

# **PROGRAM CONTEXT**

## **PROGRAM ASSESSMENT**

### **THE PROGRAM**



## 7 Program Rationale

The context and rationale for the Program is set out in this chapter. It starts with a summary of ADB's country partnership strategy for Viet Nam, and outlines arrangements with other development partners in urban and infrastructure development and results based lending or its likes. The justification for adopting results based lending approach follows that supports city grEEEn city investment programs within the context of government's decentralization efforts, its urban development framework and constitute the national program on urban development (NPUD). The chapter ends with the proposed monitoring and evaluation framework that will assess the accomplishments of the Program in relation to the proposed results, outputs and outcome, and in the longer term its impact.

### 7.1 Country Partnership Strategy and Development Coordination

The Program supports the ADB's 2012-2015 Viet Nam Country Partnership Strategy (CPS) which focuses on the need to support the government in fostering inclusive growth, economic efficiency and environmental sustainability. The Program is based on assessments undertaken through a GrEEEn City Action Plan (GCAP) process, where the three E's relate to the equity, the economy and the environment, placing it squarely in line with the CPS. In particular the CPS identifies a key challenge for the country as the need to manage rapid economic development in an environmentally sustainable manner, especially in relation to environmental degradation and climate change. Industrialization, urbanization, and agricultural intensification have degraded land and water, and continued discharges of untreated waste to water and soil threaten water safety and, thereby, food security and reliable energy supply. The GCAPs focus on identifying the investments needed to enhance environmental sustainability.

As one of the six focal sectors in the CPS, in the urban sector ADB aims to encourage comprehensive socioeconomic development in urban areas, fostering balanced growth and social stability. The CPS commits ADB to emphasize environmental improvement in selected secondary cities. This particularly applies to those on borders or along transport and economic corridors in the Greater Mekong Subregion (GMS), as well as coastal cities that need to prepare for possible early impacts of climate change. The Program responds explicitly to this. The CPS results framework has a specific objective relating to urban environmental improvement, which the Program will address. Such an approach is also consistent with the recommendations of the Viet Nam Urban Sector Assessment, Strategy and Road Map.<sup>119</sup>

The proposed Program also addresses key weaknesses in the implementation of past CPS, in particular: (i) poor implementation performance – the proposed RBL modality will effectively eliminate the high transaction costs of implementing a project where dual procurement, financial management and reporting systems need to be maintained; and (ii) lack of institutional capacity building – which is addressed in depth through the assistance provided under Results Areas 3 and 4.

In respect of donor coordination, the PPTA team has undertaken extensive consultation with other development agencies providing major loan assistance for investment finance, and with other agencies providing grant assistance. The Program compliments World Bank assistance, which also supports the NPUD, for instance through the Northern Mountains Region for Program for Results (P for R) loan. The Program has also been designed to complement World Bank and JICA assistance for wastewater improvement in Vinh Yen, and the JICA assistance for drainage and wastewater improvement In Hue. The PPTA has also taken into account the expressed interest of the Swiss Development Cooperation, the Global Environment Facility and the Nordic Development Fund to support urban environmental improvements. **Appendix 22** details donor coordination in the sector.

### 7.2 Justification for Results Based Lending Modality

Urban economies in Viet Nam have grown even more rapidly than the urban population, with average annual growth rates exceeding 12%. By 2009, urban areas accounted for more than 50% of GDP. While Ho Chi Minh City (HCMC) and Hanoi dominate the national urban economy, many secondary cities are growing rapidly, especially along the eastern coastal spine. Viet Nam has about 760 cities and towns in its rapidly evolving urban system. The Government of Viet Nam (GoV) understands the need to enable

<sup>119</sup> ADB. Viet Nam Urban Sector Assessment, Strategy and Roadmap. Manila. 2012

cities to design differentiated and dynamic responses to their own development challenges, within an enabling national framework. The strategic challenge facing these cities is to establish an effective urban management and implementation model, including a sound framework for predictable financing for infrastructure investments. Competitive and equitable urbanisation will support the government in addressing the goals of poverty reduction and economic growth. Cities, if their development is well planned and implemented, can also make sure that growth is environmentally more sustainable.

The GoV has been implementing a program of decentralization since the introduction of the Doi Moi reforms, involving a gradual delegation of powers to district and CPCs. The functions and structure of CPCs are legally assigned in the Constitution (2013) and the Law on Organization of People's Council and People's Committee—No. 11/2003/QH11 on 11/26/2003. CPCs are principally responsible for the planning, implementation and operation of public infrastructure under the city's jurisdiction. They are empowered to develop and execute the approved city master plan, and to operate or supervise the running of assigned urban infrastructure. These functions include urban lighting, water supply and drainage, urban transport and safety, environmental sanitation, building control, and the management of land and housing development. However, extensive controls and overlapping functions remain among different levels of the government. Fiscal powers remain relatively more centralized. Local taxation arrangements are subject to central approval of rates and revenue sharing prescriptions, while the system of intergovernmental transfers—consisting largely of gap filling transfers for recurrent expenditures and tightly earmarked transfers for “National Target Programs”—provides relatively less stable or predictable sources of finance.

This has resulted in a significant shortfall between investment needs and available resources—estimated at between 50% and 60% for all infrastructure sectors nationally, and significant policy, regulatory and local capacity weaknesses that will need to be addressed. Capacity building programs, for example, have typically provided only generic training on technical topics, rather than also focusing on improved results through strengthening the public expenditure management cycle.

The Government adopted the NPUD,<sup>120</sup> Decision No. 1659/QĐ-TTg of the Prime Minister, in 2012 to address the lack of coherence in the management of urbanization, and to provide a programmatic focus to achieving the 2020 targets for urban service delivery. The objective of the NUDP is to promote an efficient, sustainable and equitable process of urban development by: (i) improving levels of access to basic urban services—water supply, sewerage and drainage, solid waste management, public lighting, roads and public transport, environmental services and public space; (ii) expanding the provision of serviced land for high-density housing and economic activities; and (iii) making improvements through integrated urban upgrading of low-income urban areas. The NPUD recognizes the importance of developing effective planning, financing, implementation and monitoring systems, particularly at the local level, to ensure the efficient execution and sustainability of required investments in urban infrastructure. It specifically notes the importance of strengthening urban management through improving mechanisms for investment planning and construction management, increasing public awareness of local government roles and responsibilities, building the capacity of local officials, and encouraging new mechanisms to finance infrastructure.

The NPUD is an “umbrella” program through which the GoV aims to coordinate and focus current efforts by all levels of government in addressing the urbanization challenge. The Prime Minister, thus, assigned responsibility for program coordination and implementation to the Ministry of Construction (MOC), and established a multi-departmental Steering Committee—headed by the Minister of Construction—to supervise the execution of the program. It, thus, complements existing government programs—such as the National Program on Upgrading Urban Centers. In particular, the specific reference to the national Green Growth Policy in the Decision, and to the need to include climate-related issues into the processes of urban development.

The NPUD, which has a total envelope of some US\$72 billion over its implementation period,<sup>121</sup> has been supported by the World Bank through its Northern Mountains Region PforR loan<sup>122</sup> but has not

<sup>120</sup> World Bank. Program Appraisal Document for the Results-Based National Urban Development Program in the Northern Mountains Region. Washington. 2014.

<sup>121</sup> Team estimates based on infrastructure investment needs as a percentage of GDP adjusted for backlog and green investment premium, 2015.

specifically addressed the needed mechanisms or provided resources for the implementation of more environmentally-positive and resilient urban development, particularly in secondary cities. The investment needs for such a program are estimated to be US\$25 billion over the NPUD period. With a view to strengthening these aspects of the urbanisation process in Viet Nam, the GoV requested technical assistance from the ADB<sup>123</sup> in the preparation of pilot action plans for secondary cities focusing on sustainable and inclusive urban economic growth. The results of this TA form the basis for the design of the current Program.

The use of the RBL modality responds to the long term nature of both the national and city programs—strengthening planning, delivery and financing systems. In particular, the Program establishes the basis for continued and upscaled ADB support in the future, and facilitates the use of ADB funding to leverage additional resources for sustainable urban development through the establishment of a Green Cities Financing Mechanism.

The design of the Program integrates lessons learned from other results based operations in Viet Nam under World Bank implementation, and other ADB urban operations in Viet Nam. The RBL instrument is still quite new, only implemented in one urban project in Viet Nam thus far, but it is possible to learn some lessons from the early experiences. One such lesson from its implementation is the need to ensure that the agency responsible for the Program is prepared to assume its coordination role, and city governments are empowered to take responsibility for producing results. Also it is essential that the DLIs are formulated to be directly relevant to the output results of city activities.

