June 2015

Financing urban sanitation

Public finance at national level

Dr. Catarina Fonseca and Idun Rognerud

Mounting evidence suggests construction of latrines without further service provision in urban areas is highly inefficient and expensive for end-users not to mention the impact on human health, the environment and economic growth. Urban sanitation is complex and it's more than building toilets. A whole-systems approach is needed, one that takes into account the complexity of the faecal waste chain, from safe containment to collection, transport, treatment and reuse, as well as engagement with stakeholders and organisations operating at all levels.

To end open defecation and expand improved sanitation to all, new approaches and the finance that comes with it is needed. We will never be able to provide universal access if these services are seen as a personal responsibility instead of a public concern. This brief focuses on domestic public finance for urban sanitation at national level: how does it look like now and how does it offer an opportunity to close the funding gap for urban sanitation.

Urban sanitation

The complete sanitation system: from safe containment, collection, transport - to treatment and safe disposal or reuse of human waste in densely populated areas.

Whole-systems approach

Ideally, sanitation provision should be approached as a whole system with financial, infrastructural, environmental, technological and social (FIETS) components to secure sustainability, recognising the core concepts in figure 1. For further details consult 2014, Galli, Nothomb and Baetings.

Domestic public finance

Governments finance public expenditure for urban sanitation through taxation and other government income such as sovereign wealth funds, assets or borrowing money. This brief is primarily concerned with taxation at national level.

The 2015 Ngor Declaration on Sanitation and Hygiene for African countries

At the Fourth African Conference on Sanitation and Hygiene (AfricaSan) in Dakar, Senegal, May 2015, the Ngor Declaration was adopted by African Ministers responsible for sanitation and hygiene. The declaration includes a target for allocating 0.5 percent of GDP to sanitation and hygiene by 2020.

FIGURE 1 THE WHOLE SYSTEMS APPROACH

Why do we need domestic public finance for sanitation?

We need domestic public finance to address the financing gap, to speed up the growth rate in sanitation investments, to ensure that the poorest and most excluded have access to services and to ensure that the urban sanitation services are sustainable.

2.5 billion people globally lack access to improved sanitation facilities and one billion resort to open defecation (UN-WATER/WHO, 2014). More than half of the global population lives in urban areas and the rate at which sanitation services currently are introduced cannot keep track with the rapid urban population growth.

The latest data from WASHwatch.org shows that in Sub-Saharan Africa and in Asia the speed of investments is too slow.

At the present growth rate we will not reach universal access for sanitation.

It is also increasingly clear that approaching sanitation as a technological issue contributes to the high failure rates and lack of sustainability in current sanitation programmes.

For instance, a study in Dhaka, Bangladesh, found that 98 percent of faecal waste ended up untreated in the waterways, even though 99 percent are safely contained. From this it is evident that management of sanitation services beyond latrines is necessary to reduce public health risks and to protect the environment.

Currently, typical pit latrines tend to have high maintenance and operation costs, with safe removal of sludge estimated to cost up to US $33 per m^3. This is especially an issue in informal urban settlements where narrow alleys prevent trucks from accessing latrines, necessitating manual labour to empty them. As a result some opt to flush out latrines in the wet seasons, and even when latrines are safely emptied, the sludge is likely to be dumped elsewhere, polluting waterways and groundwater.

Sanitation is often considered a household responsibility, and is therefore largely ungoverned and unfunded.

While sewerage systems are commonly part of public sector responsibilities, pit latrines and non-centralised sanitation systems are deemed household responsibilities and not a public concern. We will never be able to provide universal access if these services are seen as a personal responsibility instead of a public concern. There is a role for the private sector and entrepreneurs at the bottom of the pyramid market to commercialise toilets, technologies and pit latrine services in urban areas, but so far there is no evidence that they are able – on their own - to tackle the size and urgency of the urban sanitation problem.

By considering sanitation to be ultimately a public responsibility, governments need to take the lead, encouraging the whole system approach and adequate funding. Strong institutions are also needed to drive efforts to eliminate inequality and reach the poor.

