Public Financing for Children (PF4C)
Part 1: Introduction
• Global state of financing in the WASH sector
• Financing in the SWA Framework
• What is PF4C? Elements of Financing Strategy

Part 2: Focus on 3 tools
• Financial tracking
• Investment needs assessment
• Investment case and value for money
Part 1: Introduction
Global Overview
State of Financing in the WASH Sector

GLAAS Report 2017
Insufficient financial resources allocated to sanitation to meet national targets
Low WASH expenditure as a percentage of GDP and per capita.
Poor availability of expenditure reports, by subsector

- Publicly available and accessible
Sources of financing for WASH

[Bar chart showing sources of financing for 25 countries with a total of US$ 43 billion, with households being the largest source, followed by government and external sources.]
Low Levels of Cost Recovery

Percent of countries in which tariffs cover their O&M costs by at least 80%
High Non-Revenue Water

* Average for the three largest water suppliers
Declining Aid Commitments to WASH (as %)

Conclusions of SWA High Level Meetings 2017
SWA High Level Meetings, April 2017
(Sector and Finance Minister’s Meetings)
Sector Ministers’ Dialogues

Can/should we ask for or attract more $$$s into WASH sector without prudent sector management and financially viable schemes?

PF4C – UNICEF for every child
Conversation with finance minister and customers: it’s what you **save**, not what you spend – so we need the evidence to support the case
Sector Ministers’ Dialogues

Lower cost and more practical solutions need greater visibility, while at the same time considering resilience and sustainability

=> VFM

PF4C – UNICEF for every child
Sector Ministers’ Dialogues

Savings by bridging the gap between humanitarian and development
Sector Ministers’ Dialogues

Boosting sector financing:
- Blended finance
- Impact investing
- Green Climate Fund
  - SDG Funds
Financing in the Sanitation and Water for All (SWA) Framework

SWA Collaborative Behaviour

SWA Building Block

**Sector Financing**

- Medium Term Expenditure Framework which matches government priorities with available resources
- Realistic and transparent sector budget with identifiable funding streams
- Availability and use of data on financing streams including the 3Ts (taxes, tariffs and transfers) and comparable, realistic estimates for all sector cost categories for sustainable service delivery.
PF4C – What is it?

UNICEF’s Engagements in Influencing Domestic Public Finance for Children (PF4C)
A Global Programme Framework
PF4C Addresses Public Financial Management Challenges

• Better reflect child-related policy commitments in budget processes
• Identify cost-effective and equitable ways to deliver services and life-saving commodities, and plan, cost and budget them
• Improve the flow and utilization of budgeted resources for service delivery, including at subnational level.
PF4C Guiding Principles

- **Human Rights**: Convention of the Rights of the Child; Humans Rights to Drinking Water and Sanitation. Applying the principles of participation, equity and accountability

- **Sustainability**: Institutionalizing changes within national systems and improving resource mobilization

- **Country Context**: Choosing PF4C actions based on governance context and opportunities (and risks!)

- **Comparative Advantage**: Prioritizing PF4C actions that add value in close collaboration with PFM actors
PF4C Pillars for Defining Interventions

Pillar 1: Measure and monitor how much is being spent
- What is the size and composition of spending (transparency)?

Pillar 2: Maximize the impact of existing resources
- Are resources fully expended as intended (efficiency)?
- Are they invested in the right programs (effectiveness)?
- Are they reaching the most vulnerable (equity)?

Pillar 3: Scale up resources
- How much is needed to address deprivations (adequacy)?
- How can the gap be financed (adequacy)?
Signs Indicating an Inefficient Sector

- Lack of data for regular sector monitoring
- Poor coordination, fragmentation
- Not sharing knowledge
- Poor budget absorption
- Service providers not investable
- No clear institutional mandates
- Poor human resource base, low salaries

PF4C – UNICEF for every child
Financing Strategy
Elements of a Financing Strategy

- WASH sector policy, targets, standards
- Budgeted/spent resources, financial flows*
- Spending needs, financing gap, potential*
- Investment case for more funds to WASH*
- Increase sector efficiency*
- Raise resources domestically
- Attract commercial finance

A WASH financing strategy must be realistic, affordable and achievable, and clearly set out how to finance sector investment plan.