### 7.3 ADB Value Added

The value added by ADB's intervention is seen in providing much needed development finance, technical assistance and capacity development. Support for the Green City approach to urban development is to be pioneered by the Program, and it establishes the processes and strengthens the institutions integral to implementing the NPUD in the future and, as intended under this program—**Appendix 12**—to integrate issues of sustainability into the NPUD. The Program will be the catalyst for similar development elsewhere in Viet Nam's secondary cities. The Program results will be enhanced environmental quality, climate resilience, economic competitiveness and inclusiveness in secondary cities in Viet Nam, and these are integrated into the DMF for the Program.

ADB adds value by being able to utilise the RBL modality, the most effective instrument to support the GoV in the implementation of the NPUD in the medium term. It aligns the provision of finance for strategic urban infrastructure services in targeted cities with green growth objectives, and provides incentives for better planning and timely delivery of the infrastructure investments. At the same time, it helps in building their technical, managerial and financial capacity. The operation will add significant value to the government program by:

- Enabling the GoV to integrate green growth objectives into its urban development investments as part of a programmatic, national approach within the NPUD.
- Implementing a results-based approach to urban environmental infrastructure service delivery, based on agreed indicators linked to disbursements, which will create incentives for: (i) improved subproject planning and execution; (ii) institutional strengthening; and (iii) improved sustainability of subprojects and overall local investment programs.
- Strengthening country planning and financing systems for fostering innovative and sustainable urban development focused on encouraging private sector, and community investment in higher value added, environmentally positive and resilient growth.
- Strengthening project development, appraisal and procurement systems for urban infrastructure subprojects, including social and environmental systems, fiduciary control, monitoring, evaluation and management that will result in improved value for money in urban infrastructure investments.
- Reducing the transaction costs of development assistance by adopting country systems.

<sup>122</sup> See Footnote 120.

<sup>123</sup> Green Cities TA

## 7.4 Design and Monitoring Framework

The Design and Monitoring Framework (DMF) for the Program has been developed based on its projected results. The DMF considered the problem tree in Chapter 2, which was derived from an assessment of the urban sector of the selected cities, their GCAPs, and the results of discussions with ADB, and the cities and their provinces. The DMF is attached as **Appendix 23**.

The impact of the program will be enhanced environmental quality, climate resilience, economic competitiveness and inclusiveness, including tourism, in the three Program cities. The expected outcome is improved green infrastructure and low impact development of urban areas, and urban management systems in three cities—Ha Giang, Hue and Vinh Yen. To achieve these, the Program will have the following outputs:

- *Environmental infrastructure improved* that includes drainage, embankments and dredging for better flood protection, water supply, sanitation, wastewater management, solid waste facilities, and new and upgraded roads, selected from the GCAPs and leading to improved environmental conditions.
- *Low-carbon development and economic competitiveness promoted*, covering improved access to a new university area, greenways and linear parks promoting tourism, greening of a major new development area, and construction of exhibition/logistics center for business promotion.
- *Inclusive and resilient development for communities* with households oriented on the 3R—reduce, reuse and recycle—and trained on disaster risk management, and sustainable environmental practices; and tertiary connections of wastewater from individual households implemented.
- *City, provincial and national decision support, implementation, and financing systems for grEEEn city development improved*, including systems and training for monitoring, reporting and verification of results-focused urban development, and to utilize these to implement the NPUD and the city GCAP programs, and the provision of sustainable financing for green investments.

## 7.5 Monitoring and Evaluation Framework

The Lead Executing Agency (EA)—Hue DPI—will maintain a monitoring system which tracks the key elements of the design and monitoring framework (DMF) over the life of the Program, preparing summary reports on an annual basis. The respective Departments of Planning and Investment (DPIs) for each city will coordinate information related to achievement of DLIs and compliance with the Program Action Plan. The Implementing Agencies (IAs) will be provided with the requirements for reporting on results and these documents will be consolidated by the DPIs. Consistency in the approach to this process will be ensured by the lead EA, Hue DPI. Consolidated results and compliance reporting will be received by an independent verification agent, who will liaise with MOF on disbursement triggers. Given the innovative nature of the RBL, the lead EA will carry out an independent evaluation prior to the mid-point of the Program as an input to the mid-term review.

## 8 Program Scope

The description of the Program to be financed by ADB is set out in this chapter. The apex for the results-based lending (RBL) Program is anchored on the national government's urban development framework, and green growth and climate change action plans. The Program supports decentralisation, and green city action plans prepared for the participating cities. The city investment program—the broader government program—in relation to the RBL program is presented first in this chapter. A description of the green infrastructure investments proposed under the Program within each of the three cities follows. This details the expected outputs of each subproject. The proposed technical assistance and capacity development packages are summarised in the next section. An outline of the proposed green city financing mechanism proposed for the provinces, but anchored at the national level, completes the chapter.

### 8.1 National Program Context

Government has responded to the urban challenge through its urban development framework—a series of pronouncements to these demands, decrees and decisions that outline programs which together constitute the framework. At the core is the Orientation Master Plan to 2025 with its long-term vision to 2050. This established national urbanization policy, involves limiting the growth of Hanoi and Ho Chi Minh City (HCMC) and supporting secondary cities. There is the 10-year Socioeconomic Development Strategy, 2010-2020, which guides national development, including a target to “sustainably develop urban areas.” The Viet Nam Sustainable Development Strategy for 2011-2020, and the National Green Growth Strategy, 2011-2020 both support urban policy in relation to green cities. More specifically, the National Program on Urban Development (NPUD), 2012-2020 targets an efficient, sustainable and equitable process of urban development through improving access to basic services, and the integrated upgrading of low-income urban areas. The latter was the subject of an early decree on the National Program on the Upgrading of Urban Centers (NPUUC), 2009-2020, which became a component of NPUD.

The NPUD, which has a total envelope estimated by the PPTA consultants to be some US\$72 billion over its implementation period, has been supported by the World Bank through its Northern Mountains Region PforR loan. But it has not specifically addressed the needed mechanisms or provided resources for the implementation of more environmentally-positive and resilient urban development, particularly in secondary cities. The investment needs for such a program are estimated to be US\$25 billion over the 2012-2020 period.

The NPUD specifically states that the Green Growth Strategy implementation is to be integrated into its implementation. In turn, the Green Growth Strategy defines ‘*sustainable urbanisation*’ as one of its core ‘*solutions*’. The strategy clearly defines a set of results needed within this solution. The *sustainable urbanization solution* requires results in: (i) urban planning and planning management; (ii) development of technical infrastructure; (iii) development of green cities, ecological urban areas and green works; (iv) urban transportation; and (v) greening of the urban landscape.

Under the Green Cities Program, the preparation of GCAPs has addressed all of these issues and further developed a city-focused program within each of the participating provinces. These city programs were prepared with extensive assistance from consultants who provided technical input to a participative process. This culminated in a city visioning workshop in which participants were asked: “what do you want your city to be like in ten years?”.

The results of the analysis and prioritisation carried out during this process were structured into a number of *initiatives*, which focused on the identification of key investments needed to realise a priority part of the vision. In summary, the key investment areas were grouped into *initiatives* which fell into the following categories: (i) promotion of lower impact economic activities; (ii) encouraging local sourcing of materials and food; (iii) comprehensive development for a more efficient urban economy; (iv) sustainable environmental infrastructure; and (v) inclusive and resilient development. These initiatives, and the investments identified within them, fall squarely under the results required under the NPUD and the Sustainable Urbanisation ‘Solution Area’ of the Green Growth Strategy.



The investment programs of the GCAPs have been quantified, and subprojects prioritised and subject to technical, institutional, social, safeguards, financial and economic—**Volume 3, Subproject Data Sheets**. The Program will finance a slice of these investment programs, and a selection of subprojects identified therein. For Ha Giang, the Program will finance subprojects to the value of US\$45.7 million or 25.2% of the US\$181.6 million investment program; for Hue, it will finance US\$101.4 million or 13.8% of the \$736.9 million program; and in Vinh Yen, it will finance US\$87.9 million or 8.6% of its US\$1,024.1 million investment program. In total the Program will finance some US\$235.1 million or 12.1% of the US\$1,942.6 million total GCAP investment programs of the three cities.

## 8.2 Green Infrastructure Investments

Infrastructure investments under the Program fall into five groups within the three cities as shown in **Table 8-1**. Some 50.4 kms of drainage and embankments, 30 kms of water mains, 94.8 kms of wastewater pipes, and 43.5 kms of roads, including bridges. The total surface area of improvements and new works is about 475.5 hectares.

