LEARNING PAPER
HIGHLIGHTS
FINANCING SANITATION FOR CITIES AND TOWNS

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Background

• It is a summary of a *Learning Paper: Financing Sanitation for Cities and Towns*, commissioned by SNV Netherlands Development Organisation and prepared by the Institute for Sustainable Futures, University of Technology Sydney.
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Background

- Sanitation is a basic human right - makes it an obligation of States to respect, protect and fulfil this right.
- Sanitation is not only crucial for public health and environmental health, but also underpins economic development.
- Planning and financing for sanitation in cities and towns in developing countries is often ad hoc and piecemeal.
- Planning requires consideration of the complete sanitation service chain over the lifecycle of the associated service infrastructure.
The focus of this paper is on access to the upfront finance and other ‘lumpy’ finance needs,

The upfront investment is the main determinant as to whether there is service at all, and the decisions made upfront have a profound influence on the performance of the entire service chain
Background

• In this paper the focus is on monetary costs.
• Ideally planners need to also consider environmental costs or impacts.
Understanding financing requirements

• For the purpose of this paper, we have grouped the main cost items according to when they are incurred in the sanitation lifecycle.
Sanitation financing over time

- Ideas about how water and sanitation services should be financed have changed over time, with 3 patterns dominating different times:
- Funding mainly by taxes (late 1850s to 1970s): public services contributing to economic growth
- Funding by tariffs (1980s onwards): user pay principle
- Funding by tariffs, taxes and transfers (the 3Ts) (since 2003): ‘sustainable cost recovery’

The 4th T, available for sanitation

‘Trade’ – revenues from the sale of products that capture the value of the sewage waste stream, such as fertilizer products, fuel products and aquaculture.

We therefore refer to the recovery of lifecycle costs through the 4Ts as ‘sustainable full cost recovery’ to distinguish it from ‘sustainable cost recovery’ through the 3Ts.
Understanding financing requirements

• Initial investment.
• Regular day-to-day
• Intermittent maintenance – minor repairs and replacements (e.g. pumps), desludging, etc. required at relatively short time intervals.
• Major rehabilitation, replacement and asset renewal – major activities required at relatively long time intervals, such as repairs and replacements of aging infrastructure
Understanding financing for sanitation

• Since focus of this paper is on *upfront finance and other ‘lumpy’ finance*, it is simplest to think in terms of two cost groupings:

• *investment costs* (representing the *upfront and major lumpy costs* in the lifecycle):
  • namely the initial investment costs and rehabilitation, replacement and asset renewal

• *Operation & maintenance costs* (all other costs incurred regularly on shorter timeframes).
Investment cost (upfront and rehabilitation)

Major ‘lumpy’ costs

Regularly occurring costs

O&M costs

Anticipated lifecycle costs
The 4Ts

Contributions from all levels of government, originating from domestic taxes

Tariffs

Taxes

Transfers

Funds from international donors and charitable entities

Trade

Income from sale of waste-derived products

Payments from users

Revenues

Anticipated lifecycle costs

Major ‘lumpy’ costs

Regularly occurring costs

Investment cost (upfront and rehabilitation)

O&M costs

≤
Investment costs
O&M costs

Lifecycle Costs

Repayable Finance

Revenue from 4Ts

Total Revenues

Borrowed funds to meet upfront costs, that must be repaid later through revenues

Revenues must be sufficient to cover Investment costs, O&M costs, plus the costs of Repayable Finance (interest payments and any fees)

Understanding the costs and revenue sources
Sanitation financing overtime

• Ideas about how water and sanitation services should be financed have changed over time, with 3 patterns dominating different times:
  • Funding mainly by taxes (*late 1850s to 1970s*): public services contributing to economic growth  
  • Funding by tariffs (*1980s onwards*): user pay principle  
  • Funding by tariffs, taxes and transfers (the 3Ts) (*since 2003*): ‘sustainable cost recovery’

• The 4th T, available for sanitation
  • ‘Trade’ – revenues from the sale of products that capture the value of the sewage waste stream, such as fertilizer products, fuel products and aquaculture.

We therefore refer to the recovery of lifecycle costs through the 4Ts as ‘sustainable full cost recovery’ to distinguish it from ‘sustainable cost recovery’ through the 3Ts
Planning for long term financing

• When planning sanitation services that can be delivered in the long term, we need to make sure
• the revenues from tariffs, government contributions, donor support and sewage reuse products
• (4Ts) can fully cover the anticipated costs over the lifecycle of the service,
Planning

- Planning finance is an iterative process of reducing planned costs and identifying a right mix of revenue sources that in combination with schemes for accessing repayable finance, meet the requirement for sustainable cost recovery. If the gap cannot be closed, the sanitation infrastructure plan may need to be revised.
Sources of finances

- The principal sources of repayable finance are loans, bonds and equity - these are structured on purely commercial terms

- APPLICABILITY OF REPAYABLE FINANCE TO SANITATION
Repayable finance

• Barriers to accessing repayable finance can be lowered by designing financing arrangements
• that combine repayable finance with one or more of the variety of supporting mechanisms
Case studies

- K-Rep Bank micro-finance for small water service providers in Kenya
- Combining microfinance, commercial loan finance, ODA grants and social investment for sanitation end users (India) (954% loan)
- Using output based aid to incentivise local governments to invest in their water and sanitation utilities to increase service connections (Indonesia)
Once service provision outputs are independently verified, loan is refinanced with OBA subsidy, reducing the loan capital.

Service Provision Agreement sets provision targets while reducing competition risk for implementing entity.

Kenya OBA combined with micro-finance
Result based financing

• Indonesian Hibah --- output based aid (OBA)
Key messages

• Governments have responsibility for enabling sanitation services to their constituents, in line with their role as protector of fundamental human rights,

• A key challenge in the emerging sanitation sector in developing countries is that many sanitation planners do not think adequately about financing lifecycle costs, and make assumptions about the ability of tariffs to cover ongoing costs while also being affordable – which leads to insufficient revenues in practice
Key messages

• The ‘sustainable full cost recovery” paradigm put forward in this paper reflects the argument for using a combination of 4 revenue streams (4Ts) to recover lifecycle costs of services:

• **Sanitation services need to plan for lumpy capital requirements to provide services for the long term**

• **Trends in new finance mechanisms could be leveraged**

Sanitation financing plans must accommodate services for all without excluding anyone
Thank you for attention: our collaborative efforts for sanitation financing