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Polycentric management of urban waters in fast-growing cities and peri-urban areas in Southeast Asia

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Session Title: Water for the Future in Southeast Asian Cities

Presentation Title: Localisation of SDGs 6 and 11 in fast-growing cities of Vietnam: planning for a sustainable future

SDG Localisation in Vietnam

 Seventeen global SDGs have been nationalized into 115 Viet Nam SDG (VSDG) targets in "National Action Plan for Implementation of the 2030 Agenda for Sustainable Development", based on Viet Nam's development context and priorities.

• Many SDGs also being integrated into the national development policy system, including laws, socio-economic development strategies and plans as well as action plans of ministries, agencies and provinces

- 1659/QD-TTg dated Nov 7, 2012 On the National Action Plan on Urban Development until 2020 (specifying on the water and sanitation coverage of different city level until 2020)
- 681/QD-TTg dated June 4, 2019 On the Approval of Timeframe for achieving SDG targets of Vietnam until 2030

Source: Vietnam's Voluntary National Review on the implementation of the sustainable development goals - 2018

SDG Localisation and integration with national target programs

Localization and integration with other national target programs and international commitment

- Decision No 2139/QD-TTg dated Dec 5 2011 Approval on National Strategy on Climate Change
- Decision No 1474/QD-TTg dated Oct 5, 2012 Approval on Action Plan on Climate Change of Vietnam towards 2020
- Decision No 2623/QD-TTg dated Dec 31 2013 on Approval on the National Program on Urban Development Responding to Climate Change 2013-2020 (detailing 5 action programmes – with one specific for integrating climate change to urban planning, piloting for 31 cities in two phases)
- Decision No 1393/QD-TTg dated Sep 25 2012 Approval on National Strategy on Green Growth towards 2020;

Institutional arrangement for SDG implementation in Viet Nam



Source: Vietnam's Voluntary National Review on the implementation of the sustainable development goals - 2018

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Water Supply and Sanitation sector of Vietnam



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Source: Turning Finance into Services for the Future - WB 2015

Some relevant SDG targets

Achievements

- SDG 6 related target
- The proportion of households having access to safe water reaching 93.4 per-cent in 2018 (goal is 90-95% in 2020)
- SDG 11 related target
- The national floor area per person increased from 16.7m² in 2009 to 23.4m² in 2017.
- The collection and treatment of normal solid waste has improved, with approximately 80 per-cent treated in 2018.

Difficulties

- By 2017, up to 41 concentrated wastewater treatment plants were in operation with a total design capacity of 950,000 m3/day-night. Among 781 municipalities, only 44 have sewage treatment facilities up to required standards.
- The ratio of collected and treated wastewater is 12 per-cent and 50 wastewater treatment plants are being designed or constructed with total designed capacity of 2.2 million m³/day-night.
- Targe by 2020, 20% of wastewater is collected and treated properly, by 2030 >50% for secondary cities and urban area) -> Thus, the target set for SDG 6 in the sanitation sector until 2030 is quite ambitious for Viet Nam to achieve.

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 Safe and affordable dwellings remain difficult for poor and near-poor households as prices are too high
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Status of sanitation sector in Vietnam urban area



Source: Worldbank Urban wastewater management of Vietnam (Big cities like Ha Noi and Ho Chi Minh city just have around 13% wastewater collected and treat properly even though the capacity of the wastewater treatment system can be higher)

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Some typical major water and sanitation program in Vietnam

Project	Value (million
	USD)
Water Sector Investment Program	1000
Secondary Cities Environment Improvement Project	175
Urban Water Supply and Wastewater Project	200
Vietnam Urban Upgrading	382
Local Development Investment funds	190
Mekong Delta Urban Upgrading Project	292
Nhon Trach 1 Water Supply Project	100
Southern Binh Duong Province Water Environment	195
Improvement Project	
Improve wastewater treatment capacity for Can Tho	29.5
Construction of 2 wastewater treatment plant and sewer	33,7
lines, 2 water treatment plants for urban area of Ba Ria –	
Vung Tau	
	ProjectWater Sector Investment ProgramSecondary Cities Environment Improvement ProjectUrban Water Supply and Wastewater ProjectVietnam Urban UpgradingLocal Development Investment fundsMekong Delta Urban Upgrading ProjectNhon Trach 1 Water Supply ProjectSouthern Binh Duong Province Water EnvironmentImprovement ProjectImprove wastewater treatment capacity for Can ThoConstruction of 2 wastewater treatment plant and sewerlines, 2 water treatment plants for urban area of Ba Ria –Vung Tau