**Table 8-1. Infrastructure Investments—Lengths and Surface Areas**

Sector	Ha Giang		Hue		Vinh Yen		Total	
	Length (m)	Surface Area (m <sup>2</sup> )	Length (m)	Surface Area (m <sup>2</sup> )	Length (m)	Surface Area (m <sup>2</sup> )	Length (m)	Surface Area (m <sup>2</sup> )
Drainage, dredging and embankments	14,460	163,558	24,365	971,283	11,562	1,715,620	50,387	2,850,461
Water supply			30,000	15,000			30,000	15,000
Solid waste management		30,000					0	30,000
Wastewater management					94,750	473,750	94,750	473,750
Parks, roads and bridges	6,367	137,087	31,671	654,949	5,498	578,650	43,536	1,370,686
Exhibition linkage center						15,000	0	15,000
<b>Total</b>	<b>20,827</b>	<b>330,645</b>	<b>86,036</b>	<b>1,641,232</b>	<b>111,810</b>	<b>2,783,020</b>	<b>218,673</b>	<b>4,754,897</b>

Source: PPTA Consultants

The location of subprojects and their areas of impact are shown as **Figures 8-1 for Ha Giang, 8-2 for Hue and 8-3 for Vinh Yen**.





Figure 8-2. Hue Location of Subprojects and Impacts Areas

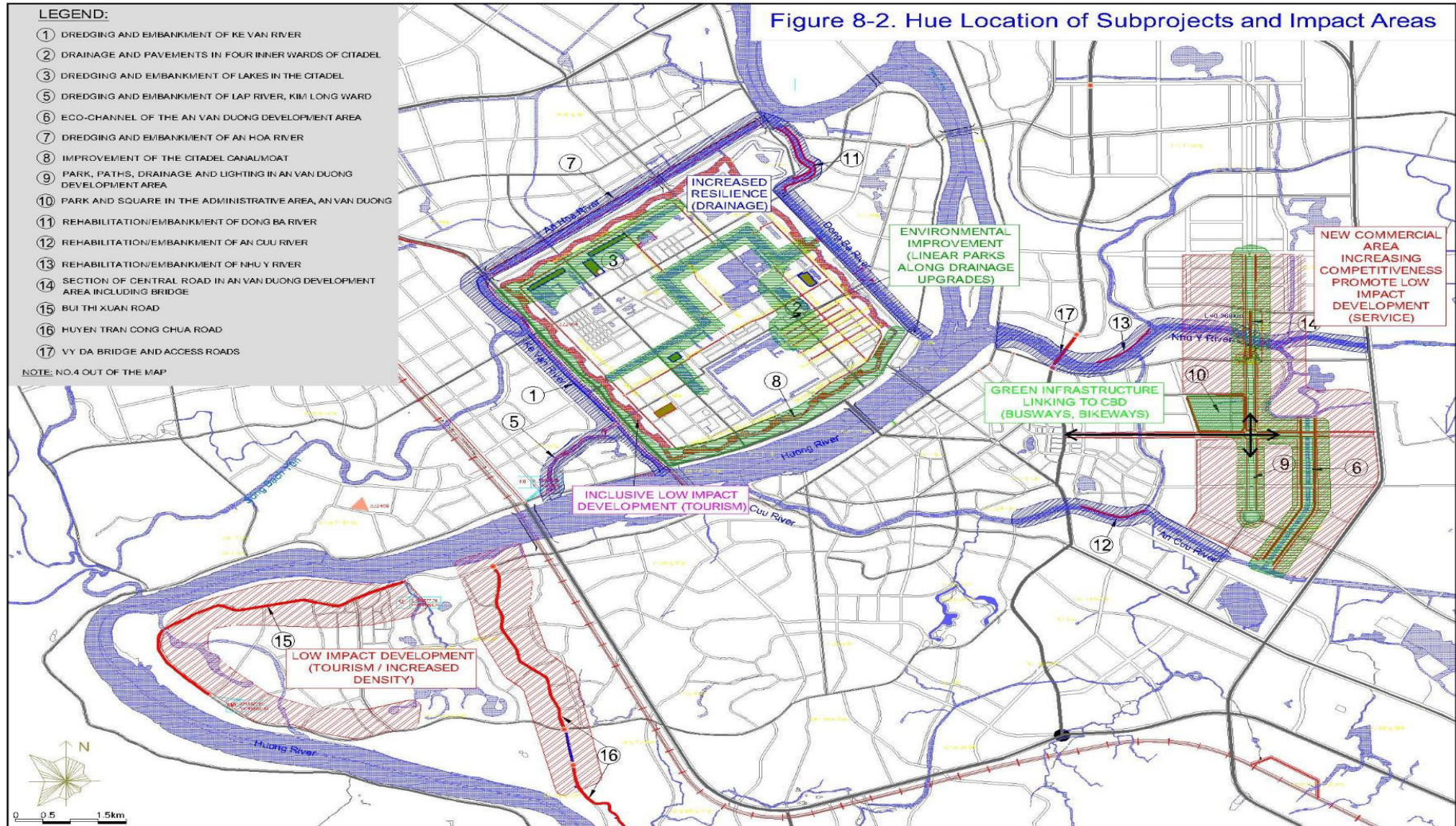
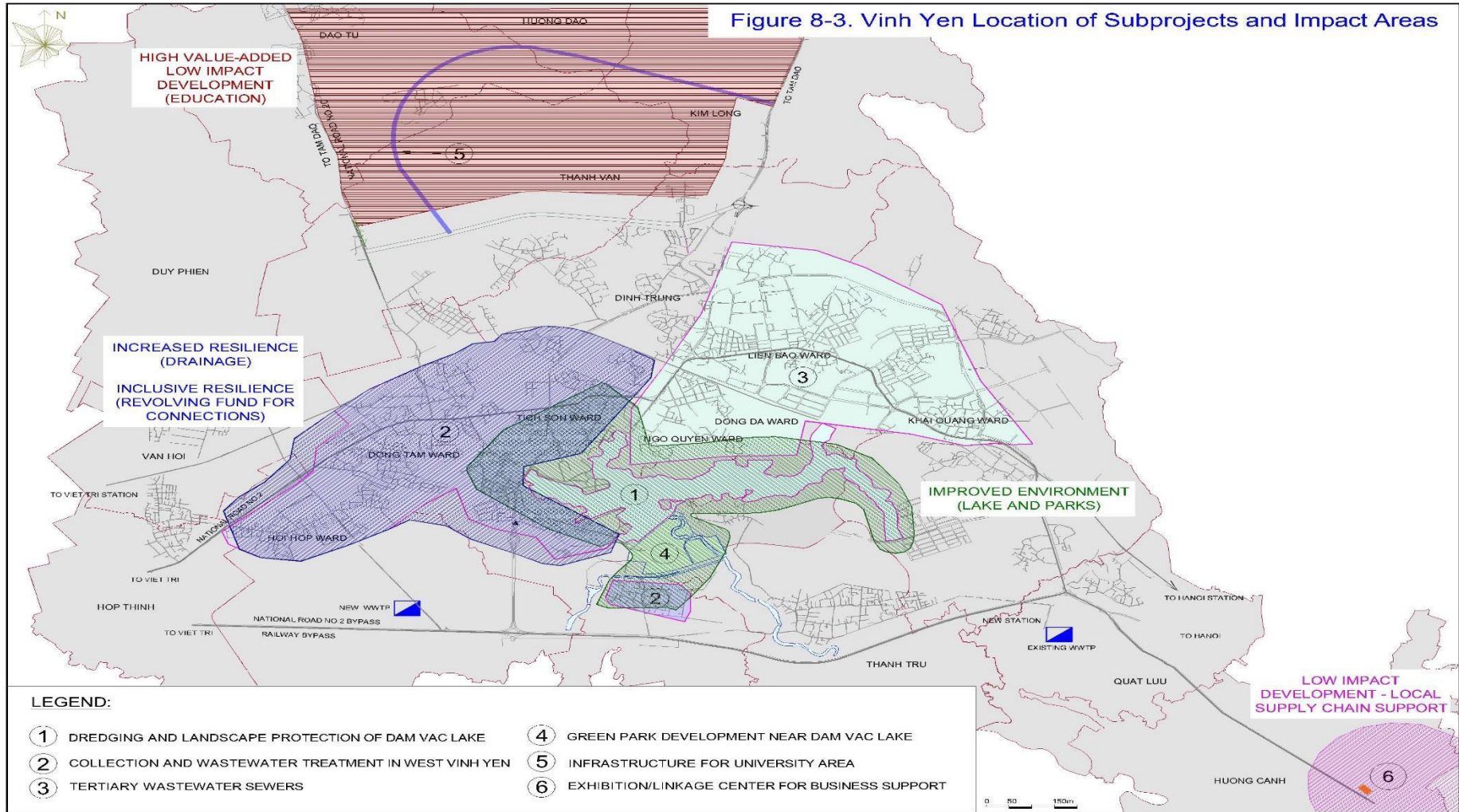




