is, in effect, the elasticity of the EIRR with respect to the economic investment cost and economic benefits. The switching value is the percentage change in investment costs and project benefits for the NPV to become zero, i.e. for the EIRR to decrease to its minimum required value 10% (beyond which the subproject “switches” from being economically feasible to not economically feasible). As shown in Table A4.10, even if the assumed adverse changes would materialize, the EIRRs of all subprojects remain above the hurdle rate of 10%, with the exception of Component 2A in Soc Trang (the EIRR of this component would drop to 8.3% because expected land prices increases are relatively low compared to investment costs).

Table A4.10: Results of Economic Analysis*

Subproject	Base Case		Sensitivity Analysis (Worst Case)**			
	EIRR (%)	ENPV (US$ m)	EIRR (%)	ENPV (US$ m)	SI	SV (%)
Component 1: Tertiary Infrastructure for Low-Income Areas						
Long Xuyen	32.6	15.5	28.6	13.1	-0.9	144.9
Bac Lieu	29.8	14.8	26.0	12.3	-1.3	25.3
Ben Tre	23.9	9.5	20.5	7.4	-1.5	8.8
Vi Thanh	17.8	3.5	15.0	2.3	-2.1	8.9
Tan An	20.2	6.4	17.2	4.6	-1.6	37.2
Soc Trang	17.5	4.9	14.7	3.2	-2.0	15.6
Vinh Long	39.8	50.7	35.2	43.9	-0.8	24.4
Subtotal Component 1	**28.7**	**105.2**	**25.0**	**86.8**	**-1.3**	**80.5**
Component 2A: Secondary Infrastructure for Environmental Sanitation						
Long Xuyen	23.6	30.2	20.4	23.8	-1.1	301.0
Bac Lieu	24.8	17.0	21.5	13.6	-1.4	80.8
Ben Tre	37.4	35.0	33.1	30.1	-1.1	673.4
Vi Thanh	33.5	26.6	29.5	22.7	-1.2	169.0
Tan An	46.5	30.1	41.6	26.4	-1.0	605.6
Soc Trang	10.4	0.2	8.3	(1.0)	-5.1	124.5
Vinh Long	40.5	53.2	35.9	46.2	-108	473.2
Subtotal Component 2A	**31.3**	**192.4**	**27.4**	**161.9**	**-1.2**	**95.5**
Component 2B: Secondary Roads and Bridges						
Long Xuyen	16.7	11.1	14.8	8.0	2.1	46.9
Bac Lieu	15.5	8.7	13.6	5.8	2.5	40.3
Ben Tre	18.0	19.6	15.7	14.2	2.1	48.5
Vi Thanh	16.5	8.7	14.4	6.0	2.4	41.9
Tan An	15.3	17.3	13.4	11.3	2.6	39.0
Soc Trang	19.6	19.6	18.1	16.0	1.5	66.6
Vinh Long	15.5	11.8	13.8	8.1	2.5	40.6
Subtotal Component 2B	**16.7**	**95.8**	**14.8**	**70.1**	**2.1**	**46.9**

Source: World Bank estimates (2017), based on PMU records.

* EIRR: economic internal rate of return; ENPV: economic net present value; SI: sensitivity indicator; SV: switching value

** Defined as a 10% increase in investment cost and 10% decrease in benefits relative to the base case.

Fiscal Analysis

17. **Project cost and financing plan.** The PPCs of An Giang, Bac Lieu, Ben Tre, Hau Giang, Long An, Soc Trang and Vinh Long have requested US$240 million from the Bank to co-finance investments under the Scaling-up Urban Upgrading Project, and propose to provide about US$90 million in CF contributions. The amount requested from the Bank would be financed from an IDA credit of US$140 million and an IDA Scale-up Facility (SUF) credit of US$100 million. According to the latest draft of a Ministry of Finance (MoF) decree on on-lending of ODA and less-concessional loans, all PPCs would need to borrow 70% of the IDA SUF credits (which the Bank offers at non-concessional terms), and the remaining 30% would be on-granted.[16] Depending on the fiscal capacity of the PPC, MoF would on-lend 20% to 30% of the regular IDA credit allocated to that PPC and on-grant the remainder. Based on these assumptions, US$104 million of the IDA and IDA SUF credits would be on-lent, and US$136 million would be on-granted. Refer to Table A4.11 for an overview of the SUUP project cost and financing plan.