Domestic public finance offers opportunities to reduce the funding gap.

At the moment, urban sanitation is being mainly funded through household own contributions or tariffs, and through transfers (aid), leaving the single most important source of funds – taxes – untapped as a financial source.

In the last GLAAS survey (UN-WATER/WHO, 2014), 80 percent of country respondents stated that there is a significant funding gap for WASH, especially for sanitation. There is room for public finance to contribute to ending the global sanitation crisis, but funds must be mobilised through effective governance, taxation mechanisms and accountability.

In Barranquilla, Colombia, a house sales tax has been used to fund sanitation systems in the city. Similarly, in Gujarat, India a tax on trucks entering the city raised funds to finance sanitation.

On a national level, governments must encourage the development of new approaches to sanitation that are more affordable and financially sustainable in the long term, and where every stage in the human excreta management chain is accounted for.

What are current levels of domestic public finance at national level for urban sanitation?

Very limited data is available on national level investments in (urban) sanitation (Table 1). Current public expenditure in sanitation is extremely small, with Bangladesh spending only 0.06 percent of GDP on sanitation in 2012 while Bolivia on the higher end, spends 0.2 percent of GDP. It is assumed that most of this public expenditure is directed to urban areas.

Increasing public expenditure to 0.5 percent (in accordance with the Ngor Declaration which is only applicable to signatory African countries) would require an increase in the public funding to the sector by almost half a billion USD for Bangladesh alone.

TABLE 1 EXPENDITURE ON SANITATION IN SELECTED COUNTRIES

Country	GDP 2012 (USD Million)	WASH expenditure as % of GDP in 2012	Sanitation as % of WASH expenditure	Sanitation expenditure as % of GDP	Sanitation Expenditure (USD Million)	Projection 0.5% of GDP (USD million)	Gap (USD million)
Afghanistan	20,500	0,13%	13%	0,017%	3,5	102	**99**
Bangladesh	116,360	0,26%	23%	0,060%	69,6	581	**512**
Bolivia	20,040	0,64%	32%	0,205%	41,0	100	**59**
Brazil	2,252,660	0,11%*	40%	0,044%	991,2	11,263	**10,272**
Fiji	3,910	0,81%	33%	0,267%	10,5	19	**9**
Iran	552,400	0,12%	28%	0,034%	185,6	2762	**2,576**
Morocco	95,980	0,38%*	36%	0,133%	127,8	479	**352**
Nepal	18,960	0,57%	13%	0,074%	14,0	94	**80**
Serbia	37,490	0,06%	22%	0,013%	4,9	187	**182**
Tunisia	45,660	0,46%	36%	0,166%	75,6	228	**152**

Source: World Bank (2015), UNICEF/WHO (2014), own estimate.

* Findings from the TrackFin initiative suggest these numbers might be higher, with 1.18% of GDP in Brazil going to WASH in 2012, and 2.3% in Morocco, 2011.

Increasing public investment for sanitation to such an extent raises the question of where the funding will come from.

One alternative is to redistribute funds from other sectors, risking possible negative consequences as other services and institutions lose funding. Alternatively, government revenue must increase through taxation mostly, enabling channelling more funds into sanitation without detrimental effects elsewhere.

There is potential for raising government revenue through taxation, as many countries, especially in the African continent, currently have relatively low levels of tax revenues.

Tax revenues in EU countries average 18.7 percent of GDP, compared to 13.8 percent in Sub-Saharan Africa, with Nigeria as low as 1.6 percent. Almost half of the countries in the region do not provide data on tax revenue, indicating that the average might be even lower.

In countries where universal basic sanitation is not affordable, aid will be required to complement national public finance. In many developed countries, a blend of public finance, private capital and tariffs has been instrumental to ensure adequate investments. See 2015, Bisaga and Norman for examples on this.