Figure 8-3. Vinh Yen Location of Subprojects and Impacts Areas



### 8.2.1 Ha Giang

The subprojects comprise three drainage projects, three embankment rehabilitation projects, three roads<sup>124</sup> subprojects for rehabilitation, one bridge and solid waste landfill improvements. Subprojects were proposed to improve city drainage for wards of Tran Phu and Nguyen Trai; for areas T1, T2, T3 and T4 in Quang Trung Ward; and Minh Khai ward. A network of 14 streams flow from the surrounding mountains to Lo River and Mien River. They constitute a green link between the surrounding mountains and the Lo and the Mien Rivers, but are combined sewers collecting storm water and wastewater. The Program involves cleaning and rehabilitating this primary storm drainage system. Embankment rehabilitation covers the western embankment of Lo River—from Goc Gao to the new Me Bridge; embankment and roads for two sides of the Mien River—from Suoi Tien to Bridge 3/2; southern embankment of Me Stream—part from old Me bridge to Chang spillway; and the embankment of Nam Chau Stream—from Quyet Thang to Mien River. For most subprojects, greener solutions were suggested for embankments. The embankment improvements should be integrated with the improved road subprojects, bridge, and the proposed green belt to protect the quality of the Lo River and connect green hubs. Roads and transport subprojects include the upgrading of 1.23 kms of National Road No.2, and a new ring road which by-passes the south eastern side of the city from the River Lo Bridge, and National Road No. 2 to the southern edge of the city centre. A bridge over River Lo is also proposed. Solid waste management involves the expansion of the solid waste landfill site located in a scenic area on the south eastern edge of the city.

In summary, ten infrastructure subprojects are proposed:

- Drainage for Tran Phu and Nguyen Trai Wards.
- Drainage for Minh Khai Ward.
- Drainage of T1, T2, T3 and T4 for Quang Trung Ward.
- Western Embankment of Lo River.
- Embankment and roads on each side of Mien River.
- Southern Embankment of Me Stream.
- Improvement of Existing Landfill.
- Upgrading of National Road Number 2.
- Southern Ring Road.
- Bridge from National Road Number 2 to Southern Ring Road.

**Table 8-2**, shows that some 7,378 linear meters of drainage swales over an area of 45,062 square meters will be constructed/improved in Tran Phu, Minh Khai and Quang Trung wards. In addition 7,082 linear meters of embankment improvements will be undertaken along the Lo and Mien Rivers and the Me stream, covering some 118,496 square meters of land. The landfill subproject will require 30 ha of land. 6,367 linear meters of road are proposed to be improved or constructed, covering 137 087 square meters of land. Green infrastructure will be constructed within the drainage system—22,531 m<sup>2</sup> and as part of the road subprojects—33,597 m<sup>2</sup>. It will also feature in the embankment improvements covering some 118,496 m<sup>2</sup>.

**Table 8-2. Ha Giang Subprojects—Dimensions**

Sector/Subproject	Length (m)	Surface Area (m <sup>2</sup> )	Green Infrastructure Area(m <sup>2</sup> )	Base Cost less Taxes (VND Millions)
Drainage:				
Tran Phu and Nguyen Trai, Wards	2,921	18,987	9,394	37,653
Minh Khai Ward	3,269	20,729	10,364	40,893
T1, T2, T3 and T4, Quang Trung Ward	1,188	5,346	2,673	7,546
Sub-total	7,378	45,062	22, 531	86,092
Embankment Improvements:				

<sup>124</sup> One combined with embankment improvements.

Sector/Subproject	Length (m)	Surface Area (m <sup>2</sup> )	Green Infrastructure Area(m <sup>2</sup> )	Base Cost less Taxes (VND Millions)
Lo River	950	17,765	17,765	51,863
Mien River	4,527	84,661	84,661	191,992
Me Stream	1,605	16,050	16,050	24,571
Sub total (Embankments)	7,082	118,496	118,496	268,426
Improvement of Existing Landfill	n/a	30,000	n/a	19,404
Roads and Bridges:				
Upgrading of National Road No 2.	1,230	33,200	8,300	41,796
Southern Ring Road Improvement	2,936	49,912	12,478	86,585
Bridge from National Highway No. 2 to Souther Ring Road—over Lo River	150	2,700	0	88,084
Phung Hung Road (Mien River)	2,051	51,275	12,818	49,590
Sub-total (Roads and Bridges)	6,367	137,087	33,597	266,055
Total	20,827	330,625	174,604	639,974

Source: PPTA Consultants

### 8.2.2 Hue

Six dredging and embankment improvement subprojects are proposed—Ke Van River, Lap River, An Hoa River, Dong Ba River, An Cuu River and Nhu Y River—plus the dredging and embankment improvements for six lakes in the Citadel, and the improvement of the Citadel Canal/Moat—8.5 km. Other subprojects are a drainage component in four wards of the Citadel, three road subprojects—Bui Thi Xuan Road, Huyện Trần Công Chúa road and a section of the road connecting two urban areas A and B in An Van Duong Development area, and one bridge—Vy Da Bridge and approaches. Also, there is the water supply system for the proposed solid waste treatment facility and nearby villages. And there are a number of greening subprojects—eco channel of the An Van Duong Development Area; park and square in the administrative area of An Van Duong, and park, paths, drainage and lighting in the An Van Duong Development Area.

In summary, seventeen infrastructure subprojects are:

- Dredging and Embankment of Ke Van River.
- Drainage and Pavement in Four Inner City Wards of Citadel.
- Dredging and embankment of Lakes in Citadel.
- Water Supply System to Phu Son Solid Waste Management Facility and Villages.
- Dredging and Embankment of Lap river, Kim Long Ward.
- Eco-Channel at the An Van Duong Development Area.
- Dredging and Embankment of An Hoa River.
- Improvement of the Citadel Canal/Moat.
- Park, Paths, Drainage, and Lighting in An Van Duong Development Area.
- Park and Square in Administration Area, An Van Duong.
- Rehabilitation/Embankment of Dong Ba River.
- Rehabilitation/Embankment of An Cuu River.
- Rehabilitation/Embankment of Nhu Y River.
- Section of Central Road in An Van Duong Development Area including Bridge.
- Bui Thi Xuan Road.
- Huyện Trần Công Chúa Road.
- Vy Da Bridge and Access Road.

Some 24,365 linear meters of embankment will be constructed or repaired. Dredging will be undertaken for an area of 971,283 square meters. Improvement and construction of roads will involve 31,671 linear meters, and will cover an area of 654,949 square meters, including parks and landscaping. Green infrastructure should cover 315,920 square meters of land. Conservation corridors on the embankments

have an areas of 122,795 square meters. Table 8-3, shows that the dimensions of the infrastructure subprojects.

