

Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

Swiss Cooperation Office in Vietnam





Implemented by



Success Story #2 Drainage Tariff Roadmaps

The Problem

Floods occur frequently in Vietnam's cities. In addition to seasonal flooding, random extreme flood events have disastrous economic and civilian impacts. The flood in the year 2000 alone took over 800 lives. Of all natural hazards present in Vietnam, flooding is the most frequent, the most economically damaging and the deadliest. Vulnerability to floods rests largely upon the poor. Reducing vulnerability to floods will help vulnerable groups living in marginalized areas improve their resilience to shocks and stresses. In particular in the Mekong-Delta, urban flooding will increase due to rising sea levels and more frequent intense rainfall events.

Reasons for Urban Flooding in Vietnam

Cities in Vietnam mostly rely on traditional drainage systems to transport and discharge storm water through networks of pipes and pumps. The majority of cities utilize 'combined sewerage/drainage systems' that fulfill a dual functionality in a single pipe network:

- (a) *Preventing floods* by quickly transporting storm water surface runoff out of cities into rivers, the sea or other receiving water bodies, and
- (b) Protecting public health and the environment by safely collecting and transporting wastewater from domestic and non-domestic dischargers to points of treatment and disposal.

The evaluation of past urban sewerage/drainage investment projects has revealed significant limitations in the effectiveness of pollutant collection and transportation in combined pipe systems under the specific topographic and other conditions in Vietnam. Consequently, the GoV's sector paradigm for urban drainage has, in recent years, shifted for many locations in favor of the functional separation of pipe networks over upgrading or expanding existing combined sewerage/drainage systems. To date, however, only very few cities in Vietnam transport sewage and storm water in such separate systems and only few more projects, among these two projects in Long Xuyen and Vi Thanh in the Mekong-Delta, have so far been approved or are under implementation. The vast majority of cities continue to rely on combined pipe systems as underground drainage and sewerage infrastructure.

Often, however, this underground infrastructure does not have the capacity to drain water during heavy rainfall events in time. Main reasons for this are inadequate execution of construction works, low quality materials, under-dimensioned pipe networks and insufficient preventive maintenance efforts.

It is a well-known fact that, besides installing sufficiently dimensioned pipes and pumps and keeping sealed surface areas to a minimum, effective operation and maintenance (O&M) of drainage assets are a crucial cornerstone to prevent the occurrence of urban floods. O&M includes all activities influencing a drainage system that aim to increase its economic and technical performance and efficiency. The following box gives a basic definition for the term.





Definition of O&M

Operation includes controlling system parameters, scheduling and conducting inspections as well as staffing of personnel to monitor and oversee facilities and processes.

Maintenance is all action taken to retain material and assets in a serviceable condition or to restore them to serviceability. It includes *preventive* and *corrective* maintenance measures. **Preventive maintenance** can be planned and is typically based on regular assessments of components so as to best schedule maintenance works. Typically it includes tasks such as adjusting, lubricating, cleaning, and replacing components of machines, electro-mechanical equipment, vehicles or civil works. **Corrective maintenance** comprises repair activities necessary to re-establish proper functioning condition or service of equipment. It is usually performed unplanned and in reaction to interruptions or failure.

Some equipment at the end of its useful service life may warrant overhaul instead of immediate replacement. **Overhaul** means the restoration of an item to a completely serviceable condition as prescribed by maintenance serviceability standards. **Investments** into drainage infrastructure are typically defined as replacements of larger components or sections of systems, capacity or performance upgrades, expansions or entirely new constructions.

A clear and exact definition of what constitutes 'O&M' and what an 'investment' is of high importance when drawing up management, O&M, lease, BOT or concession contracts between operators (utilities) and owners (cities) of drainage systems. While costs for maintenance count as operational expenditure (OPEX), investments are capital expenditures (CAPEX). The selected contracting model will determine the degree to which OPEX and CAPEX and the related risks are allocated to each contracting party. However, a 'grey zone' exists where the two expenditure categories interface and a lack of precise and detailed definitions often leads to legal conflicts and disputes.

