

## SECTOR ASSESSMENT (SUMMARY): WATER SUPPLY AND OTHER MUNICIPAL INFRASTRUCTURE AND SERVICES

### Sector Road Map

#### 1. Sector Performance, Problems, and Opportunities

1. Viet Nam is one of the fastest urbanizing countries in Southeast Asia. Of the current population of around 86 million, about 30% live in urban areas, and this figure is forecast to rise to 37% by 2020. Most urban growth is in the metropolises of Ha Noi and Ho Chi Minh City, followed by Can Tho, Da Nang, and Hai Phong. The next tier of secondary cities is experiencing lower growth rates because they are less attractive in terms of employment and income opportunities. As a result, big urban centers receiving large inflows of migration are becoming more congested and experiencing serious social and environmental issues.

2. **Performance.** Viet Nam's urban areas are the centers of economic growth, generating about 70% of the country's gross domestic product. Infrastructure has significantly improved since the year 2000, enabled by this growth. Officially, 98% of the population has access to "improved water sources".<sup>1</sup> However, only 59% of people have a house connection; the remaining 39% have access to water through shared standposts or protected wells ("other improved sources").<sup>2</sup> Data from the Water Sector Review 2009 indicate a wide range in access to clean water, from 70% in major cities and towns to less than 15% in district towns.<sup>3</sup> Of the 754 towns, only about one-third have any form of piped water supply.<sup>4</sup>

3. According to 2008 Ministry of Construction (MOC) data, less than 10% of urban wastewater is treated. Most households rely on on-site systems with inadequate septage management. Long-term environmental degradation and public health risks are caused by water pollution from untreated human waste and industrial wastewater. Recurrent urban flooding stems from the poor management of storm and run-off water, increasing as urbanization intensifies. With many towns located along the coast, sea-level rise and other climate change impacts will influence these flooding risks significantly.

4. Viet Nam has 68 urban water companies, mainly supplying provincial centers, with a combined installed capacity of 5.5 million cubic meters per day, but they only deliver 4.8 million cubic meters per day.<sup>5</sup> Management efficiency, and thereby the interest of the private sector is exacerbated by low water tariffs and a lack of accountability. Nonrevenue water (NRW) is reported as having been reduced from 39% in 2000 to around 30% in 2009 in a low service pressure context. Development focus is shifting to benchmarking the performance of water companies and to improving coverage in small towns and peri-urban areas.<sup>6</sup>

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<sup>1</sup> Asian Development Bank (ADB). 2009. *Key Indicators for Asia and the Pacific*, Manila; and World Health Organization–United Nations Children's Fund (WHO/UNICEF) 2008. Joint Monitoring Programme for Water and Sanitation 2008. New York.

<sup>2</sup> Compare with "other improved sources" e.g., 55% for Indonesia, 27% for the Philippines, and 15% for Thailand.

<sup>3</sup> ADB. 2009. *Water Sector Review Project, Final Report*. Manila (TA 4903-VIE).

<sup>4</sup> Benchmarking data from Ministry of Construction.

<sup>5</sup> Data in this paragraph from Benchmarking Surveys by Vietnam Water Supply and Sewerage Association. Report on Benchmarking Study on Urban Water Supply Utility Performance in Viet Nam for the Period 2007–2009. Water and Sanitation Program–World Bank, September 2010.

<sup>6</sup> The Government has announced a \$500 million program for reducing NRW between 2011 and 2025.

5. **Policy environment.** The key Social Economic Development Plan (SEDP) for 2011–2015 emphasizes environmental protection. The SEDP stresses effective management of water resources, consistent with the recommendations of the Asian Development Bank (ADB) Water Sector Review (footnote 3) and ADB Water Operational Plan 2011–2020,<sup>7</sup> focusing on water security and country water assessment, highlighting water as a limiting factor for growth.