Greater transparency and monitoring of expenditure is needed to improve service delivery and hold governments accountable

Despite the numerous commitments and efforts to improve transparency and monitoring in the WASH sector, (i.e. GLAAS/TrackFin, Sanitation and Water for All High Level Meeting commitments, eThekwini declaration) information on expenditure remains elusive. Initiatives like WASHwatch.org compile data on WASH expenditure and budgets for a large number of countries, yet disaggregated data on sub-sectors such as water, sanitation and hygiene is rare.

The eThekwini Commitment 6a to establish specific public sector budget allocations for sanitation and hygiene programmes have been fulfilled in less than half of the 35 participating countries.

Meanwhile good or better progress is reported in most countries working towards meeting the targets set in the commitments made in the 2012 Water and Sanitation for All High Level Meeting (Table 2).

National expenditure on sanitation needs to be tracked and made available if countries are to be held to account to their commitments, such as those made in the Ngor Declaration in 2015.

For the civil society organisations, the question remains on how to successfully advocate for improved tracking and monitoring of government expenditure for sanitation beyond the community and the district level.

TABLE 2 PROGRESS TOWARDS E-THEKWINI AND SWA HLC COMMITMENTS IN SELECTED COUNTRIES

Country	eThekwini Commitment 6a *	SWA HLC – Selected commitments to financing sanitation **	0,5% of GDP (constant 2015 USD million) ***
Burkina Faso		*Completed*: Allocate at least 17.5 billion CFA annually (35 million $ U.S.) to finance the water and sanitation Sector	44
Ethiopia		*Good progress*: Generate about US $ 1.5 billion for full scale implementation of all the UAP components from government and donors	139
Ghana		*Slow progress*: Provide micro-finance for household latrine construction	100
Mozambique		*Slow progress*: Establish a specific public sector budget allocation for sanitation and hygiene equivalent to at least 0.5 % of GDP	56
Nigeria		*Slow progress*: The Federal Ministry of Finance will work closely with all relevant Government Ministries for progressive annual increase in budget allocation of up to 5% of national budget for water supply and 0.5% of the GDP for sanitation within the next three years	917
Uganda		*Good progress*: Increase budget allocation and funding for sanitation and hygiene issues in the ministries of Water, Education, Health, Defence and Agriculture	79

Source: World Bank (2015), SWA (2015), AfricaSan (2015).

* e-Thekwini Commitment 6a: To establish specific public sector budget allocations for sanitation and hygiene programs.
** 2012 Sanitation and Water for All High Level Meeting Commitments for 2014. Additional commitments were made in 2014.
*** Ngor Declaration: Increase public expenditure for sanitation to 0.5 percent

CONTACT

Catarina Fonseca
Head Innovation and International Programme
fonseca@ircwash.org

ABOUT THIS BRIEF

This brief was developed by IRC as an input to the SuSanA thematic discussion "Urban Sanitation Finance – from Macro to Micro Level". 23 June – 16 July, 2015.

FURTHER INFORMATION

- Read about the IRC approach on urban sanitation http://www.ircwash.org/sites/default/files/201411_wp_towardssyschangeinurbansan_web.pdf
- Learn more about public finance for WASH www.publicfinanceforWASH.com
- Read how rich countries financed urban sanitation: http://www.publicfinanceforwash.com/resources/finance-brief-2-universal-water-and-sanitation-how-did-rich-countries-do-it
- Background on financing sanitation services http://www.wsscc.org/sites/default/files/publications/WSSCC_Public_Funding_for_Sanitation_2009.pdf
- Sanitation financing models for the urban poor http://www.ircwash.org/sites/default/files/Sijbesma-2011-Sanitation.pdf

ABOUT IRC

IRC is an international think-and-do tank that works with governments, NGOs, entrepreneurs and people around the world to find long-term solutions to the global crisis in water, sanitation and hygiene services. At the heart of its mission is the aim to move from short-term interventions to sustainable water, sanitation and hygiene services.

With over 45 years of experience, IRC runs projects in more than 25 countries and large-scale programmes in seven focus countries in Africa, Asia and Latin America. It is supported by a team of over 80 staff across the world.