



**To: Ministry of Planning and Investment (MPI)**  
Project Management Unit 2 (CPMU2 IPWV)  
39 Hong Phuc Street, Hanoi

## **P04 Final Report**

**Consulting Services in Assisting MPI  
in Developing and Issuing Policies and Regulations in  
Setting up Wastewater Tariff, Improving Investment and Operation  
(Package P04)  
- Vietnam Urban Water Supply and Wastewater Project (VUWSWP)**

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Elaborated by



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## 1 INTRODUCTION

### 1.1 The importance of the urban water and sanitation sector

Water supply and sanitation in Vietnam is characterized by challenges and achievements. Among the achievements is a substantial increase in access to water supply and sanitation between 1990 and 2010, nearly universal metering, and increased investment in wastewater treatment since 2007. Among the challenges are continued widespread water pollution, poor service quality, low access to improved sanitation in rural areas, poor sustainability of rural water systems, insufficient cost recovery for urban sanitation, and the declining availability of foreign grant and soft loan funding as the Vietnamese economy grows and donors shift to loan financing. The government also promotes increased cost recovery through tariff revenues and has created autonomous water utilities at the provincial level, but the policy has had mixed success as tariff levels remain low and some utilities have engaged in activities outside their mandate.

In spite of recent developments, the Government of Vietnam recognizes that additional efforts are needed to increase service coverage, to improve the quality of service, and to ensure sustainability in operations of the water and sanitation sector in Vietnam. Efficiency gains are needed for operations to ensure that the companies providing the water and drainage services are financially viable. For the water sector, tariffs generally cover operating costs but are not adequate to cover investments. For drainage services, although there is a policy to recover operating costs through tariffs (Decree 88), the actual cost recovery in many instances has been less than 10 %. Financial sustainability of sector improvements and operations is a determinant of the provision of reliable and safe water supply and sanitation services. Financial discipline in the sector allows water supply and sanitation utilities to produce cash surplus which is vital for meeting new investment requirements, for responding to rehabilitation needs and expanding the existing network. Weak financial management systems can pose risks to sector viability and sustainability. Structuring pricing and subsidies to meet social, economic, and/or technical objectives, promoting efficiency, strengthening the collection of payments, and enforcing accountability for performance are important challenges, especially in the water supply and sanitation sector context in Vietnam.

## 1.2 The P04 Project

### 1.2.1 Background

The Government of Vietnam received credit no. 4948 - VN with an amount of USD 200 million for the Urban Water Supply and Wastewater Project (VUWSWP). The Financing Agreement signed on 13 July 2011 between the Bank and the Government of Vietnam and became effective on 7 October 2011. The Project implementation period is expected to be 5 years from 2011 through 2016.

The development objective of the Project VUWSWP is to increase access to sustainable water services and environmental sanitation provision in selected urban areas in the Project Provinces. This improvement would include better access to water, sanitation and drainage services in selected urban areas in Project Provinces. The success in meeting the objective would be measured through strategic sanitation plans, expansion of drainage coverage, expansion of water coverage and use, reduced risks of flooding in urban areas and improved financial sustainability of the service providers. The project consists of two components:

- Component 1: Investment and Project Implementation
- Component 2: Technical Assistance with the Assignment P04.

### 1.2.2 Objectives and Tasks

The Assignment P04 "Technical Assistance on Improving the Efficiency of Investments and Operations" is under implementation by Ministry of Planning and Investment (CPMU2). Consulting service is supported through this component to provide policy support and promote private sector participation in water and drainage sector and efficiency operations.

The tasks of P04 Project have been divided into four groups:

- Group Task 1: Reviewing the current regulations and development planning;
- Group Task 2: Developing a Circular on wastewater tariffs
- Group Task 3: Developing a Circular on Operational Improvement and Investment Needs
- Group Task 4: Support in arranging two study tours.