Insufficient O&M of Drainage Systems in Vietnam

Despite more than three decades of impressive growth since the onset of economic reforms in Vietnam in 1986, many constraints of the pre-doi moi socialist state's centrally planned economy continue to dominate management approaches of Government officials, administrative systems, institutional frameworks as well as planning and regulation in many sectors. This is particularly evident in state-run public utilities such as urban wastewater disposal and drainage management, which Vietnamese typically see as free-of-charge services to be provided by the state.

Consequently, the universal way to operate and maintain existing urban drainage infrastructure, rudimentary or sophisticated, foresees an annual allocation of provincelevel budgets that is neither based on a demand-driven calculation of necessary investments and activities deduced from desired and agreed levels of service, nor – in most cases – sufficient in amount to cover even the most basic cleaning and de-silting activities for the entire year. Operators of urban drainage systems are not contracted for durations sufficient to make the development of midterm business plans and investments into equipment, staff, procedures and knowledge economically viable. Instead, simple short-term work order contracts for the removal of silt and debris from manholes are handed out to usually province-owned urban public works, urban environment or water supply and sewerage companies. These 'operators' are paid on a usually quarterly basis, following the application of central Government issued cost norms for volumes of silt removed. As soon as allocated budgets are exhausted, often already midyear, silt removal activities are terminated and no O&M is performed until the beginning of the next fiscal year. In the event of major rain storms and floods, communelevel ward authorities, sometimes in combination with the provincial 'operators', are engaged to unblock pipes from debris and rubbish in order to - not always successfully ensure floods remain within manageable levels. These engagements are usually without financial compensation and operators are expected to cross-finance this emergency response from other business endeavors. As a result, operators lack the economic incentives needed to improve performance, effectiveness and quality of services. The intransparent use of tax-financed budgets paired with low quality service outcomes and a lack of public accountability lead to dissatisfaction and frustration in the general public.



The Solution

Institutional Framework for Adequate O&M

Technically adequate operation and properly planned preventive maintenance increase overall system performance and have important advantages over management systems that are limited to corrective maintenance only. These advantages include:

 Reduced urban flooding as full hydraulic capacity of pipe system can be utilized

- Less pipe backups / overflows and associated nuisances and hazards for public health
- Minimized damage to public or private property
- Safer and more hygienic work environment resulting in fewer accidents and illnesses
- Reduced adverse environmental effects
- Extended useful service life of assets and higher economic sustainability of capital investments
- Reduced costs for operation and for corrective maintenance
 Asset



Figure 1 presents an overview of how different asset management and related O&M approaches are related to the rewards, motivators and behavior of an organization or utility. The above-described situation of drainage management in most cities in Vietnam can be considered reactive at most. Advancing from this to planned, proactive or even strategic asset management entails a number of institutional, financial and social prerequisites that require complex reforms and take long to be put in place. These include:

- A legal and regulatory framework allowing cities to apply contracting models that are based on agreed performance targets measured in the quality of outcomes rather than the volume of inputs (e.g. work hours, available budget, sludge volumes removed from pipes, etc.) and that offers financial incentives for operators to make relevant mid-term investments that improve efficiency and quality of services delivered.
- A user-tariff system that provides sufficient revenue to cover (at least) the costs for O&M, calculated based on detailed and evidence-based planning of O&M requirements, commercial and other relevant business activities and a reasonable profit, sufficient to achieve agreed performance targets and levels of service.
- A system of independent economic and tariff regulation that protects customer interests and ensures the delivery of the promised level of service at lowest tariffs possible (best value for money).
- Functioning law enforcement and Government oversight mechanisms to control adherence to technical standards and environmental limitations.
- General acceptance among customers and political leaders that quality public services come at a price and that tax-based budget expenditures do not offer sufficient incentives to improve efficiency and levels of service.

Recent Sector Reforms in Vietnam

The Government of Vietnam (GoV) has recognized the above described challenges in urban sewerage / drainage management and has initiated the implementation of the necessary sector reforms with its Decree 88/2007/NĐ-CP ('Decree 88') on drainage in urban areas and industrial zones that took effect in June 2007. The development of Decree 88 was strongly supported by GIZ. The decree marked a historic milestone in Vietnam's urban sewerage / drainage sector and required far-reaching reforms, the most outstanding of which was the adoption of 'fees' for the discharge of wastewater into public drainage systems and the use of these fees to cover (at least partly) the costs for O&M. As Decree 88, however, required that fees were to be ratified by provincial People's Councils and contained conflicts with other existing sector legislation, in particular Decree 67/2003/NĐ-CP on environmental protection fees for wastewater, the decree lead to confusion among local governments and hence was not rolled-out on a larger scale. By 2014, only two cities, Soc Trang and Bac Ninh (both part of a MOC/GIZ support programme), had started collecting wastewater fees based on Decree 88.