Some major challenges for water sensitive urban development

- The wastewater tariff is built on the principle of "polluters pay", however the wastewater tariff collection according to the current decree is not enough to pay for the O&M of sewer and wastewater treatment plants (only meet about 20-30% of the wastewater treatment costs).
- The wastewater tariff (fixed to 10% of the water supply pricing), while the cost to treat 1 cubic meter of wastewater to meet discharge standards is comparable to that of clean water treatment, if not higher.
- Ha Noi city collected roughly 9 million USD/year from wastewater tariffs, but the O&M cost of the sewer and wastewater treatment plant is about 44 million USD/year.
- Many urban areas (mostly in secondary and tertiary cities) do not have the wastewater collection system connected to a treatment plant, and directly discharge to environment, irrigation channel.

Some major challenges for water sensitive urban development

- There is lack of inter-sectoral water related infrastructure management in the city (wastewater, clean water, storm water, sustainable development and water resource management city wide, development of green infrastructure). With the current administrative structure, it is difficult for the city to coherently develop integrated water management for the city.
 - Different planning phases for different sectors results in different implementation plans, which ends up causing disruptions in fulfilling the potential of infrastructure projects.
 - Different investment criteria for different areas and different donors
 (ODA, central government fund, provincial fund, and PPP) resulting in
 mismatches in setting of priorities. Just recently, the planning law is in place
 to ensure that development projects are coordinated to generate the
 designed impact.

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Example from Vinh Yen (secondary city)



https://vinhyen.vinhphuc.gov.vn/

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City implemented a series of hard-side and soft-side measures to preserve and enhance the quality of Dam Vac lake and its shoreline. The shores of the lake is selectively redeveloped to improve public access and provide water management facilities, for tourists. This combination of environmental improvements and **public–private partnership** in lakeshore development showcases the integrated, holistic approach.

Example from Vinh Yen (secondary city)

- Development in phases with target program on (wastewater collection, treatment, flood and storm improvement through synergistic development process with proper planning activity.

Synergistic Development of Dam Vac Lake: Environmental Improvements Drive Economic Growth



Source: Vinh Yen GrEEEn city action plan (ADB)

Urban Services in Vinh Yen City	Households with Service (%)
Electrical Power	100
Piped Water Supply	85
Piped Sewerage	70
Sanitation (Septic Tanks)	94
Solid Waste Collection	100
Road Access	100
Road Access (Wider than 3 meters right-of-way)	50
Green Spaces within Walking Distance	1
Public Transport	0

Source: Vinh Yen city departments and utilities.



Conclusions

• Vietnam has surpassed its SDG commitment regarding the clean water supply but is behind on the sanitation targets, which predicted very difficult to meet with the current pace. 13

- A holistic and integrated planning has been expressed in Vietnam's action plans (SDG, Green Growth, and Climate Change Action Plans), but this will not all happen at once. Therefore, a strong coordination is needed, especially in uniting different action plans.
- There should be consideration on the incentive mechanism to share the burden between clean water supply and wastewater collection and treatment through innovative financial schemes.

Conclusions

• A lower land use tax (or preferred loan) for developers applying green infrastructure that support the cleaning up of stormwater and wastewater,

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- Public-private partnership in investment in the sanitation sector is needed
- NBS and water sensitive urban development have been considered and piloting in some areas but still lack many factors for widespread application (benchmarking, standardizing, integration in the urban planning activities, financing for NBS and other innovative solutions)

Thank you for your attention!

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