The activities of each group tasks are in detail:

## Group Tasks 1

- Task 1.1 Review and evaluate the current **policies and regulations** of Vietnamese Government on investment, construction, management, operation, maintenance and other businesses in the water sector. This includes current management regulations, mechanisms of the Government on investment support, investment preferences, land, tax, finance, credit, etc and other issues related to water sector. The evaluation further includes advantages and disadvantages of private sector participation in the urban water sector.
- Task 1.2 Review the water supply and wastewater **development plan** of the country and provinces. The review should focus on relevant issues regarding the outputs, the feasibility of plans, achievements, needs for improvement and investment.
- Task 1.3 Review the current **regulation for setting wastewater tariffs** and process for tariff escalation including: difficulties and advantages when it is implemented locally.
- Task 1.4 Review the current **models and methodologies** (the norm and unit price) for identifying and setting **cost estimates** of maintenance, operation, administration of wastewater system including the wastewater tariffs structure, which are being applied by the provincial authorities.
- Task 1.5 Identify the outstanding issues of Vietnamese regulations concerning tariff calculation and operational improvement in **comparison with international regulations** and recommend necessary changes and suitable additions to Vietnamese regulations based on the results.

## Group Tasks 2 – Support the MPI in developing a **Circular on wastewater tariffs**.

- Task 2.1 **Analyze the structure** of existing wastewater tariffs and their capability to recover costs and introduce to the relevant authorities (MPI, MOC, MOF and local provinces) in a technical report.
- Task 2.2 The Consultant shall propose models of wastewater tariff and prepare economic and technical norms as the basis for wastewater tariff calculation and develop wastewater tariff frame.
- Task 2.3 Develop the **roadmap** and guidance, include the scenarios for applying tariffs levels, which include the partial recovery cost (management, operation and maintenance cost) and full cost recovery (management, operation and maintenance cost plus asset depreciation, rehabilitation and replacement cost); timetable for

continuous process and whose steps must be practical and feasible. The first step given is to set tariffs to cover O&M costs, and to establish a participatory approach with the implementation of supplementary measures such as long term planning, detailed cost analysis of the sector and capacity-building. A stepped approach to tariff design is recommended, starting with covering O&M cost of production and advancing towards average incremental cost pricing (a proxy for long run marginal costs). Cost recovery limited to O&M costs as a target for tariffs must be seen as a pragmatic approach until the regulatory cycle is slowly but firmly introduced and implemented.

- (7) **Raising awareness:** It is also crucial for the relevant Ministries to raise awareness at the Provincial level. Provinces should also establish communication to let service users understand the benefits of having a better wastewater system and increase their willingness to coordinate.
- (8) To better calculate the various cost recovery scenarios, **more detailed guidelines** should be implemented. The following categorization could be used:
  - Break down for wastewater management and flood management costs. Based on this break down, local authority can decide the target of cost recovery they want to use: recover the cost of wastewater management system or costs of flood control;
  - Levels of cost recovery mechanism to achieve (1) O&M cost recovery, (2) Partial cost recovery (like some structural maintenance), (3) Full cost recovery;
  - Decide in what area the cost recovery tariff should be applied, e.g. (1) whole city where water is supplied, (2) whole city where water is supplied and have access to and (3) project area where water is supplied and wastewater service is provided;
  - Guidance for eligible expenditure could be included in each level of cost recovery (item 2) could be used.
- (9) The **circular** to be developed **for wastewater tariffs** in Vietnam might use
  - (i) mature legislation, already successfully implemented and available in details (which would have to be adapted to the working conditions in Vietnam) and / or
  - (ii) toolkits and guidelines, well-structured and elaborated for wastewater management in transition countries, like from the World Bank.

## 5.2 Investment Incentives

The following recommendations on policies to attract investments can be made:

- Integration and cross subsidy of wastewater service charge and water price: The most appropriate approach could be an integration of the wastewater service charge and water price. This could further enable a cross subsidy between water price and wastewater service charge, and in such cases the affordability gap could be reduced.