**Table 8-3. Hue Subprojects—Dimensions**

Sector/Subproject	Length (m)	Surface Area (m <sup>2</sup> )	Green Infrastructure Area (m <sup>2</sup> )	Base Cost less Taxes (VND Millions)
<b>Dredging, Rehabilitation and Embankments:</b>				
Ke Van River	2,500	30,000	12,500	48,750
Six lakes in the Citadel	3,395	169,000	16,975	62,694
Lap river	1,764	18,155	8,820	34,061
Eco-channel of An Van Duong Development Area	1,700	325,540	17,000	122,732
An Hoa river	5,000	82,500	25,000	74,800
Improvement of the Citadel Canal/Moat	8500	340,000	42,500	70 395
An Cuu river	876	3,228	0	9 393
Dong Ba river	0	0	0	0
Nhu Y river	630	2,860	0	6 931
Subtotal (Embankment and Dredging)	24,365	971,283	122,795	429,756
Water supply to the solid waste treatment plant	30,000	15,000	0	18,820
<b>Parks and Roads:</b>				
Four wards in Citadel	14,515	139,600	139,600	195,500
Parks, paths, drainage and lighting in An Van Duong Development Area	4,031	139,600	139,600	142,828
Park and square in the Administrative Area, An Van Duong	1,581	201,600	0	116,111
Dong Ba river roads and boardwalk	3,466	20,142	0	12,219
Section of Central road in An van Duong Development Area, including bridge	464	40,700	0	64,937
Bui Thi Xuan road	2,994	31,437	14,970	70,348
Huyen Tran Cong Chua road	4,170	66,720	20,850	42,648
Vy Da bridge and access roads	450	15,150	900	58,090
Subtotal (Roads and Parks)	31,671	654,949	315,920	702,679
<b>Total</b>	<b>86,036</b>	<b>1,641,232</b>	<b>438,715</b>	<b>1,151,255</b>

Source : PPTA Consultants

### 8.2.3 Vinh Yen

The subprojects involve Dam Vac Lake and park improvements, sanitation and wastewater management improvements, road developments, and an exhibition/logistics center. The Dam Vac lake improvements involve dredging, construction of an embankment, and the development of a park adjacent to lake. The sanitation component includes two subprojects—the completion of secondary and tertiary wastewater collection networks in four wards currently connected to a new wastewater treatment plant, which is not yet in operation; and the construction of a wastewater collection network in three wards with connections to a new wastewater treatment plant to be built under the subproject. The Program also includes one new road—an arterial road for the proposed university area. The proposed revolving fund to finance household sewer connections is proposed under the grant and not the loan.

In summary the six infrastructure subprojects are:

- Dredging and Landscape Protection of Dam Vac Lake.



- Collection and Wastewater Treatment in West Vinh Yen.
- Tertiary Wastewater Sewers.
- Green Park Development near Dam Vac Lake.
- Infrastructure for University Area.
- Exhibition/Linkage Center for Business Support.

The Dam Vac Lake subproject involves dredging of 160 ha of the lake, constructing 11,562 linear meters of embankment and building a park on some 44.1 ha of land. The collection and wastewater treatment subproject for three wards will involve the purchase and laying of 79,625 linear meters of pipes, construction of 2,380 manholes and six pumping stations, providing 9,000 household connections, and the building of a wastewater treatment plant with a capacity of 7,000 m<sup>3</sup>/day. The tertiary wastewater sewers component for four wards will involve the purchase and laying of 15,125 linear meters of pipes, construction of 710 manholes or CSO's, and three pumping stations. The infrastructure for the university area involves the construction of one lane of an arterial road of 5.5 kms. The exhibition center to link business to the green program is proposed to be built on a site of 1.5 ha—total area of the building is some 5,465 m<sup>2</sup>. **Table 8-4**, shows the dimensions of the infrastructure subprojects.

**Table 8-4. Vinh Yen Subprojects—Dimensions**

Sector/Subproject	Length (m)	Surface Area (m <sup>2</sup> )	Green Infrastructure Area (m <sup>2</sup> )	Base Cost less Taxes (VND Millions)
<b>Dredging and Embankment Protection of Dam Vac Lake:</b>				
Embankment	11,562	115,620	115,620	115,079
Dredging		1,600,000		94,155
Subtotal (Dam Vac Lake)	11,562	1,715,620	115,620	209,234
Green Park Development near Dam Vac Lake	n/a	441,200	441,200	186,444
Collection and Wastewater Treatment in West Vinh Yen	79,625	398,125	60,000	308,017
Tertiary Wastewater	15,125	75,625	N/A	119,796
<b>Roads:</b>				
Infrastructure for University Area	5,498	137,450	34,362	254,178
Exhibition Center		15,000	0	53,591
<b>Total</b>	<b>111,810</b>	<b>2,783,020</b>	<b>535,562</b>	<b>1,131,260</b>

Source: PPTA Consultants

All of these subprojects contribute to the greening program which is focused on the protecting the main hub—Dam Vac Lake. Green infrastructure features will be prominent and are part of the infrastructure for the university area—the arterial road, 34 362 m<sup>2</sup>. Green features are also included in the wastewater treatment plant—60,000 m<sup>2</sup>, within the embankment of Dam Vac Lake—115,620 m<sup>2</sup>, and in the new park 441,200 m<sup>2</sup>. The university village road will become a green corridor connecting two green hubs of the city.

### 8.3 Technical Assistance and Capacity Development

Consulting services will be provided through two modalities: Program Implementation Assistance (PIA) consultants for detailed engineering design and construction supervision of investments under the loan; and institutional strengthening and capacity development assistance, which will be provided through five consulting packages funded by a grant from ADB.

The total cost of the program implementation assistance—mainly engineering design and construction supervision is US\$13.21 million; while that for the institutional strengthening and capacity development component is US\$13.09. The later packages envisage some 1,044 person months of consulting services—914 national consultants, and 130 international. The breakdown is shown as **Table 8-5**.



**Table 8-5. Summary of Institutional Strengthening and Capacity Development Assistance**

Package	Person months			Base Costs (US\$m)		Contgcy (US\$m)	Total Cost (US\$m)
	Int'l	Nat'l	Total	Renum	Other		
Policy Support	17	25	42	0.62	0.16	0.08	0.86
Independent Verification	19	231	250	3.12	0.42	0.35	3.89
PMU Support	32	249	281	2.22	0.42	0.26	2.90
Capacity Development Support	24	175	199	1.55	0.51	0.21	2.26
Green Cities Financing Mechanism Support	34	98	132	1.47	0.34	0.18	2.00
Green Cities Fund Mechanism	4	136	140	0.89	0.19	0.11	1.18
Total	130	914	1,044	9.86	2.04	1.19	13.09

Source: PPTA Consultants

Each package is described in the following paragraphs and is detailed in Chapter 11.

### 8.3.1 Program Implementation Assistance Consultants

The PIA consultants will be procured by each city PMU. The services will be provided by domestic consulting firms. The PIA consultants will be responsible for supporting respective PMUs in detailed engineering design, procurement, and implementation and supervision of the subprojects; providing specialist technical and sector specific support; and in quality assurance and reporting. Overall coordination of consulting services will be provided by the lead PMU and the ADB through its Viet Nam Country Office. The consultants will be required to liaise with each other, where necessary, and there may be occasions when the staff of the PMUs and PPCs will need to come together for joint workshops and common training.

The PIA consultants will have expertise, depending on the sub-components, within each city in:

- Project management.
- Engineering, design, documentation, bidding and construction of drainage dykes, wastewater system and networks, retention basins, urban roads and bridges, and solid waste management subprojects, among others.
- Geotechnical, structural, mechanical, and electrical engineering.
- Procurement and contract administration.

This TA package is further detailed in Chapter 11, and in **Appendix 20**.

The PMUs in each Program city will provide suitable office accommodation for their consultants, and will facilitate the availability to them of all relevant data, maps, and reports. They will also ensure access to all equipment—including vehicles, computing, and communication equipment—purchased under the assistance at no cost to the consultants. The PMUs and participating agencies of each PPC and CPC will provide counterpart and support staff to work with the consultants, and arrange introductions to concerned government organizations, divisions, and departments. Each consultant team should include translators and interpreters to assist their international staff.

### 8.3.2 Institutional and Capacity Development Consultants

Five grant-funded TA packages will support the PMUs and build national systems in:

- Policy Support – this package will focus on building city, provincial and national systems to plan and implement sustainable urban development.
- Independent Verification – this package will design and build the systems for monitoring, reporting and verification of results-focused urban development, and undertake the verification function for the RBL.

- PMU Support – this package will develop systems for the implementation of results-focused urban development, and strengthen PMUs to enable them to utilise such systems to implement the NPUD and the city GCAP programs.
- Capacity Development Support – this package will provide the training for PMUs, and other provincial and city agencies required to implement the NPUD and the RBL.
- Green Cities Financing Mechanism Support – this package will support the development of the Green City Financing Mechanism at Viet Nam Development Bank (VDB) and in the participating provinces.
- Green Cities Fund Implementation – this TA and investment package will support the preparation of community-based investments as pilot subprojects for future financing activities, and provide approximately US\$2 million per city to finance them.

These TA packages are further detailed in Chapter 11, and in **Appendix 20**.

The PMUs in each Program city and the relevant groups within the MOC, MONRE and VDB will provide suitable office accommodation for the operation of the institutional and capacity development consultants. They will facilitate the availability to the consultants of all relevant data, maps, and reports etc, and will also ensure access to all equipment—including vehicles, computing, and communication equipment purchased under the Program—at no cost to the consultants. The PMUs and participating agencies will provide counterpart and support staff to work with the consultants and arrange introductions to concerned government organizations, divisions, and departments. Each consultant team should include translators and interpreters to assist their international staff.