6. **Urban planning.** Government Resolution No. 08/2004/NQ-CP<sup>8</sup> delegates responsibilities from the central government to the provinces.<sup>9</sup> The new Law on Urban Planning<sup>10</sup> stresses decentralization of urban planning responsibility to include all government administration levels and contains a requirement for stakeholder consultation. A major challenge in realizing any decentralization is the lack of experience at subnational level with planning and urban management, or with critical tasks such as budgeting and financial management. However, this new autonomy is not yet matched with improved accountability in terms of compliance with agreed regulations, and delivery of adequate service.

7. The key legislation on urban water supply is Decree 117/2007/ND-CP, supplemented by Decree 124/2011/ND-CP, demanding that water companies operate on a full cost-recovery basis and connection cost included in the tariff. The parallel Decree 88/2007/ND-CP for wastewater management defines the principle of cost-recovery, with connection costs to be borne by households. These decrees thereby provide the basis for setting realistic tariffs for water and wastewater services. Further decisions add ambitious targets for (i) water supply coverage (100% by 2025 for all urban areas, with 24-hour continuous supplies), (ii) reduction of NRW to 15% by 2025, and (iii) coverage by wastewater collection and treatment (70% for provincial towns and higher by 2025).<sup>11</sup>

8. Urban areas in Viet Nam are categorized by administration and hierarchy. Under the administrative classification, nine cities have provincial status and are administered directly by the central government, 99 cities have district status under provincial governments, and the remaining 646 cities have commune status under district governments. The hierarchical classification is based mainly on population, with additional parameters such as population density and economic activity. Hanoi and Ho Chi Minh City are recognized as “special cities”, above the seven class I cities. There are 14 class II cities (with populations greater than 250,000) with lower growth rates showing signs of stagnation, which is in contrast to the rapid growth of the largest cities.

9. Decision No. 38/2007/QD-TTg on the equitization of water, wastewater, and drainage companies has brought about changes in the structure of these companies and the nature of their control.<sup>12</sup> The equitization process for these water supply companies should have been completed by 1 July 2010.<sup>13</sup> Efficiency improvements are yet to be realized. Private sector participation in urban water supply in Viet Nam has been limited to bulk water supply.

<sup>7</sup> ADB. 2011. *Water Operational Plan*. Manila.

<sup>8</sup> Further Decentralization of State Management.

<sup>9</sup> See also Decree 38/2013, on the decentralization of management and utilization of Official Development Assistance.

<sup>10</sup> Law on Urban Planning 32/2009/QH/12.

<sup>11</sup> Orientation Plans 1929/2009/ND-TTg, for water supply and 1930/2009/NC-TTg for wastewater.

<sup>12</sup> “Equitization”, a term used in Viet Nam since 1992, is the process of transforming a state-owned enterprise into a company operating under enterprise legislation under a corporatization process.

<sup>13</sup> There are no reliable comprehensive data on the degree to which this process has been completed.

10. **Financial sustainability.** The state budget is the main financial source for meeting investment needs for urban service delivery. Investment needs are significant compared to the local revenue base. There are overlapping one-off fees on real estate transactions but not a single property tax, which traditionally is an important revenue base and could reflect property value increases that result from public investment in infrastructure and services.

11. The financial sustainability of water companies has been hampered by low tariffs. Local political considerations often prevent the timely application of tariff adjustments. Affordability and willingness-to-pay surveys have indicated that consumers are prepared to pay for improved services. Tariffs for a wastewater connection are only just being charged in certain cities, where sewerage projects have been completed. Urban water supply systems are therefore still subsidized to a large measure by their respective governments on a nontargeted default basis. The de facto policy by local government of maintaining low tariffs for water supply effectively constitutes a nontargeted subsidy for a service for which consumers are willing to pay. The practice encourages waste and benefits high-end users.