As a result of the negative response from the local level and a widespread reluctance to implement the stipulated reforms, GIZ supported MOC in drafting Decree 80/2014/NĐ-CP ('Decree 80') on drainage and wastewater treatment as a replacement for Decree 88. Taking effect on 01 January 2015, Decree 80 marked a great step forward and a major improvement over the identified shortcomings of its predecessor. Its furtherreaching and more clearly formulated set of reforms, a more coherent integration into existing legal frameworks and more systematic and realizable implementation requirements paired with a wide-ranging roll-out strategy steered by MOC, led to clear understanding and acceptance among local leaders.

A key element of Decree 80 is the requirement that cities introduce a **user-tariff system** that provides sufficient revenue to cover the costs for O&M. Calling the user charge a 'tariff' instead of 'fee', as was the wording of Decree 88, has the legal implication that People's Committees are able to approve without prior legislative ratification through People's Councils. O&M costs are to be calculated based on the O&M requirements of existing assets, applying cost norms that are to be localized based on national guiding norms published by MOC (Decision 591/QĐ-BXD of 30/5/2014). This provision earmarks a radical change away from the traditional supply-based towards a demand-based cost planning paradigm. Figure 2 visualizes the difference between the two ways of O&M planning.



Figure 2: Two Ways of O&M Cost Planning

In addition to the adoption of cost-based user tariffs, Decree 80 introduced further improvements over Decree 88. Some of these include:

- The requirement for local governments to adopt local regulations on sewerage / drainage management ("localizing" Decree 80 to meet local particularities).
- The clear exemption for connected dischargers of wastewater who pay sewerage / drainage tariffs from paying environmental protection fees for wastewater.
- The requirement for local governments to assign clear operators for urban sewerage / drainage systems and enter into operation and management contracts with these operators with a duration between 5 and 10 years and based on a calculation of necessary costs sufficient to uphold agreed levels of service.
- A clear definition of the elements and scope of sewerage / drainage systems, including the legal boundary between public and private property (house connection boxes) and the inclusion of tertiary sewer

pipes as a part of the overall system, hence giving O&M of the entire system, not just parts of it, into the hands of a single operator.

- The compulsory connection of households on own cots to sewerage / drainage systems, if these are available within reasonable distance.
- The signing of connection agreements as well as sewerage / drainage service contracts between operators and connected customers.

To underpin the implementation of the required reforms, MOC promulgated Circulars 02/2015/TT-BXD (now replaced by Circular 13/2018/TT-BXD) and 04/2015/ TT-BXD guiding the enforcement of some content of Decree 80 and providing guidance on calculation and implementation of sewerage / drainage tariffs. The Circular 04 includes templates for a management and a customer service contract. Furthermore, MOC Circular 14/2017/TT-BXD guides the determination and management of costs for urban public utility services.

Environmental protection fees for wastewater

Since the Government's adoption of Decree 67/2003/NĐ-CP in 2003 (subsequently replaced by Decree 25/2013/ NĐ-CP, then by 154/2016/NĐ-CP and then by Decree 53/2020/NĐ-CP), direct dischargers of wastewater are charged an environmental protection fee for wastewater, determined, for domestic dischargers, as 10% of water supply tariffs. The money is collected via water supply bills or directly through commune-level authorities for households without water connection and is, after subtraction of a collection effort compensation, submitted to local state budgets. The collected funds shall be used for environmental protection activities. The environmental protection fee for wastewater is not related to and is not used for the O&M of urban sewerage / drainage systems. Dischargers who are registered customers of an urban drainage operator and pay a tariff for sewerage / drainage services are exempt from paying the environmental protection fee for wastewater. To date, several cities across the country, many of these with SECO and BMZ support, have introduced drainage tariffs as per Decree 80. These include Soc Trang, Bac Ninh, Hai Duong, Son La, Hoa Binh, Lang Son, Vinh, Quy Nhon, Ba Ria and Tra Vinh. Tariff approval and introduction efforts are ongoing in Buon Ma Thuot and Vi Thanh.