Table A4.11: Project Cost and Financing Plan of SUUP (US$ million)

PPC (Project Town)	Bank Financing			Borrower	TOTAL
	IDA*	IDA SUF**	Subtotal		
An Giang (Long Xuyen)	20.0	20.0	40.0	16.2	56.2
Bac Lieu (Bac Lieu)	20.0	15.0	35.0	11.3	46.0
Ben Tre (Ben Tre)	20.0	15.0	35.0	11.0	46.0
Hau Giang (Vi Thanh)	20.0	5.0	25.0	11.8	36.8
Long An (Tan An)	20.0	15.0	35.0	8.9	43.9
Soc Trang (Soc Trang)	20.0	15.0	35.0	11.3	46.3
Vinh Long (Vinh Long)	20.0	15.0	35.0	19.5	54.5
TOTAL	**140.0**	**100.0**	**240.0**	**90.0**	**330.0**

Source: PPC proposals

* For IDA: PPCs of An Giang, Long An and Vinh Long: on-lending 30%, on-granting 70%. Others: on-lending 20%, on-granting 80%.

** For IDA SUF: All PPCs: on-lending 70%, on-granting 30%.

Table A4.12: Subloan Amounts by PPC
(US$ million)

PPC	US$ million
Long Xuyen	20.0
Vinh Long	16.5
Soc Trang	14.5

[16] The working title of the new decree is "Decree on Management of On-Lending of ODA loans and Government's Concessional Loans to People's Committees of Provinces and Centrally-Run Cities". Several PPCs intend to apply for a reduction of the on-lending share of IDA SUF credits from 70% to 50%. Because MoF's draft decree does not provide for special exemptions, these proposals were not considered.

Tan An	16.5
Bac Lieu	14.5
Ben Tre	14.5
Vi Thanh	7.5
TOTAL	**104.0**

Source: World Bank estimates (2016)

18. **Fiscal capacity to borrow for SUUP.** The draft MoF decree on on-lending of ODA less-concessional loans mentions two constraints to the amount of foreign-funded debt of a PPC:

- *Repayment limit*. The total debt service on a foreign-financed loan to a PPC must not exceed 10% of the annual budget revenue of that PPC in any given year during the loan repayment period.
- *Overall debt limit*. The State Budget Law of 2002 restricts total outstanding borrowing of PPC to 30% of total annual domestic capital investment of the provincial budget (Art. 8.3). Because this law will no longer apply after 2016, the debt limits of the State Budget Law of 2015 (which will come into effect on 1 January 2017) were used instead. According to the new law, total outstanding debt must not exceed 20% to 60% of the budget that a PPC may retain (Art. 7.6).

On 1 June 2016, the Bank presented a methodology to MoF to operationalize the estimation of the borrowing capacity of a PPC.[17] In this context, the borrowing capacity of a PPC was defined as "the maximum amount of a foreign-funded subloan that a PPC is able to borrow without breaching the repayment capacity limit and overall debt limit". In October 2016, the Bank used this methodology to assess the borrowing capacity of participating PPCs based on fiscal data provided by their consultants. In January 2017, the Mission updated the analysis with revised data for all of the seven participating PPCs. As shown in Table 1, six of seven PPCs remain within the repayment limit and overall debt limit throughout the loan repayment period (2017-2045) and are therefore deemed to have the fiscal capacity needed to cover the debt service charges of the proposed subloans for SUUP.[18] Because of high levels of existing debt, PPC Bac Lieu will breach the "stock of debt" limit in 2020. To be able to borrow the requested amount, the PPC will need to repay part of its existing debt ahead of the repayment schedule in order to remain in compliance with MoF's debt limits.[19]

Table A4.13: Compliance with Repayment Limit and Overall Debt Limit

PPC	Limit #1: Repayment Capacity <10% RR			Limit #2: Stock of Debt < Max. Allowed		
	Highest Share (% RR)*	Year of Highest Share	Repayment Capacity Sufficient?	Highest Debt Share (% allowed)	Year of Highest Share	Maximum Allowed Debt Sufficient?
An Giang	5.0	2017	Yes	64	2017	Yes

[17] *A Methodology for Assessing the Borrowing Capacity of Provincial People's Committees.* World Bank. June 1, 2016.
[18] These calculations assuming that the accelerated repayment clause (which would permit the bank to reduce the repayment period of a standard IDA credit) would not apply.
[19] The fiscal analysis explicitly took revenue from the sale of land into consideration. During 2014-2016, revenue from land sales accounted for less than 1% of the total revenue of the seven participating PPCs, with the exception of the revenue of PPC Vinh Long in 2016 (2.2%).