#### 8.4 Green City Financing Mechanism

The PPTA team propose the establishment of a Viet Nam Green Cities Fund that would provide catalytic financing to facilitate investment in green economy initiatives that support poverty reduction and job creation. The Fund would be focused on financing subprojects that are based on green principles. It would support subprojects that lead to efficient, compact cities that promote low carbon development and the efficient use of available natural resources, and bolster resilience. The Fund would act as a ‘challenge fund’ – financing viable projects proposed by provinces. It would serve as the base for strengthening LDIFs and other provincial agencies to act as channelling mechanisms.

The Green Cities Fund will actively seek to respond to weaknesses, both in the public or private sector, that hamper Viet Nam’s transition to a green economy by:

- Identifying, developing and promoting high impact green projects.
- Showcasing the opportunities to transition to a green economy.
- Provide resources for investments supporting Viet Nam’s development of green infrastructure and a green economy.

Seed funds will be released to the provinces—US\$2 million for each—to support pilot subprojects promoting community based resilience. This will include some US\$2 million to fund the loans program for financing household connections to the tertiary sewer system in Vinh Yen.

**Annex 1 of Appendix 19** has more detail on the proposed operation of the Fund.



## 9 Expenditure Framework and Financing plan

Cost estimates were prepared for each city's investment program proposed for inclusion under the Program. These were matched with the likely resource envelope available to the cities on the basis of draft guidelines on financing subprojects from the MOF, and the estimated borrowing capacities of the concerned province. This chapter presents the summary estimates and assessments, while detailed computations and assumptions used are set out in **Appendix 24**.

### 9.1 Preliminary Program Estimates—Cities' Subprojects

The total estimated cost of the subprojects submitted by the three cities—Ha Giang, Hue, and Vinh Yen—as their participation in the Program, is US\$235.07 million, inclusive of physical and price contingencies, taxes and duties, and interest charges (**Table 9-1**).

**Table 9-1. Total Estimated Subprojects Costs, by City**

City	Total Cost Estimates		
	VND million	US\$ million	% to Total
Ha Giang	1,006,318	45.74	19.8
Hue	2,150,924	97.77	42.2
Vinh Yen	1,934,753	87.94	38.0
<b>Total</b>	<b>5,091,995</b>	<b>231.45</b>	<b>100.0</b>

Source: PPTA Consultants' estimates based on data from each city.

Total base cost of the subprojects is some US\$132.84 million, representing 53.0% of total estimated Program costs. This is broken down into the following: drainage, dredging and embankment, US\$56.85 million; construction of roads, bridges and parks, US\$52.37 million; solid waste management, US\$0.88 million; water supply system, \$0.86 million; wastewater management, US\$19.45 million; and exhibition linkage center, US\$2.44 million (**Table 9-2**). Detailed expenditure estimates by city and items are in **Appendix 24**.

**Table 9-2. Total Estimated Expenditures of Program Cities, by Expenditure Item**

Expenditure Item	Total Cost Estimates		
	VND million	US\$ million	% of Total
Base Costs <sup>a</sup>			
Infrastructure Investments			
1 Drainage, Dredging and Embankment			
1.1 Drainage	281,592	12.80	5.1%
1.2 Dredging and Embankment	969,122	44.05	17.6%
Subtotal (Drainage, Dredging & Embankment)	1,250,714	56.85	22.7%
2 Parks, Roads and Bridges			
2.1 Parks	510,320	23.20	9.3%
2.2 Roads	553,645	25.17	10.0%
2.3 Bridges	88,084	4.00	1.6%
Subtotal (Parks, Roads & Bridges)	1,152,049	52.37	20.9%
3 Water Supply	18,820	0.86	0.3%
4 Solid Waste Management	19,404	0.88	0.4%
5 Wastewater Management	427,813	19.45	7.8%
6 Exhibition Linkage Center	53,591	2.44	1.0%
Total (Infrastructure Investments)	2,922,391	132.84	53.0%

Expenditure Item		Total Cost Estimates		
		VND million	US\$ million	% of Total
Technical Assistance and Capacity Development				
1	Green City Policy Support	17,171	0.78	0.3%
2	Independent Verification Assistance	77,853	3.54	1.4%
3	Program Support Assistance	58,032	2.64	1.1%
4	Capacity Building Assistance	45,287	2.06	0.8%
5	Green City Finance Mechanism	39,952	1.82	0.7%
6	Green City Fund Implementation	155,606	7.07	2.8%
Total (TA and CB)		393,900	17.90	7.1%
Detailed Engineering Design and Supervision		204,567	9.30	3.7%
Land Acquisition and Resettlement		313,620	14.26	5.7%
Contingencies <sup>b</sup>				
1	Physical	371,177	16.87	6.7%
2	Price	707,242	32.15	12.8%
Subtotal (Contingencies)		1,078,419	49.02	19.6%
Taxes		410,465	18.66	7.5%
Financing Charges <sup>c</sup>		186,094	8.46	3.4%
<b>TOTAL</b>		<b>5,509,456</b>	<b>250.43</b>	<b>100.0%</b>

Source: PPTA Consultants' estimates based on data from each city.

<sup>a</sup> In August 2015 prices. Includes value-added tax and import duties. The taxes and duties are estimated at \$18.66 million. The government will finance these taxes and duties through tax exemptions. Government participation will likewise include land acquisition and resettlement (LAR) costs amounting to \$14.26 million.

<sup>b</sup> Physical contingency is computed at 10% of base costs, DEDES, LAR, technical assistance and capacity development. Price contingency is based on foreign inflation rates of 0.3% in 2015, 1.5% in 2016, 1.4% in 2017 and 1.5% from 2018 and onwards; and local inflation rates of 2.5% in 2015, 4.0% in 2016, 5.0% in 2017 and onwards.

<sup>c</sup> Includes capitalized interest and contractual spread. Financing charges during implementation on the ADB loans has been computed (i) at 2.0% per annum from ADB's Special Funds resources (Asian Development Fund) with a 25 year term inclusive of a 7-year grace period; and (ii) ADB's ordinary capital resources (OCR) at the 7-year (corresponding to implementation period) USD fixed swap rate of the London inter borrowing rate plus an effective contractual spread of 0.5% and commitment fee of 0.15% for undisbursed amount.

## 9.2 Indicative Financing Plans

### 9.2.1 The Program

A total of US\$214.12 million equivalent will be mobilized to finance the Program, broken down as follows: ADB-Asian Development Fund (ADF), US\$120 million; ADB-Ordinary Capital Resources (OCR), \$75.03 million equivalent; UCCRTF, US\$19.09 million equivalent. The ADB-ADF will be a loan under concessional lending terms, while the ADB-OCR will be a LIBOR-based loan at closer to market based interest rates. The UCCRTF grant will finance technical assistance and capacity building designed to make climate change a central element of city planning. **Table 9-3** summarizes the financing sources of the Program. The Program design, activities and disbursement-linked indicators were developed with reference to these particular sources of financing.

**Table 9-3. Sources of ADB Financing**

Financing Source	Amount (US\$ million)	Terms
ADB-ADF Loan	120.00	Loan at concessional, low interest rates. ADF will finance most program investments.
ADB-OCR Loan	75.13	Loan at terms closer to market interest rates.
UCCRTF Grant	19.09	Grant will support making climate change a central element of city planning.
<b>Total</b>	<b>214.12</b>	

Source: PPTA Consultants.

ADF = Asian Development Fund; OCR = Ordinary Capital Resources; UCCRTF = Urban Climate Change Resilience Trust Fund

Based on the estimated subproject costs of each city (Table 9-2) and the cost of technical assistance and capacity development, the overall financing plan to support this Program is shown as **Table 9-4**.

**Table 9-4. Indicative Financing Plan**

Source	Amount		Share of Total (%)
	VND million	US\$ million	
Asian Development Bank			
ADF Loan	2,640,015	120.00	47.9%
OCR Loan	1,650,727	75.03	30.0%
<b>Sub-total</b>	<b>4,290,741</b>	<b>195.03</b>	<b>77.9%</b>
Asian Development Bank			
UCCRTF Grant	420,064	19.09	7.6%
Government Counterpart	798,651	36.30	14.5%
<b>Total</b>	<b>5,509,456</b>	<b>250.43</b>	<b>100.0%</b>

ADF = Asian Development Fund; OCR = Ordinary Capital Resources; UCCRTF = Urban Climate Change Resilience Trust Fund.

Source: PPTA Consultants' estimates.