FPP Contribution

Co-Financed by Switzerland and Germany and implemented by MOC and GIZ, the programme "Flood Proofing and Drainage for Medium-sized Coastal Cities in Viet Nam" (FPP) in its phase two has targeted to tackle urban climate resilience via a holistic approach to urban flood prevention and management. This included the strengthening of urban drainage management capacities through a shift from reactive to preventive planned maintenance of drainage infrastructure. To this end, FPP advisors supported the creation of a stable and sufficient revenue stream that will lead to increased hydraulic capacities of drainage systems, better service reliability, improved efficiency, transparency and accountability of service providers towards customers.

Utilizing the official requirement for cities to introduce tariffs to cover O&M costs for urban drainage systems, FPP dedicated a set of activities to supporting its three partner cities in the Mekong-Delta in determining current and future O&M costs for drainage systems and calculating resulting revenue requirements and customer tariffs. Guided by an experienced senior FPP advisor, local government working groups in three provinces compiled detailed tariff proposals for their provincial capitals Long Xuyen, Rach Gia, and Ca Mau. Each proposal contains a detailed roadmap that projects tariff development from starting levels in 2019 until 2030. The roadmaps foresee to phase-out tariff subsidies from provincial budget and achieve OPEX cost-recovery (cost-recovery Level 1) from customer tariffs by 2025. From 2027 onwards, full OPEX and CAPEX¹ (cost-recovery Level 3) will be achieved. The subsidy reduction strategy towards 2025 has been carefully planned based on socio-economic affordability assessments. A gradual tariff introduction will help avoid an initial 'tariff shock', dampen adverse economic impacts and raise acceptance among the affected population.

The tariff determination process follows a number of steps:

1. **Execution of data surveys**: Including the collection of technical and financial data on existing assets, ongoing investment projects, drainage master plans or other development plans, current O&M work volumes, sewerage house connections, population statistics and projections, current and future water

supply connections and consumption volumes and socio-economic affordability.

- 2. Determination of current volume of O&M works: Cities in Vietnam do not comprise of sufficient data on the condition and O&M records of existing sewerage / drainage systems. Such data would normally be used as an evidence-basis to estimate a sufficient volume of works that ensure the achievement of desired levels of service. As a temporary workaround, the determination of annual work volumes has to rely on estimations to be made and agreed between asset owner, asset operator, DoC and other stakeholders.
- 3. Determination of current and future total OPEX and CAPEX, incl.
 - a. direct costs for operation, maintenance and repair (labor, machinery operation, materials) for the delivery of services, based on the agreed volumes of O&M works and local cost norms;
 - b. depreciation costs for electro-mechanical equipment and civil works1;
 - c. indirect costs (overheads), general costs and norm profit.
- 4. **Projection of OPEX and CAPEX development:** based on, in this case, 10-year projections for the development of drainage infrastructure, volumes of O&M works and unit costs, labor costs, machinery investments, population growth, per-capita water consumption and income.
- 5. Determination of the average starting tariff for one cubic meter of discharged wastewater and of adjusted tariff levels, differentiated by type of discharger (household, public, commercial, industrial) and different scenarios of cost-recovery. Cost recovery scenarios are calculated at three levels:
 - a. (Level 1) OPEX: recovery of costs for O&M only;
 - b. (Level 2) OPEX+: recovery of costs for O&M plus depreciation of electro-mechanical equipment;
 - c. (Level 3) OPEX+CAPEX: recovery of costs for O&M plus full depreciation, incl. civil works¹.
- 6. Determination of tariff introduction roadmap, incl. a plan for gradual subsidy reduction aiming towards full cost-recovery from customer tariffs.

After consultations, appraisal and ratification through different provincial departments and other stakeholders, provincial People's Committees take a final decision on which proposed option is to be adopted and provide their final approval for the implementation of the tariffs. By May 2020, drainage tariff roadmaps for the cities Long

¹ It is noted that no historic financial or technical documentation of existing sewerage / drainage infrastructure is available in any city in Vietnam. Therefore, depreciation costs for existing systems were defined as zero and not included in tariff projections.