Bac Lieu	6.6	2020	Yes	153	2020	**No**
Ben Tre	4.7	2017	Yes	56	2021	Yes
Hau Giang	6.6	2017	Yes	90	2017	Yes
Long An	5.9	2017	Yes	12	2021	Yes
Soc Trang	2.9	2017	Yes	54	2021	Yes
Vinh Long	5.8	2017	Yes	44	2017	Yes

Source: World Bank estimates

* RR: retained revenue

19. **Fiscal capacity to provide counterpart fund contributions for SUUP**. The participating PPCs need to finance the following expenditures from their own resources: (i) capital investment expenditure of project-financed assets not covered by Bank Financing, (ii) incremental O&M expenditure on project-financed assets, and (iii) debt service charges on subloans for project-financed assets (it was conservatively assumed that no CF contributions would be provided by the central government or City People's Committees). Although there is no formally accepted methodology to assess the ability of a sub-national government to provide counterpart fund (CF) contributions, ADB normally requires (and MoF usually accepts) that CF contributions for a proposed project must not exceed 5% of the total budget of the entity that provides the contributions. This threshold would apply in any year of the project implementation period. Based on financing plans presented to the Mission on 13 January 2017, it was found that none of the PPCs would exceed the 5%-limit through the project implementation period, except PPC Vinh Long during 2019-2020. Because the excess is relatively minor (6.4% in 2019 and 6.3% in 2020), and because the PPC has expressed a strong commitment to provide the counterpart funds, the PPC of Vinh Long was deemed to have the fiscal capacity to provide the required counterpart funds.

20. **Conclusions and recommendations**. The total cost of SUUP is estimated at US$330 million. This amount would be financed from IDA credits (US$240m) and CF contributions (US$90m). Of the IDA and IDA SUF credits, US$104m would be on-lent to PPCs, and the remainder would consist of sub-grants from the central government to the PPCs. Six of the seven participating PPCs have the fiscal capacity to: (i) cover debt service on proposed sub-loans for SUUP, and (ii) provide the minimum required counterpart fund contributions for investment and incremental management, operations and maintenance costs. Assessment at the time of appraisal had highlighted high levels of existing debt for the seventh city Bac Lieu due to which there was a risk that the PPC of Bac Lieu would breach one of the lending limits imposed by the Ministry of Finance (MoF) in 2020. Following the suggested mitigation measures, Bac Lieu PPC consulted with MOF to rearrange the city's debt. According to the latest data provided by the Province after rearrangement of debt repayment plan, the risk of Bac Lieu breaching the debt limit is very minimal.

ANNEX 5: CLIMATE CHANGE RESILIENCE

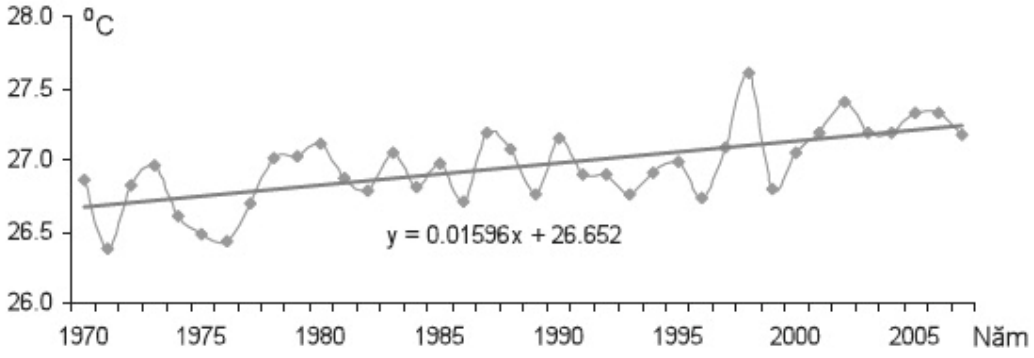
COUNTRY : Vietnam
Vietnam Scaling up Urban Upgrading Project

