



Sanitation Tax

An innovative way to finance sanitation services

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Center for Water and Sanitation

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Sanitation tax

An innovative way to finance sanitation services

Sanitation tax is a tax collected by an urban local government for provision of sanitation services. The sanitation tax is collected through property tax bill or water bill. Local governments use the proceeds of sanitation tax for providing various sanitation services. Such services include desludging services of septic tanks, treatment of collected sludge, cleaning of drains, etc. In the two cities of Wai and Sinnar, sanitation tax has helped ensure that scheduled desludging service becomes a part of public services provided by local governments and residents do not have to pay at the time of desludging. It can also ensure that adequate funds are available with local government for operation and maintenance of sanitation services in their city.

1. Background and need for sanitation tax

In August 2014, Government of India launched Swachh Bharat Mission that aimed to make India open defecation free. The Sustainable Development Goal (SDG) 6.2 focuses on “safely managed sanitation” services. This suggests that that all faecal waste is safely collected and treated. The success of Swachh Bharat Mission (SBM) has helped build strong narratives around the benefits of improved sanitation and making cities open defecation free (ODF). This has triggered large investment in toilet construction. Treatment of faecal sludge and septage is now the priority of cities.

Funds for capital investments for treatment facility are available from national programmes like AMRUT, some state level programmes (e.g. Nagarotthan in Maharashtra). Scaling up FSTP construction in cities is facilitated by use of Fourteenth Finance Commission funds. While funds for construction of treatment facility is available through central and state grants, cities – large and small – have to fund the operations of these services through their own resources.

The onus is on local governments to ensure proper functioning and maintenance of sanitation services. Limited financial capability of local government is one of key reasons for inadequate management of wastewater and faecal sludge services in India. The common spectre of non-functioning Sewage Treatment Plants (STPs) is due to inadequate funds available for their operation and maintenance. A study by Central Pollution Control Board on Evaluation on Operations and Maintenance of Sewage Treatment Plants in India-2007 reports that majority of local governments or the implementing agencies are not able to provide Operation and Maintenance (O&M) services of STPs. (CPCB, 2007, p.17). Therefore, it is crucial for the local governments to mobilise resources to meet operational expenses.

Sanitation tax is a tax collected by an urban local government for the provision of sanitation services. This tax can be a fixed charge or a percent of general property tax or water charges. This note outlines the provision in various states India for sanitation tax and highlights the case of two cities, Wai and Sinnar in Maharashtra where sanitation tax is successfully introduced to finance sanitation services. It also showcases examples from other countries where sanitation tax or an earmarked fund is allocated to support the sanitation activities.

2. Legal provisions for sanitation tax

The local governments in India are vested with a long list of functions delegated to them under the 74th Constitutional Amendment. The Twelfth Schedule of the Constitution lists eighteen functions that are to be devolved to the local governments. These include the responsibility to run the services in a city, such as water supply, sanitation, street lights and other public services.

While property tax continues to be a significant and reliable source for local government, there are several provisions for other important taxes and charges related to water, sanitation services and solid waste services. Various tax provisions for sanitation services include: conservancy tax, compulsory and voluntary taxes including general sanitary tax, special latrine tax, sewerage benefit tax, and special sanitary tax. Many local governments incorporate 'service taxes' within the property tax system to finance sanitation and these cover sewerage (if provided), drainage, faecal sludge and septage management (FSSM) and solid waste management services. A study of different states' Acts suggests that there are provisions for sanitation tax in various states of India.

Table 1 Provisions related to sanitation services in municipal acts of various states

State	Tax Provisions related to sanitation services	Provision for Sanitation Tax (verbatim extracted from the states' Acts)	Relevant State Municipalities Act
Andhra Pradesh	1. Pay for clearance of sullage (as a charge) 2. Scavenging tax as a part of property tax	1. Owners of buildings to pay for clearance of sullage from their buildings by connecting their house-drains with public drains 2. A scavenging tax to provide for expenses connected with the removal of rubbish, filth or the carcasses of animals from private premises	The Andhra Pradesh Municipalities Act, 1965. Part IV and V. Chapter-1, Section 85 and Section 148