Xuyen and Rach Gia have been approved by provincial authorities, while the roadmap for Ca Mau city has been finalized and is pending appraisal. Tariff collection in Long Xuyen and Rach Gia will commence within 2020. All customers connected to the public urban sewerage / drainage system are obliged to pay. Collection will be organized via the water bill. The sewerage / drainage system operator is assigned to survey and populate a database on dischargers who do not have a water supply connection, yet discharge wastewater into the public sewerage / drainage system. For these cases, tariffs will be collected based on an assumed average discharge volume of 4 (Rach Gia) or 5 (Long Xuyen) m3 per person and month.

To illustrate the content of the tariff roadmaps developed and approved under FPP support, the roadmap and tariff structure of Long Xuyen City is presented in the following set of tables.

Table 1 presents sewerage / drainage tariffs as currently applied by a number of cities in Vietnam. It shall be noted that tariffs in Son La City are lower as no wastewater treatment plant is in operation there yet. The achieved levels of cost-recovery of the presented tariffs is unclear.

Turne of Customer	Sewerage / Drainage Tariff (VND/m3)					
Type of Customer	Son La City	Bac Ninh City	Vinh City	Soc Trang City	Nha Trang City	
Household	1.000	1.500	1.200	2.600	2.160	
Public	1.000	1.500	1.600	2.600	3.240	
Commercial	1.250	2.300	3.500	3.900	4.320	
Industrial	1.500-1.750	3.000	2.400	5.200	4.320	

Table 1: Current sewerage / drainage tariffs in selected cities in Vietnam

Table 2 presents the approved customer tariff roadmaps for the period 2020 to 2030 in the three FPP cities.

	2020	2021/2022	2023/2024	2025/2026	2027/2028	2029/2030	
Type of Customer	Approved Long Xuyen Sewerage / Drainage Tariff (VND ³ /m ³)						
Household	1.000	1.500	2.500	3.500	4.500	5.500	
Public	2.000	3.000	5.000	7.000	9.000	11.000	
Commercial	2.500	3.750	6.250	8.750	11.250	13.750	
Industrial	1.500	2.250	3.750	5.250	6.750	8.250	
	Approved Rach Gia Sewerage / Drainage Tariff (VND ³ /m ³)						
Household	700	830	1.030	1.230	1.430	1.630	
Public	700	830	1.030	1.230	1.430	1.630	
Commercial	1.050	1.245	1.545	1.845	2.145	2.445	
Industrial	1.400	1.660	2.060	2.460	2.860	3.260	
	Proposed Ca Mau	ı Sewerage / Drain	age Tariff (VND³/n	1 ³)			
Household	950	1.200	1.400	1.650	1.800	2.000	
Public	950	1.200	1.400	1.650	1.800	2.000	
Commercial	1.425	1.800	2.100	2.475	2.700	3.000	
Industrial	1.900	2.400	2.800	3.300	3.600	4.000	

Table 2: Approved 2020-2030 tariff roadmap of Long Xuyen City

Table 3 presents the projected average unit costs per one cubic meter of wastewater at three levels of cost recovery for Long Xuyen City.

Year	Long Xuyen Average Unit Costs (VND/m ³)					
	Level 1 (OPEX)	Level 2 (OPEX+)	Level 3 (OPEX+CAPEX ¹)			
2020	3.520	3.992	5.888			
2021	3.577	4.035	5.870			
2022	3.636	4.079	5.856			
2023	3.696	4.125	5.844			
2024	3.756	4.171	5.836			
2025	3.818	4.220	5.831			
2026	3.881	4.270	5.830			
2027	3.945	4.321	5.831			
2028	4.009	4.374	5.835			
2029	4.075	4.428	5.843			
2030	4.142	4.483	5.853			

Table 3: Projection of average unit costs towards 2030 at three levels of cost-recovery in Long Xuyen

Figure 3 presents the total O&M costs at three different levels and the customer tariff revenue as projected in the sewerage / drainage tariff roadmap approved for Long Xuyen City. To ensure consistent service delivery, provincial budgets will need to be used to subsidize the gap between costs and revenue.