Climate Change in the Mekong

1. The Mekong Delta is highly vulnerable to climate change, and Figures 1-4 provide an overview of climate trends experienced across the region:

- From 1970 to 2007 average temperature and rainfall increased 0.6°C and 94 mm, respectively.
- Mean sea level rise is about 3 mm/year (1993-2008) in line with sea level rise worldwide
- Climate change will result in change of rainfall pattern and stream flow, which can cause severe floods in the rainy season (especially in Ben Tre province) and low flows in the dry season.
- Rainfall will become more concentrated, with total number of days with rain decreasing.
- It is estimated that in the delta maximum monthly flows will increase by 16–19% and minimum monthly flows will decrease by 26–29%, compared with 1961–1990 levels.
- In the flat areas of the delta, the predicted sea level rise can result in large areas of permanent and more frequently inundated coastal plains. Depending on the scenario the percentage of inundated delta ranges from 12.8 to 37.8%.
- Salinity levels and salt-water intrusion vary depending on the magnitude of the previous year's flood, ability to supply freshwater upstream in the dry season, production level of summer-autumn paddy and the onset of the rainy season. [20]

Figure 5.1: Mean Temperature Trend



[20] Marchand M., Dam, R. and Buck, T. (eds) (2011) *Towards a Mekong Delta Plan: synthesis of water sector assessment.* Netherlands Cooperation, Vietnam

Figure 5.2: Trend of Mean Annual Temperature Change (°C) from 1970-2007

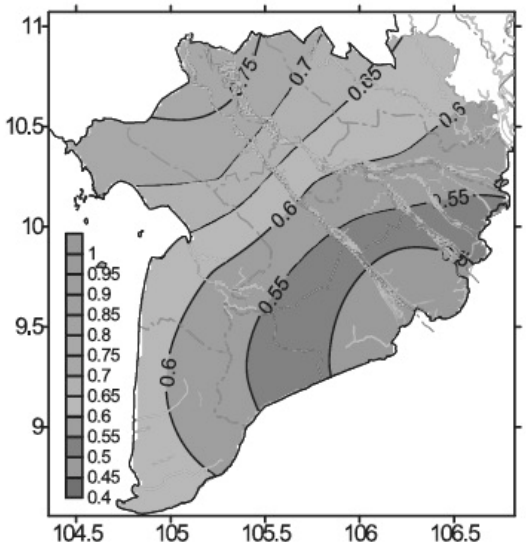


Figure 5.3: Sea Level Trend at Hon Dau Monitoring Station

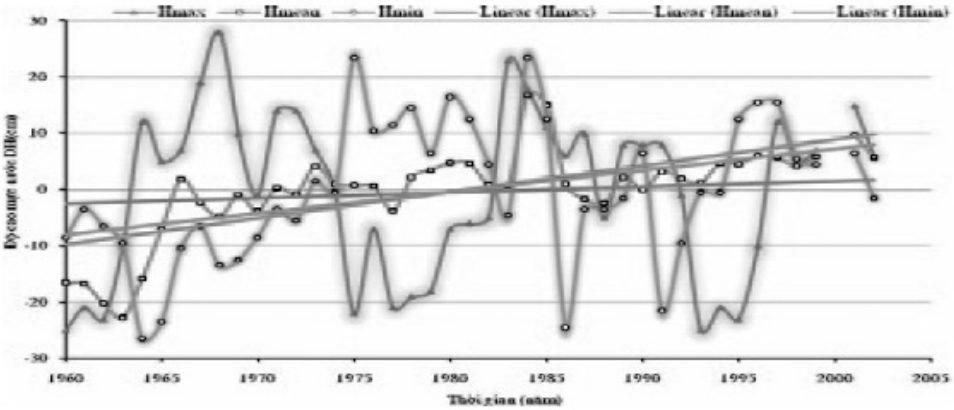
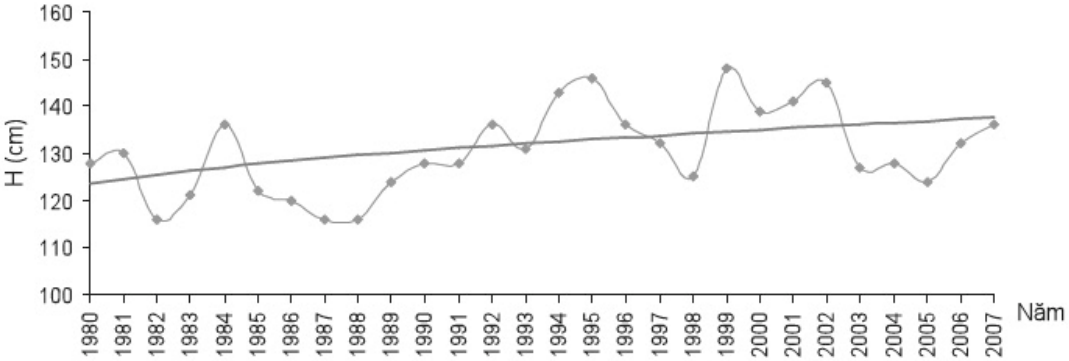