State	Tax Provisions related to sanitation services	Provision for Sanitation Tax (verbatim extracted from the states' Acts)	Relevant State Municipalities Act
Odisha	1. Latrine Tax 2. Drainage Tax	1. A latrine tax on the annual value of holdings This tax will be imposed only on holdings containing dwelling houses, latrine, urinals or cesspools, and on holdings containing shops or places of business, in which, in the opinion of the Municipality a latrine, urinal or cesspool is required; the tax shall not be levied in any area until the Municipality have made provision for the cleaning of private latrines, urinals, and cesspools within such area, no shall the tax be levied for any quarter or portion of a quarter antecedent to the making of such provision 2. A drainage tax on the annual value of holdings	The Orissa Municipal Act, 1950, Chapter XIII. Section 131
Gujarat	1. Special sanitary cess 2. General sanitary cess 3. Drainage tax	1. A special sanitary cess on private latrines, premises or compounds cleansed by municipal agency, after notice given as herein after required 2. A general sanitary cess for the construction and maintenance of public latrines and for the removal and disposal of refuse 3. A drainage tax. It is levied on all properties connected to sewerage	The Gujarat Municipalities Act, 1963. Chapter VIII. Section 99
Uttar Pradesh/ Uttarakhand	1. Conservancy tax 2. Scavenging tax	1. A conservancy tax for the collection, removal and disposal of excrementious and polluted matter from privies, urinals, cesspools 2. A scavenging tax The Act defines the house-scavenging as the removal of filth, rubbish, odour or other offensive maater from the dust-bin, privy, cesspool or other receptable for such matter in or pertaining to a house or a building A scavenging tax, or a tax for the cleansing of latrines and privies, on the annual value of buildings or lands or of both, shall be leied from the actual occupier of the property upon which the taxes are assessed.	The Uttar Pradesh Municipalities Act, 1916. Chapter V. Section 128.

State	Tax Provisions related to sanitation services	Provision for Sanitation Tax (verbatim extracted from the states' Acts)	Relevant State Municipalities Act
Tamil Nadu	1. Sewerage tax 2. Drainage tax as a part of property tax 3. Scavenging tax as a part of property tax	1. A sewerage tax can be levied at a rate not exceeding fifteen percent of property tax as the council may determine 2. A drainage tax to provide for expenses connected with the construction, maintenance, repair, extension or improvement of drainage works heretofore provided or hereafter to be provided 3. A scavenging tax to provide for expenses connected with the removal of rubbish, filth or the carcasses of animals from private premises	The Tamil Nadu Urban Local Bodies Act, 1998. Chapter VI. Section 80. The Tamil Nadu District Municipalities Act, 1920, Chapter VI, Section 81

Sources: Based on review of relevant states' municipalities Acts- The Andhra Pradesh Municipalities Act, 1965; The Orissa Municipal Act, 1950; The Gujarat Municipalities Act, 1963; The Uttar Pradesh Municipalities Act, 1916; The Tamil Nadu Urban Local Bodies Act, 1998 and The Tamil Nadu District Municipalities Act, 1920

The Maharashtra Municipal Councils, Nagar Panchayats and Industrial Areas Act, 1965, enables municipalities to levy a tax towards the provision of sanitation services in the city. Many Local governments (LGs) of Maharashtra levy sewerage/sanitation tax for the provision of sanitation services ranging from Rs. 120 to Rs. 1200 annually for Municipal Corporations and Rs. 60 to Rs. 1800 annually for municipal councils.¹ The table below mentions the provision of sanitation tax under the different Acts in Maharashtra for municipal corporations and municipal councils. With the backing of such provisions in the Maharashtra Municipal Councils, Nagar Pallikas and Industrial town Act 1965, section 108, sanitation tax was introduced in Wai and Sinnar.

Table 2 Provision of sanitation tax under Maharashtra municipal and municipal corporations Acts

Act	Tax name	Section	Details (As mentioned in the relevant Acts)
Bombay Provincial Municipal Corporations Act, 1949, Chapter – XI	Conservancy tax	as a part of Property tax Section 127	A conservancy tax at such percentage of their rateable value as will in the opinion of the Corporation suffice to provide for the collection, removal and disposal, by municipal agency, of all excrementitiously and polluted matter from privies, urinals and cess-pools and for efficiently maintaining and repairing the municipal drains constructed or used for the reception or conveyance of such matter.

¹ Data derived from CEPT's PAS SLB data, 2018. These data is of 28 cities of Maharashtra, 10 Municipal Corporations and 18 Municipal Councils. Data is not available for some of the large municipal corporations such as Greater Mumbai, Pune, Pimpri Chinchwad, etc.