LONG XUYEN COST-RECOVERY ROADMAP 2020-2030

Figure 3: Projected costs and tariff revenue in Long Xuyen City 2020-2030

Figure 4 presents the projected tariffs towards 2030 applied for the household group of dischargers in three FPP locations.

Tariff Roadmaps for Household Dischargers



Figure 4: Tariff projections for households in three FPP cities 2020-2030

FPP Approach

The FPP outcome on tariff roadmaps in the three programme provinces is based on existing national key legislation and practical experiences made by the FPP advisory team in other provinces and cities throughout Vietnam. The FPP advisory team includes some of Vietnam's leading experts on drainage tariff calculation. On the national level these have contributed to the creation of key sector framework legislation (Decree 88, Decree 80, Circulars) and GoV templates for management contracts, service contracts and local regulations. Besides the tariff roadmaps for Long Xuyen, Rach Gia and Ca Mau, FPP experts also guided tariff determination processes in many other cities in Vietnam.

Even though in recent years more and more cities have invested in their sewerage / drainage infrastructure and subsequently started charging dischargers for collection and treatment, the large majority of urban centers in Vietnam, and in particular in the Mekong-Delta, has not yet succeeded with the implementation of Decree 80. For future phases it is recommended to utilize this experience and scale-up tariff roadmap determination activities to further cities throughout the Mekong-Delta and other regions.

To ensure sustainability of outputs and outcomes, FPP applies a holistic approach to capacity development that has proven highly effective. For FPP, flood proofing is an institutional, financial, technical and social issue and as such, FPP partners include leaders and officials from different state management and legislative agencies at central level², and Provincial People's Committees and relevant departments and agencies at provincial level.³ Capacity development efforts of FPP emphasize information flow, learning and experience sharing along both vertical (central–local) and horizontal (intra- and inter-provincial) lines of administration, ensuring a high degree of effectiveness, improved local capacities and strong ownership of activities and outputs.

² Central level partners include various agencies and units of: Ministry of Construction (MOC), Ministry of Environment and Natural Resources (MONRE), Ministry of Agriculture and Rural Development (MARD), Ministry of Planning and Investment (MPI), Office of the Government (OoG) and Committee for Science, Technology and Environment of the National Assembly (CSTE).

³ Local partners include: Provincial People's Committees (PPC), City People's Committees (CPC), Ward People's Committees (WPC), Departments of Construction (DOC), Natural Resources and Environment (DONRE), Agriculture and Rural Development (DARD), Planning and Investment (DPI), Health (DOH), Finance (DOF), Provincial Statistical Offices (PSO) and Urban Drainage Operators (UDO).

The Human Impact

Mr. Do Van Khanh, resident and household head in Long Xuyen



"I live in My Xuyen ward of Long Xuyen city. The area I live in gets regularly flooded, usually during heavy rains. Whenever rain storms concur with high tides the floods are particularly severe and water stays in the streets longer. Usually the floods occur over a period of a couple of hours. The rain water gets mixed up with wastewater from sewers, so the flood water is highly polluted and just disgusting to walk or drive through. It can even splash into your face and mouth when cars pass by too quickly.

The flooding is a major nuisance for all the people who live here in this part of town. It makes commuting a wet, dirty and unpleasant experience. Whenever water is too high, it overflows into exhaust pipes and engines of motorbikes stall. Especially weaker women then sometimes fall off their bike and get soaked in the dirty water. I have seen video clips from children who were sucked into uncovered street inlets or manholes that were not visible because of the water. Luckily that has not happened here yet, but it's a horrible imagination for this to happen to your own children. I always remind my kids to not walk anywhere during a flood. Besides holes there could be electrical power lines or other potential hazards anywhere. Not even to speak of diseases you can catch from that polluted flood water.

I heard that the city is investing into a treatment system for the wastewater generated by households and businesses here. I have also heard that the province has approved a plan to charge households for the collection and treatment of their sewage. I think that is the right thing to do. Those who cause pollution should cleanup themselves or get charged if others have to do it for them. I am certainly not rich, but I would be happy to pay a small monthly charge for proper sewerage and drainage services. But the emphasis is on 'proper'. I want to know what the city or the drainage company is doing with our money. I want to see results in return for my payments. The flooding situation must be improved and the environment must become visibly cleaner. After all that's what they promise us to do in exchange for our money. There are many households here that are poorer than my family. Especially some households in that women raise children on their own, without husband or other relatives for support. For them a sudden additional monthly charge may be a big shock and hard to cope with economically. So there must be some form of subsidy for these very poor households. Also the drainage tariffs should start low and then, if needed, be raised slowly over time. People need time to get used to paying for yet another utility service."