- Possible property tax to fund for WWTPs: It is recommended to study the model of imposing tax levy based on the value of real estate to mobilize the capital for construction of WWTP.
- Research and pilot concession contract modality: One of the PPP modalities, which is widely used and relatively successful in water and wastewater sector, is a concession contract. According to Decree 15/2015 on investment under PPP model, the concession is not mentioned directly as PPP modality. For applying concession contracts, the approved by the Prime Minister is required. It is recommended to consider applying this contract modality through a pilot project which can be started before issuing specified legal documents.
- Research on the implementation of an infrastructure guarantee fund: Infrastructure Guarantee Fund, set up to provide guarantees for infrastructure development could be a benefit for the Government of Vietnam for attracting private investors. The Infrastructure Guarantee Fund could provide guarantees against the failure of government to fulfil contractual agreements, allowing investors to mobilize financing from international financial markets that might otherwise be unavailable and to reduce the cost of financing.
- Improving the efficiency in water supply and sanitation sector.
- Providing basic roadmap for increasing the wastewater service charge.

In order to develop policies to improve operation and investment efficiency the following can be recommended:

- to develop policy guidelines which enable local authorised state agencies to create a sustainable cost recovery roadmap in the wastewater sector;
- to investigate a possible integration and cross subsidies of wastewater service charge and water price
- to study and provide performance based contract mechanisms in the water/sanitation sector;
- to implement a regulatory agency with responsibilities to regulate the performance of utilities, based on the MOC database such as the IBNET toolkit.

### 5.3 Operating Models

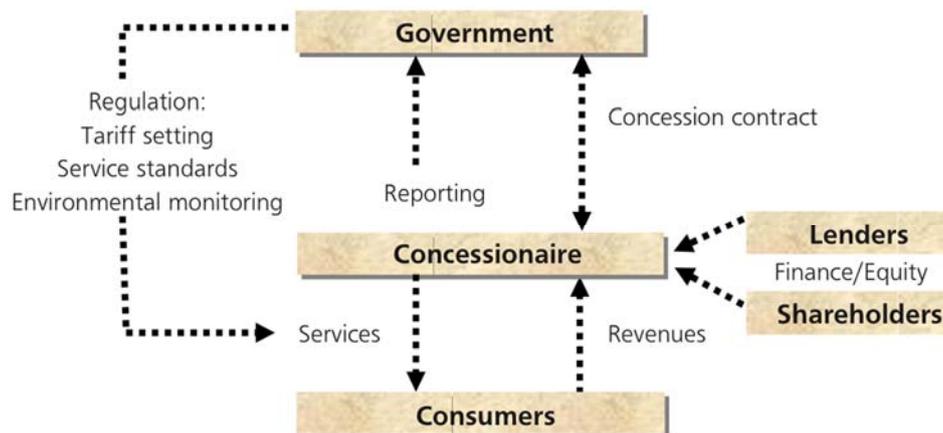
In terms of the operating models the following can be recommended

- Research and pilot concession contract modality:

One of the PPP modalities, which is widely used and relatively successful in water and wastewater sector, is a concession contract. This is a form of contract between private sector and public agencies in which private sector provides a full service delivery including operation, maintenance, management, investment. The ownership of all assets under operations remains in the hands of the public sector.

International experiences illustrate that the concession approach adds significant value. For example, the concession agreement between the MWSS and two private enterprises: Manila Water and Maynilad illustrated significant progress in the service quality and coverage provided (percentage cover from 40 % to about 99 %, the loss from 60 % decreased to about-11 % within 20 years period for water supply). However, in order to be successful, effective and transparent regulation and monitoring mechanism between competent authorities and concessionary businesses must exist.

According to the Decree 15/2015 on investment under PPP model, the concession (concession) is not mentioned directly as PPP modality so in order to apply the concession; it needs to be approved by the Prime Minister. Therefore, the consultants recommend applying this contract modality, through a pilot project which can be started before issuing specified legal documents.



Source: ADB PPP handbook

**Figure 2: Concession contract**

Further recommendations are:

- to introduce performance based contract mechanisms,
- to develop a Policy Circular on state owned water utility equitization and reform;
- to support to PPCs and utilities in professionalizing the sector: commercial, operational, planning and financial management and associated institutional development;
- to establish the contractual relationship between all PPCs and their water utilities;
- to establish a regulator to set up and enforce monitoring and evaluation of the KPIs for utilities, as suggested in the service delivery assessment.