12. **Opportunities for reform in supporting economic growth.** The ongoing expansion of the economy presents substantial opportunity to Viet Nam's urban areas. Such benefits must be recognized in terms of the resources flowing into the urban economy, as well as being strong incentives to create a significant transformation that will enable sustained and equitable growth and development, balanced throughout the urban hierarchy of primary growth centers and the network of secondary cities. An increasing population, with ever higher expectations for infrastructure and services, is therefore putting greater pressure on urban management agencies. The challenge for both central and local governments is to actively and constructively manage this transformation opportunity. The urban sector now requires support in terms of access to public sector funding and leveraged private sector funding, as well as new skills, to meet these expectations.

## 2. Government's Sector Strategy

13. **Economic policy.** The government's SEDP (2011–2015) includes specific initiatives related to urban development, and highlights the importance of realizing key Millennium Development Goals and national goals on water and sanitation. Government plans stress the need for institutional reforms, including efforts to restructure the MOC, so as to (i) refocus on effective policy formulation, guidance, and monitoring; (ii) develop the capacity of subnational government agencies; and (iii) encourage urban services to operate as business entities. The government's policies for urban infrastructure development are presented in the Orientation Plan for Urban Development to 2025 and Vision to 2050, which place emphasis on the role of comprehensive town development projects to promote socioeconomic growth.

14. The government has a policy to develop links between regional cities to balance development in the central, northern, and southern regions consistent with Greater Mekong Subregion development strategies.

## 3. ADB Sector Experience and Assistance Program

15. **ADB program to date.** Since resuming operations in Viet Nam in 1993, ADB has provided nine loans for a total of \$544 million for urban development and the environment. ADB has also provided three grants for a total of \$5 million and 19 technical assistance projects totaling \$15 million. Starting in 1993, ADB's development assistance has responded to the

government's need to rehabilitate (and later expand) water supply and sanitation systems in urban and rural areas.

16. ADB's present strategy for the urban environment sector is based on the Water Operational Plan, which introduces concepts of the water–food–energy nexus, water security, and water footprint, supplementing integrated water resources management. The operational plan follows the Water Financing Partnership Facility, in which Viet Nam was a target country for doubling investment lending in water and sanitation between 2005 and 2010. A \$1 billion ordinary capital resources multitranche financing facility was approved by ADB in 2011.<sup>14</sup> ADB is supporting implementation of the World Health Organization's water safety plans for distribution of drinking water. Hue is the only city to be distributing water of drinking quality after implementing a water safety plan. A similar line of credit is proposed for urban environmental improvement in 2014, with project preparation in 2012–2013, supported by capacity development technical assistance in 2012.

17. Geographically, funding has shifted from the major cities of Ho Chi Minh City and Hanoi to secondary growth centers within the Greater Mekong Subregion economic corridors, in clear recognition of the process of decentralizing administrative responsibilities. By linking planning and investment, the Comprehensive Socio-economic Development series of projects represent a new approach in urban development, and is recognized by the government as a model for future urban development projects. Project formulation was based on an agreed city development strategy, defining a vision, and identifying competitive advantages. Financing involved broad-based cofinancing. Future ADB urban development projects will follow the previous concept of linking spatial planning with sector investment plans, with a renewed focus on inclusive, competitive, and green city development as per the ADB Urban Operational Plan 2012–2020.<sup>15</sup>

18. New urban projects will include components that will
- (i) develop urban, peri-urban, and rural links and access to services and infrastructure improvement for a better distribution of benefits from economic growth (i.e., be inclusive);
  - (ii) assist the government to effectively manage the urbanization process at subnational level by expanding the local revenue basis while introducing stronger budgeting and financial management procedures and financial mechanisms which can leverage cofinancing in general and private sector investment in particular by targeted ordinary capital resources lending, and setting up local development investment funds (i.e., be competitive);
  - (iii) simultaneously support elements and components of city climate change adaptation and mitigation plans and lower carbon and water footprints in order to improve environmental management of both liquid and solid waste, and reduce the impact of waste generated by the urban economy to reverse environmental degradation. The urban poor can also have a positive role in managing environmental impacts in more highly degraded areas, where they often reside, through activities such as waste recycling, watershed management, and monitoring of provision of local services (i.e., be green).