The city Soc Trang in the Mekong-Delta was the first city in Vietnam to implement Decree 88 by introducing a cost-based sewerage / drainage tariff in 2011. The tariff calculation and introduction process was strongly supported by GIZ on behalf of the Government of Germany (BMZ) that also provided a loan to finance drainage and wastewater treatment infrastructure for the city. Tariff introduction in Soc Trang was managed by the Soc Trang Urban Works JSC, the local sewerage / drainage operator. During the introduction process and ever since, the company and its staff could collect valuable experience on social acceptability and the benefits of tariffs for the quality of drainage services. Mr. Thai Binh Khuol, Deputy-head of the company's Planning and Technical Department shares his memories and thoughts:

"I have been working for Soc Trang Urban Works Company since almost two decades now. Back in 2010 I was assigned a double-role as company employee and at the same time as assistant for the GIZ technical assistance project. Part of that project was the introduction of tariffs that should cover the O&M of our city's wastewater and drainage system. This was part of the loan agreement with Germany for the investment project. We were the first city in the entire country to finally go through with the tariff introduction and with applying the Government Decree 88 of 2007. It fell into my responsibility to support our company's director in convincing all the many stakeholders and interest groups in our province about the benefits of the tariff introduction. After we finally got approval from our People's Council, I was assigned to manage the introduction process. It was hard work, we implemented more than 100 community meetings in the entire city, explaining rights and obligations of customers, and why a tariff introduction was necessary. We received lots of feedback and questions from residents and we tried our best to answer them all as best as we could. I believe that without this meticulous grass-root work our tariff introduction would have not been as smooth and successful as it was. Once we started with the tariff collection we met only very little resistance, only very few households refused to pay. The conflicts we had could be settled through additional face-to-face meetings and explanations.

In 2011 we started with a tariff of 1.700 VND/m3 for households. This was then adjusted several times over the years and we now (2020) collect 2.600 VND for one cubic meter of wastewater discharged to our system and treated by our treatment plant. This is a 65% increase over almost 10 years.

Besides giving my company the money we need to provide high quality O&M services, the tariff has had some interesting impact on the community in Soc Trang. We feel that since they have to pay money, people are more interested in what we do for them, they make use of their right to monitor our work more than they used to. In return that means that we have to be more transparent with them in how we use their money than we used to when we were still a state-owned enterprise. But I think that is a good thing. This 'public pressure' reminds us every day on who we actually work for. We used to perceive the local authorities as our customer. Since we are financed through tariffs we understand that the people are our customers and that we have an obligation to give our best, every day, to fulfill our promises to them and provide the best service we can."

Mr. Khuol concludes thoughtfully: "Of course not everything is perfect yet. Nobody should expect that after a tariff is in place, all problems magically disappear. It is only a first step in a long journey of continual improvement. The quality of our service is limited by two factors, the capacity of our infrastructure and the funds we have for O&M. We continue to experience occasional flooding in Soc Trang as our city grows rapidly and we need further investments. The tariff we charge is not yet sufficient to cover all the O&M activities we deem necessary to be implemented. You can always do more to achieve a better outcome. However, at our current state of development our politicians need to find the right equilibrium between an acceptable level of service and an acceptable tariff."





	Deutsche Gesellschaft für	Photo credits	GIZ	
	Internationale Zusammenarbeit (GIZ) GmbH	Text	Chris Scharfe	
	Registered offices Bonn and Eschborn, Germany	GIZ is responsible for the content of this publication.		
	Mekong Urban Flood Resilience and Drainage Programme 37 Le Dai Hanh, Hai Ba Trung Hanoi, Viet Nam	On behalf of	Federal Ministry for Economic Cooperation and Development (BMZ)	
	www.giz.de		State Secretariat for Economic Affairs (SECO)	
As at	June 2020	In cooperation with	Viet Nam's Ministry of Construction	
Printed by	Golden Sky			
Design	Golden Sky			