### 9.2.2 The Provinces

The cities' infrastructure investments will mainly be financed from ADB's Asian Development Fund (ADF) and the Ordinary Capital Resources (OCR). ADB loan funds will be channeled to the Program through the Ministry of Finance and will be passed on to the provincial governments of Ha Giang, Hue and Vinh Phuc partially on-loan and on-grant basis. The part of the ADF loan will be provided to the provinces on-grant based on the following formula—90% to Ha Giang, 70% to Hue and 50% to Vinh Phuc. OCR will be 100% on-loan. The Government of Viet Nam will cover the funding requirement for land acquisition, resettlement, taxes, and duties.

For Ha Giang, the total Program cost amounts to US\$45.74 million equivalent, broken down into ADF loan of US\$4.0 million equivalent, ADF grant of US\$36.0 million equivalent and GoV equity of US\$5.74 million equivalent. For Hue, the total cost amounts to US\$97.77 million equivalent, broken down into ADF loan of US\$12.0 million equivalent, ADF grant of US\$28.0 million equivalent, OCR loan of US\$38.03 million equivalent, and GoV equity of \$19.75 million equivalent. For Vinh Yen, the total cost is some US\$87.94 million equivalent, broken down into ADF loan of US\$20.0 million equivalent, ADF grant of US\$20.0 million equivalent, OCR loan of \$37.13 million equivalent, and GoV equity of US\$10.81 million equivalent. The summary for each city shown in Table 9-4, and the details are presented in **Appendix 24**.

Table 9-5. Indicative Financing Plan by City/Province

Financing Plan - Ha Giang			
Source	Cost Estimate		Share to Total (%)
	VND million	US\$ million	
ADF Loan	88,000	4.00	8.7%
ADF Grant	792,004	36.00	78.7%
Subtotal	880,005	40.00	87.4%
OCR Loan	-	-	0.0%
GoV equity	126,313	5.74	12.6%
<b>Total (Ha Giang)</b>	<b>1,006,318</b>	<b>45.74</b>	<b>100.0%</b>
Financing Plan – Hue			
Source	Cost Estimate		Share to Total (%)
	VND million	US\$ million	
ADF Loan	264,002	12.00	12.3%
ADF Grant	616,005	28.00	28.6%
Subtotal	880,007	40.00	40.9%
OCR Loan	836,391	38.02	38.9%
GoV equity	434,526	19.75	20.2%
<b>Total (Hue)</b>	<b>2,150,924</b>	<b>97.77</b>	<b>100.0%</b>
Financing Plan - Vinh Yen			
Source	Cost Estimate		Share to Total (%)
	VND million	US\$ million	
ADF Loan	440,001	20.00	22.7%
ADF Grant	440,001	20.00	22.7%
Subtotal	880,003	40.00	45.5%
OCR Loan	816,938	37.13	42.2%
GoV equity	237,812	10.81	12.3%
<b>Total (Vinh Yen)</b>	<b>1,934,753</b>	<b>87.94</b>	<b>100.0%</b>

Source: PPTA Consultants.

ADF = Asian Development Fund, OCR = Ordinary Capital Resources, GoV = Government of Viet Nam

### 9.3 Provincial Borrowing Capacities and Limits

Discussions with MOF confirmed that the GoV will partially relend the ADB loans, passing on the same terms and conditions to the participating provinces. The PPTA consultants were informed that under the guidelines currently being finalized, the following minimum onlending shares will be applicable for ADB-ADF loans: (i) for Ha Giang, a minimum onlending share of 10%, with the remaining 90% qualifying for grant funding; (ii) for Thua Thien Hue, a minimum onlending share of 30%, with the remaining 70% qualifying for grant funding; and (iii) for Vinh Phuc, a minimum of 50% onlending share, with the remaining 50% qualifying for grant funding. These onlending shares were largely based on the financial capacity of each province, with Ha Giang—considered one of the poorest provinces in Viet Nam—allocated the lowest onlending share and consequently, receiving the highest share of the ADB-ADF loan proceeds to be passed on as grants. For ADB-OCR loans, only Ha Giang and Vinh Phuc were eligible to borrow, with 100% of the loan proceeds to be passed on to these two provinces as subloans.

In Viet Nam, provinces must meet certain conditions for domestic borrowing including the criteria for project eligibility, approvals by the provincial-level People's Councils and by the MOF, and compliance with the debt limits established by the State Budget Law (SBL). The formula prescribed by the current SBL sets the limits for the total outstanding debt of a province at 30% of its budgeted annual capital expenditure—and at 100% in the case of Hanoi and Ho Chi Minh City.<sup>125</sup> For the provinces, this limit is

<sup>125</sup> Decree No. 60/2003/ND-CP of June 6, 2003 Detailing and Guiding the Implementation of the State Budget Law No.01/2002/QHII of December 16, 2002. Chapter II, Article 26 Section 1(g).



highly restrictive and does not reflect their actual borrowing capacities. The new SBL, approved in June 2015 and programmed to become effective in 2017,<sup>126</sup> has changed the methodology for calculating provincial debt limits, relating them to the provinces' decentralized revenues, a significant step towards more effective management of sub-national debts arising from local infrastructure investments.<sup>127</sup>

Local governments in Vietnam have three main sources of revenues: (i) revenues retained 100% by provinces, such as taxes and fees related to lands, local fees and charges; (ii) revenues shared between provinces and the central government, such as VAT—except on imports, CIT—except on enterprises with uniform accounting, and excise tax on domestic goods; and (iii) transfers from upper levels of government. For shared revenues, a “sharing rate” between each province and the central government is adopted and kept stable for 3-5 years—known as the stability period. For the stability period 2011-2015 among 63 provinces, 13 provinces are allowed to keep only a portion of the shared taxes they collected and the remaining amounts are transferred to the central budget. Fifty provinces are allowed to retain 100% of their shared taxes collections. The decentralized revenues of provinces comprise the revenues they retain 100% and the revenues from the shared taxes they are allowed to keep. The new SBL requires that total outstanding debts of a province should not exceed 20% to 30% of their decentralized revenues. For provinces with decentralized revenues greater than their recurrent expenditures, their outstanding loans cannot exceed 30% of their decentralized revenues. For provinces with decentralized revenues less than their recurrent expenditures, their outstanding loans cannot exceed 20% of their decentralized revenues.

To comply with the requirements of the new SBL which will be effective by the time the SCDP program is implemented, the PPTA consultants estimated the debt limits of the provinces of Ha Giang, Thue Thien Hue, and Vinh Phuc from 2017-2022—the planned period of SCDP loans availment. For this analysis, the consultants used the statements of decentralized revenues prepared by each province for the period 2011-2015 and their projections from 2016- 2020, if available. Based on trends derived from the statements and projections of the provinces, the consultants also prepared the forecasts for 2016-2022. The analysis incorporated that for the stabilization period 2011-2015, the provinces of Ha Giang and Hue are allowed to keep 100% of the revenues from their shared taxes. The province of Vinh Phuc retains only 60% of its shared taxes with the central government.

The results of the analysis show that the planned yearly availments of the three cities of the Program ADF and OCR loans are within the debt limits prescribed by the new SBL. For Ha Giang, their planned ADF loan availments are from 1.1% to 22.3% of their annual estimated debt limits from 2017-2022. For Thua Thien Hue, their combined ADF and OCR loan availments make up from 1.8% to 37.2% of their estimated annual debt limits. For Vinh Phuc, which has planned loans with the World Bank and the OPEC Fund for International Development, in addition to the Program ADF and OCR loans, their cumulative availments for all four loans will range from 20.6% to 83.9% of their estimated debt limits from 2017-2022. The results of the analysis are summarized in **Table 9-6. The details are in Appendix 25.**

**Table 9-6. Impact of SCDP Loans on Estimated Provincial Debt Limits, VND Millions**

Province/Item	2017	2018	2019	2020	2021	2022
<b>Ha Giang Province</b>						
Decentralized Revenues	1,337,515	1,457,796	1,597,321	1,756,090	1,862,572	1,975,511
Debt Limit per SBL 2015 <sup>1</sup>	267,503	291,559	319,464	351,218	372,514	395,102
Cumulative SCDP-ADF Loan Availments <sup>2</sup>	2,826	21,436	47,776	74,413	84,541	88,000
% of SCDP Loan Availments to Debt Limit	1.1%	7.4%	15.0%	21.2%	22.7%	22.3%
<b>Thua Thien Hue Province</b>						
Decentralized Revenues	5,821,567	6,427,004	7,108,315	7,869,006	8,805,655	9,853,793
Debt Limit per SBL 2015 <sup>3</sup>	1,746,470	1,928,101	2,132,495	2,360,702	2,641,696	2,956,138

<sup>126</sup> Decree No. 83/2015/QH13 on The Law on State Budget which was approved on 25 June 2015 and scheduled to become effective on January 1, 2017 which is the start of the 2017 budget year.