Figure 5.4: Sea Level Trend at Vung Tau Station



Climate Resilience in Project Design

2. While the above-mentioned climate trends will affect the MDR in numerous ways, the primary threat that climate change poses to investments under this project is through increased flood risk. The exposure of infrastructure investments to flooding exacerbated by climate change varies across project cities based on elevation and proximity to the sea. Project investments also have the potential to increase flood risk given the build up of impermeable surfaces (pavement and asphalt) through road construction. Project preparation included a technical review by the GFDRR team to ensure that project investments were accounting for climate risk by (i) Increasing the drainage capacity of canal systems, and (ii) Preserving green spaces for water retention within city limits. *The descriptions of the components below should be read together with the description of city specific resilience interventions provided in Annex 2.*

3. *Component 1: Tertiary Infrastructure Upgrading in Low Income Areas:* Investments in this category are not threatened by climate change as they are in fact improving the quality of local drainage systems in already existing urban settlements. In cities like Tan An and Ben Tre, where flooding from rising water levels is minimal, a well functioning drainage system sufficiently mitigates against possible flooding from intense periods of rain while in cities like Bac Lieu that have higher exposure to sea level rise, these investments still contribute to an overall improved drainage system.

4. **100% of investments under this component, through the upgrading of canals, clearing of culverts, and establishing new household connections to drains, are retrofitting the infrastructure of LIAs to better withstand floods**.

5. *Component 2: Priority Primary and Secondary Infrastructure:* The investments under this component, which include new primary roads, are more mixed in their exposure to climate change. In some cities like Soc Trang and Bac Lieu, ring roads or roads outside of the city core were proposed in line with the city master plan but without consideration of how this infrastructure might be exposed to climate conditions or even exacerbate and change flooding patterns. In these cases, TA from the GFDRR grant is critical in allowing for project cities to understand and design for the impact of new infrastructure on flood plains and drainage system capacity through the modeling of multiple flooding scenarios. Cities were also encouraged to develop green embankments for proposed canal upgrades. These embankments will reduce runoff during peak flooding periods, (as water is retained longer in natural surfaces than paved surfaces) helping to extend the capacity of city drainage. Experience garnered by city administrations during the development of this infrastructure can be carried forward to later investments that are also planned under the city master plan.

6. **An estimated 60% of embankment upgrading under this component employs green embankment design. 100% of roads constructed under this component will be all-weather. However, since construction of roads does create more concrete surfaces, we assess the contribution to co-benefits at 70%.**

7. *Component 3: Resettlement.* Under this project resettlement is only used when absolutely necessary, such as where informal settlements are encroaching on canals. These informal settlements are highly vulnerable to flooding, and resettling these populations to permanent structures with drainage

connections minimizes personal exposure to climate risk while also improving environmental, sanitation, and health conditions.

8. **Approximately 50 % (600 of 1,201households) will be relocated from high-risk areas along canals across the seven project cities**.

9. Component 4: Project Management Support: As mentioned previously, TA provided under the GFDRR grant, particularly surrounding hydraulic modeling and GIS, will allow cities develop the capacity to measure and mitigate against current weather events and future climate risks as they continue to urbanize and develop.