Act	Tax name	Section	Details (As mentioned in the relevant Acts)
	Conservancy tax	Section 137- may be fixed at special rates in certain cases	The Commissioner may, whenever he thinks fit, fix the conservancy tax to be paid in respect of any hotel, club, stable ¹ [industrial premises or other large premises] at such special rate as shall be generally approved by the Standing Committee in this behalf, whether the service in respect of which such tax is leviable be performed by human labour or by substituted means or appliances.
Maharashtra Municipal Councils, Nagar Panchayats and Industrial Townships Act, 1965	Special sanitary tax	Section 108	Tax upon private latrines, premises or compounds cleansed by municipal agency after making provision for the cleansing thereof by manual labor; or for conducting or receiving the sewage thereof into municipal sewers.
	Drainage tax	Section 108	Drainage tax and Special water tax for water supplied by the council in individual cases, with charges for such supply being fixed in such modes as shall be best suited to the varying circumstances of any class of cases.

Sources: Based on review of Maharashtra municipalities Acts- Maharashtra Municipal Councils, Nagar Panchayats and Industrial Townships Act, 1965 and Bombay Provincial Municipal Corporations Act, 1949, Chapter – XI

It is observed that across states there are different taxonomy under which sanitation tax can be levied. The terminologies are mentioned in the box below:

Box.1: Terminologies

The revenues for sanitation services are generally collected by levying tariffs or imposing sewerage/sanitation tax. Different terminologies include:

Sewerage tax- This is a tax levied on users with sewerage connection. This is generally part of property tax or water bill. These funds are used for maintenance of sewerage network and treatment plants.

Desludging user charges- The charges are taken from users that request for desludging service of their onsite sanitation systems. The charges are collected at the time of service provision. The charges are not uniform and vary across different service providers (ULB or private).

Sanitation tax- This is an earmarked tax levied for carrying out operations and maintenance of Faecal Sludge and Septage Management (FSSM) services. FSSM service comprises of desludging of septic tanks on a regular basis and treating the septage and the effluent at Faecal Sludge Treatment Plants (FSTP).

Scavenging Tax- A scavenging tax is provided for expenses connected with the removal of rubbish, filth or odour or other offensive matter from the dust-bin, privy, cesspool or the carcasses of animals from public/private premises

Drainage Tax- A drainage tax is generally provided for expenses connected with the construction, maintenance, repair, extension or improvement of drainage works

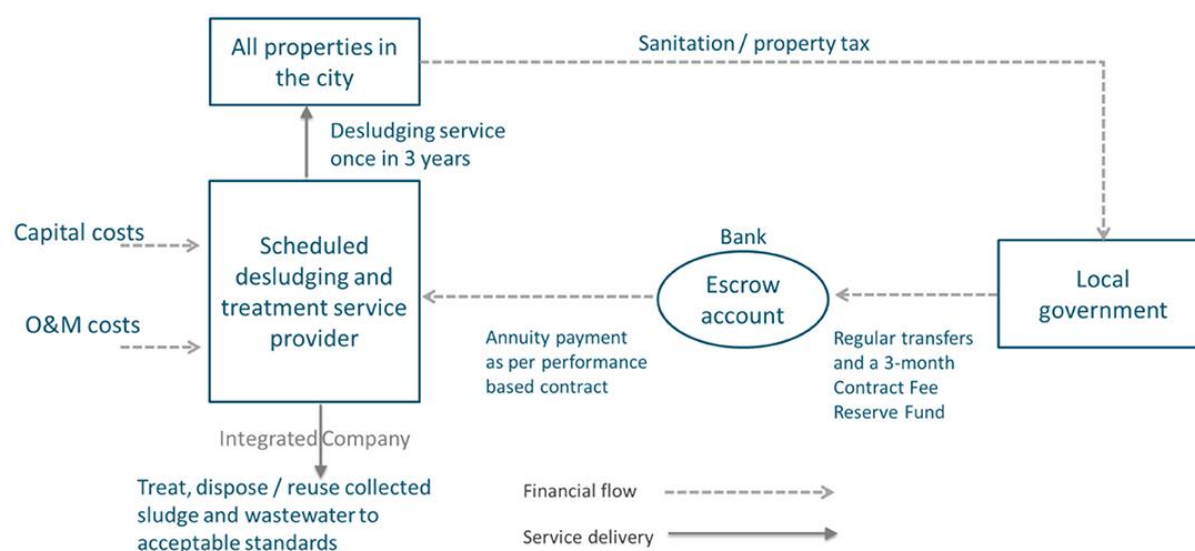
Conservancy Tax- A conservancy tax is suffice to provide for the collection, removal and disposal, by municipal agency, of all excrementitiously and polluted matter from privies, urinals, and cesspools and for efficiently maintaining and repairing municipal drains