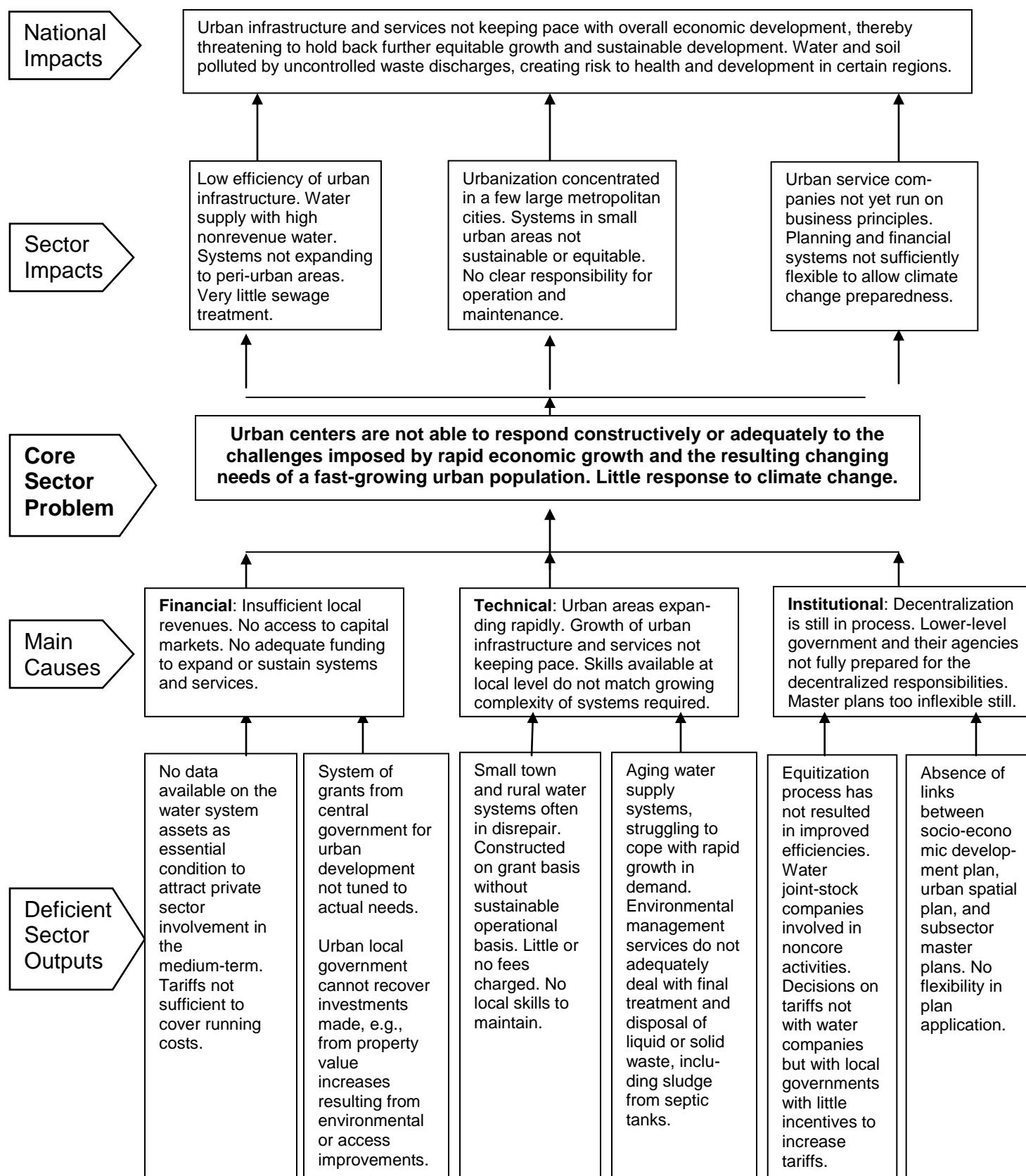
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<sup>14</sup> ADB. 2011. *Report and Recommendation of the President to the Board of Directors: Proposed Multitranche Financing Facility Socialist Republic of Viet Nam: Water Sector Investment Program*. MFF0054-VIE. Manila

<sup>15</sup> ADB. 2013. *Urban Operational Plan*. Manila.