<sup>127</sup> World Bank. *Assessment of the Financing Framework for Municipal Infrastructure in Viet Nam: Final Report*. (The World Bank Group: Washington DC, 2013) pp. 24-34.

Province/Item	2017	2018	2019	2020	2021	2022
Cumulative SCDP-ADF Loan Availments <sup>4</sup>	7,229	66,948	147,335	220,599	253,033	264,002
Cumulative SCDP-OCR Loan Availments <sup>5</sup>	23,413	204,702	450,892	679,662	789,379	836,391
% of SCDP Loans Availments to Debt Limit	1.8%	14.1%	28.1%	38.1%	39.5%	37.2%
<b>Vinh Phuc Province</b>						
Decentralized Revenues	13,719,535	14,817,098	16,002,466	17,282,663	18,665,276	20,158,498
Debt Limit per SBL 2015 <sup>6</sup>	4,115,861	4,445,129	4,800,740	5,184,799	5,599,583	6,047,549
Cumulative SCDP-ADF Loan Availments <sup>7</sup>	14,280	73,190	237,021	372,011	424,186	440,001
Cumulative SCDP-OCR Loan Availments <sup>8</sup>	26,303	133,048	428,150	675,281	777,821	816,938
Cumulative Other Planned Loans Availments	805,376	919,600	1,104,224	660,000	330,000	-
% SCDP Loans + Other Planned Loans Availments to Debt Limit	20.6%	43.4%	72.8%	87.5%	89.7%	83.9%

Source: PPTA Consultants

ADF = Asian Development Fund; OCR = Ordinary Capital Resources; SBL = State Budget Law; SCDP = Secondary Cities Development Program

<sup>1</sup> Calculated at 20% in accordance with the new SBL.

<sup>2</sup> Estimated at 10% of the total ADF loan proceeds passed on to Ha Giang; 90% assumed to be passed on as grant.

<sup>3</sup> Calculated at 30% in accordance with the new SBL.

<sup>4</sup> Estimated at 30% of the total ADF loan proceeds passed on to Hue, 70% assumed to be passed on as grant.

<sup>5</sup> Estimated at 100% of the total OCR loan proceeds passed on to Hue.

<sup>6</sup> Calculated at 30% in accordance with the new SBL.

<sup>7</sup> Estimated at 50% of the total ADF loan proceeds passed on to Vinh Phuc, 50% assumed to be passed on as grant.

<sup>8</sup> Estimated at 100% of the total OCR loan proceeds passed on to Vinh Phuc.

## 9.4 Flow of Funds

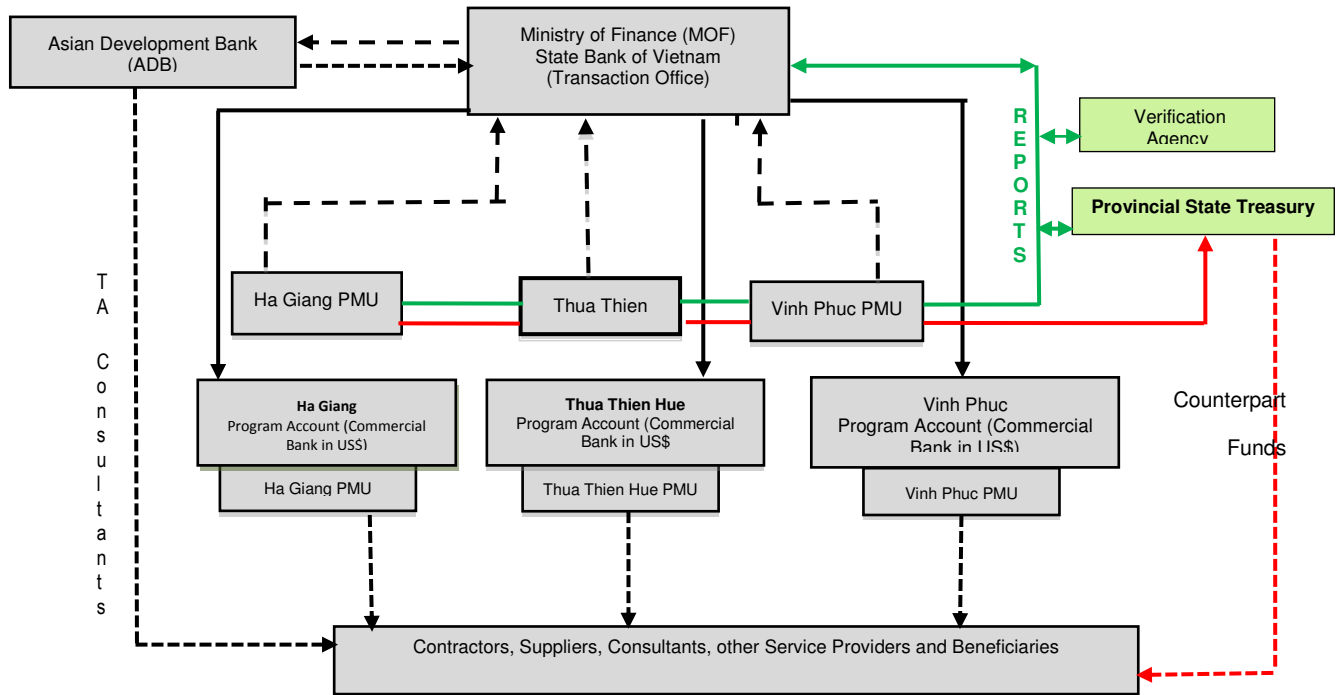
The flow of funds for the Program is shown as **Figure 9-1**. It shows the flow from ADB to GOV/MOF, and on to the PPC/PMU and other creditors. Counterpart fund releases are also shown.

### Loans and Grants

The PPCs and PMUs expressed preference for the disbursement of funds in US\$. These will be released from the MOF External Finance and Debt Management Department, through the State Bank of Vietnam (SBV) Transaction Office, into the Program accounts to be opened by the PMUs. These accounts will be in a preferred commercial bank of the PPCs/PMUs. With releases in US Dollars, the foreign exchange risk will be managed by the PMUs in close coordination with the DOF.

The PMUs will initiate the request for loan disbursement through the filing of a withdrawal application (WA) and all required supporting documents to the MOF simultaneous to submission of: (i) results to the IVA for procedural verification and physical inspection to test accuracy and quality of results claimed; and (ii) subproject expenditures to the provincial State Treasury for financial validation of fund utilization. The State Treasury validation report will supplement that on physical accomplishment to complete the Program results verification report. MOF will submit this report, with the withdrawal application, to the ADB. The results verification report will determine the amount of eligible disbursement to be made according to the results achieved. ADB will determine the compliance of the WA to the terms of the Loan Agreement. The funds will be disbursed to the SBV, which will subsequently transfer them to the Program accounts within the commercial banks of each province. Direct payments maybe transacted from the commercial bank account to the subprojects' contractors, suppliers, local consultants and other service providers. ADB can also make direct payments for consultants contracted under technical assistance packages for Program implementation.

Figure 9-1. Indicative Funds Flow Arrangement—ADB Loan and Counterpart Funds



---▶ = withdrawal application (W/A) with supporting documents consolidated by PMUs simultaneously to MOF, Provincial State Treasury per province, and to Verification Agency (VA) ; —▶ = payment released to program account with commercial bank managed by PMU, EA = executing agency, PMU = project management unit, - - -▶ = direct payments to contractors by ADB (for TA Consultant) and PMU from Imprest Account, —▶ = request release of counterpart funds, - - -▶ = direct payments to contractors, suppliers, consultants, other service providers, beneficiaries from counterpart funds.  
 Source: PPTA Consultants.

Source: PPTA Consultants

**Counterpart Funds**

The PPC's approval of the Program feasibility study, upon the recommendation of DPI, represents government's approval of the counterpart funds required. Based on the PPC's approval, the DOF, in close coordination with DPI, will include the planned disbursements during the implementation period in the annual provincial budgets. Should additional funds be required during any year, a supplementary budget will be prepared and submitted for approval to DPI, the People's Council, and the PPC.

The required accounting records and periodic audited statements covering the Program accounts for the three cities will be detailed out with the implementing agencies. Responsibilities related to subproject implementation, fund disbursements, records-keeping, submission of financial and technical reports will form part of the capacity building program for the PMUs of the cities