3.Sanitation tax -Experience from two cities of Maharashtra, Wai and Sinnar

The local governments of Wai and Sinnar in India introduced a scheduled desludging service through a public private partnership (PPP) arrangement, and have also provided faecal sludge treatment plants for improving sanitation services in the city. The scheduled desludging contracts in these cities use a performance-linked annuity model with a pay-for-results contract between the desludging company and local government. Payment is based on the number of septic tanks desludged, with an annual target specified in the contract. Figure 1 depicts the performance-linked annuity model for desludging services. For financing, both the cities have levied a 'sanitation tax' to ensure that adequate funds are available for contract fees of the private agency for desludging services and operation and maintenance of treatment plant. In this arrangement, property owners pay a yearly sanitation tax to the government, as against current system of paying a charge/fee at the time of desludging

services. This is included in the property tax bills and collected along with their property tax payments. From these funds, the local government will make payment to the private operators through an escrow mechanism.

Figure 1 Performance Linked Annuity Model used in Wai and Sinnar, Maharashtra



Before the implementation of schedule desludging services, the conventional demand based desludging was being followed in these cities. The user charges for desludging were high, ranging from INR 1500-2000 per trip. This was a deterrent in getting tanks emptied, especially for the poor and low-income households. With the introduction of scheduled desludging backed by sanitation tax, these charges were reduced.² This has a two-fold effect as the households now do not have to pay charges at the time of desludging and thus they perceive it as a ‘free service’ like garbage collection. The desludging operator can reduce cost of operation due to spreading its fixed costs across large number of desludging operations in a day.

The sanitation tax linked to property tax is structured to be progressive. “This allows the sanitation tax to be more equitable as those with larger and better properties pay a higher property tax” (Mehta, Mehta and Yadav, 2019, p. 3). This will also make the desludging service more affordable for the low income groups. “The sanitation tax ensures that adequate funds are available for annuity payments to the private service provider. The amount collected from sanitation tax is sufficient to cover annuity payments for scheduled desludging in Sinnar city, while local government in Wai has to allocate both sanitation tax and some transfer from

² Under a scheduled desludging regime, number of septic tanks to be emptied every day is known and so the private operators use their trucks optimally by proper route planning and reduce their operational costs significantly

property tax for financing the scheduled desludging service. The local government in Wai is planning to incrementally increase this tax to cover 100% operational expenses and change flat tax to percentage of property tax to make it inclusive and equitable” (Mehta, Mehta and Yadav, 2019, p.3).

Box.2: Calculation of Sanitation tax in Sinnar:

The **annual contract value** for scheduled desludging: INR 3.6 million per annum

Cost of FSTP operations per annum: INR 0.83 million per annum

Sanitation tax levied by Sinnar Municipal Council to cover 100 percent O&M of FSSM services:

For residential property: INR 300

For commercial property: INR 100

The current demand of sanitation tax for the year 2018-19 is INR 5.7 million which is adequate to meet the full costs of operations and maintenance of FSSM services. While sanitation tax is a part of property tax, the average collection efficiency of property tax in Sinnar is 51%. With the current collection efficiency, the FSSM cost recovery through sanitation tax is ~65%. The city is trying to improve its collection efficiency which will in turn benefit in collection of sanitation tax too.

Source: Sinnar Municipal Council Budget and DCB table, 2018-19

The sanitation tax was introduced in Sinnar after getting approval of the elected members of the municipal council. The council members were informed of the benefits of sanitation tax. A unanimous decision was taken to introduce sanitation tax and a general resolution was passed by the ULB. This resolution was kept in public display for 30 days as required by Maharashtra Municipal Act, 1965. With no objections, sanitation tax was introduced.

Sanitation tax facilitates equitable and inclusive services. Introduction of sanitation tax and scheduled desludging services were welcomed by all households as it was perceived as a regular and “free service” provided by local government. In Wai, over the year, 1,500 properties received desludging services in a year as against 200 that were desludged annually in previous years. In Sinnar, in one year of operations, 1400 properties were desludged as against 260³ desludged annually earlier.