19. In support of promoting inclusive, competitive, and green cities, projects will promote gender equality and strategies to include women's (i) involvement and employment in community-level planning and construction of water supply and sanitation facilities; (ii) access to training to manage and maintain facilities and in awareness raising activities; (iii) access to income-generating activities related to pilot sanitation schemes; and (iv) increased role in institutional decision-making processes, including development of national and subnational sector strategies and action plans.

## Problem Tree for Water Supply and Other Municipal Infrastructure and Services Sector



### Sector Results Framework (Water Supply and Other Municipal Infrastructure Services, (2011–2019))

Country Sector Outcome		Country Sector Outputs		ADB Sector inputs	
Outcomes with ADB Contributions	Indicators with Targets and Baselines	Outputs with ADB Contributions	Indicators with Incremental Targets (Baselines Zero)	Planned and ongoing ADB Operations	Main Outputs Expected from ADB Interventions
Increased access to basic urban services	<p><b>1. Urban water supply</b> Urban population in class III and above with access to improved drinking water to increase from &lt;60% (2010) to 90% (2015)</p> <p><b>2. Drainage, sewerage, and sanitation</b> Increase household access to collection and treatment of domestic waste water from 10% (2010) to 20% (2015)</p>	Water supply, sanitation, and other urban infrastructure expanded, maintained, and well managed	<p>Access to 120 liters per capita per day of safe drinking water in urban areas and 50 liters per capita per day in rural areas by 2015</p> <p>Reduce nonrevenue water from 30% to 25% by 2015</p> <p>Additional 5 million people connected to a central sewerage system</p>	<p><b>Planned key activity areas</b> WSS (60%) Urban sector development (40%) <b>Pipeline projects with estimated amounts</b> MFF Viet Nam Water Supply – PFR 2 (2012) \$212 million – PFR 3 (2014) \$250 million GMS Corridor Towns (2012) \$130 million Secondary Cities Dev. (2013) \$100 million Coastal Cities UE and CC (2014) \$100 million Industrial wastewater (2014) \$100 million Provincial WSS (2015) \$100 million Sector Loan UE (2015–2024) \$1 billion <b>Ongoing projects with approved amounts</b> Central Region Small and Medium-Sized Towns \$53 million Thanh Hoa SEUD \$72 million Selected Cities SEUD \$70 million Central Region Rural WSS \$45 million MFF Viet Nam Water Supply (2011–2020) \$1 billion – PFR 1 \$138 million GMS RETA Harnessing Climate Change Mitigation Initiatives to Benefit Women \$2.7 million</p>	<p><b>Planned key activity areas</b> Expand coverage and improved efficiency of basic urban services <b>Pipeline projects</b> Introduction of improved asset management and control systems Technical support through Ministry of Construction to selected water companies to achieve NRW targets Acceptance of revised performance indicators Formal guidance for water supply companies on equitization Strengthened role for Ministry of Construction and VWSA in monitoring the performance of water supply companies <b>Ongoing Projects</b> Acceptance of improved systems and procedures for urban wastewater management Increases in women's participation in community-level planning on urban infrastructure investments Subnational climate change mitigation strategies, and low-carbon-technology-driven employment opportunities</p>

ADB = Asian Development Bank, CC = climate change, GMS = Greater Mekong Subregion, MFF = multitranches financing facility, PFR = periodic financing request, RETA = regional technical assistance, SEUD = socio-economic urban development, UE = urban environment, VWSA = Vietnam Water Supply and Sewerage Association, WSS = water supply and sanitation.

Source: ADB Urban and Water Project Team.