Sanitation tax as a part of property tax or water bill

It should also be recognised that it is not always necessary to introduce a special sanitation tax to finance the sanitation services. Earmarked funds (or as a percentage) under property

³ As per Sinnar City Sanitation Plan, 2015

tax/water tax can also be used for these services. The general property tax can be increased to incorporate the expenditure of the services under sanitation. Efforts are required to ensure sufficient property tax demand and improve its collection efficiency.

4. International experiences of Sanitation tax/ surcharge systems

Globally it is seen that many cities levy sanitation tax as a part of water bills, or as a surcharge based on the amount of water consumed. An argument supporting this mechanism is that “the per household cost of sanitation services (including greywater drainage) can be considered broadly proportional to that household’s water use.” (WSUP, 2019, p. 4).

Sanitation tax as a part of water tax/ water bill in Dumaguete, Philippines⁴ :

The Dumaguete City Septage Management Program was initiated in 2010. In 5 years, after the system became operational, it achieved full cost recovery through tariffs levied in the form of sanitation tax on top of water bills.

The city owns and operates the treatment plant and the local water utility conducts the desludging program. A septage management tariff attached to the water bill covers the debt service on the plant and trucks and enables desludging on a rotating five-year cycle. The financial model was based on the concept that if everyone paid a little, there would be enough money to support the program; and that making monthly payments on top of the water bill instead of having to pay a lump sum at the time of service was perceived as being more affordable. The septage management tariff was set at PHP 2.00 (USD 0.05) per cubic meter of water consumed. To make the tariff pro-poor, rates are adjusted to allow for a low minimum payment for the septage service for those families that consume less than 10 cubic meters per month. For these families, the septage fee is PHP 22.00 or about USD 0.50 per month. This billing mechanism was seen as an especially effective way of collecting the tariff, because more than 90 percent of households in Dumaguete City have metered piped water. With 22,000 household and 2,400 business customers at the time of the program inception, the projected revenue of about USD 25,000 per month was enough to pay both the capital and operating costs.

Sanitation surcharge on water bills in Ouagadougou, Burkina Faso⁵:

⁴FSM4 (2017) “4th International Faecal Sludge Management Conference: Compilation of case studies”

⁵ WSUP (2012) “Sanitation surcharge collected through water bills: a way forward for financing pro-poor sanitation” Discussion paper

In Ouagadougou, state owned National Water and Sanitation Utility (ONEA) is responsible for planning, construction and management of all sanitation infrastructure. The local government is supposed to manage basic urban services including sanitation. In order to finance sanitation services, sanitation surcharge is levied on the water bills raised by ONEA.

“All users with an individual connection to the water supply network pay a fixed surcharge of CFA 1,000 (USD 1.82) per month on their water bill, plus a surplus based on the volume of water consumed. This surplus is calculated according to a two-tier pricing structure designed to ensure that consumers with sewer connections pay more than poorer households with onsite sanitation facilities” (WSUP, 2012, p.10). The customers with sewerage connection pay CFA 60 (\$0.13) per m³ and customers with onsite facilities pay CFA 21 (\$0.04) per m³ surcharge. The surcharges collected are sent to separate sanitation accounts. ONEA generates annual revenue of approximately US\$ 2 million from this surcharge. It is majorly spent on soft aspects of sanitation such as awareness activities, etc., some of the funds are used for onsite sanitation facilities. Based on Ouibiga 2012, no expenditure on FSM was reported through these funds.

Other municipalities in Africa like Lusaka, Zambia; Dakar, Senegal; Beira, Mozambique have also adopted the concept for levying sanitation surcharge to sustain the sanitation services.

5. Way Forward

It is possible to recover operational cost of citywide sanitation services through a Sanitation Tax. Sanitation tax can help citizens to hold their governments accountable for ensuring service delivery, while also securing a reliable funding source for current and future services for the local government. At present, the sanitation tax in Wai and Sinnar covers some operational cost of desludging services and faecal sludge treatment plant. In future, the cities can consider increasing the sanitation tax base to recover full operational cost of these services. For making cities resilient and sustain sanitation service operations, it is essential to strengthen the local government capacity and finances to manage public services. It is essential to support local governments to enhance their own incomes by improving property taxes, introducing new taxes, and exploring revenues from other sources of own income.

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The Center for Water and Sanitation (CWAS) is a part of CEPT Research and Development Foundation (CRDF) at CEPT University. CWAS undertakes action-research, implementation support, capacity building and advocacy in the field of urban water and sanitation. Acting as a thought catalyst and facilitator, CWAS works closely with all levels of governments - national, state and local to support them in delivering water and sanitation services in an efficient, effective and equitable manner.