Effectiveness / Quality: Aligning Goal and Need
A package of services appropriate to areas where outcomes need to be improved

Equity: Is everyone benefiting?
Equity in access (universal) and in funding (contribution according to ability to pay)

Efficiency: Best use of inputs?
Allocative (right distribution) and technical (right approach) both considered
Part 2: Focus on 3 Tools
Financial Tracking
Financial Flows: A Complex Picture

Main aim is to understand sources, intermediaries and eventual destination of funds
Financial Measurement & Tracking Tools
TrackFin
TrackFin

Seeks to answer:

• What is the total expenditure in the sector?
• How are funds distributed by services and expenditure types?
• Who pays for services?
• What are the main funding channels?
Example of TrackFin in Ghana
Funding by main source
Example of TrackFin in Ghana
Expenditure by subsector
Example of TrackFin in Morocco
Origin of service provider financing
Comparing Countries using TrackFin

**WASH expenditure by type of funding**

Ghana (2012)

- Repayable financing (Debt): 33%
- International grants (Transfers): 20%
- Domestic public transfers (Taxes): 3%
- HH exp. on self-supply (Tariffs): 15%
- User tariffs (Tariffs): 29%

Tunisia (2015)

- Repayable financing (Debt): 12%
- International grants (Transfers): 4%
- Domestic public transfers (Taxes): 21%
- HH exp. on self-supply (Tariffs): 60%
- User tariffs (Tariffs): 3%
Budget Briefs

WATER AND SANITATION
BUDGET BRIEF FY 2011/12–FY 2015/16

Key messages

• The water sector has seen significant drops in budgetary allocations in recent years. At 2.4 per cent of the overall state budget, the water sector lags behind other priority sectors such as education, infrastructure, health and agriculture.

• Capital spending is increasingly funded by local resources and absorbed by the vast majority of the water sector budget, mostly focusing on construction and rehabilitation of infrastructure, although with low execution rates.

• Over two thirds of the water sector budget is directed to MoWR, and within it mostly to rural water supply. The unevenness of the water sector budget towards capital investments with negligible allocations for sustaining the schemes is a major issue that needs to be addressed.

• Sanitation and hygiene remain severely underfunded, with only 726.5 Million allocated in FY 2015/16, out of the Water Sector Development Plan total budget of 7.1 Billion. Statistics show that 32.8 per cent of households in 2012 had access to improved sanitation, an increase of only 0.8 per cent since 1990. More than half (56 per cent) of health care facilities have no functioning toilets and only 4 per cent of schools have latrines accessible to people with physical disabilities.

• The government needs to improve the predictability of funding to the sector, reduce geographical disparities in access to water, invest in sanitation and hygiene, and allocate funds to cover the backlog of weak maintenance.

• A stand-alone policy on sanitation would give the sub-sector much higher priority on the government agenda, by improving the institutional set-up, coordination and investment in the sub-sector.
WASH Budget Brief: Objectives

1. Analyze and monitor the size of budget allocations to sectors that are important for children, including the efficiency, effectiveness, equity and adequacy of past spending

2. Inform advocacy, through key messages for policy and financing changes – including resource mobilization!

3. Increase staff knowledge on budget issues that are linked to sector results
WASH Budget Brief: Sample structure

Key Messages and Recommendations

Section 1. Introduction
• WASH sector overview
• Main documents and targets
• Sector performance

Section 2. WASH Spending Trends
• Size of spending
• Spending changes
• The priority of WASH
• Spending against commitments
• Spending against other countries

Section 3. Composition of WASH Spending
• Ministries/agencies/institutions
• Services
• Recurrent and capital spending

Section 4. Budget Credibility and Execution
• Recent performance
• Challenges

Section 5. Decentralization and WASH Spending
• Context
• Sub-national funding guidelines
• Sub-national spending trends

Section 6. Equity of WASH Spending
• Spending inequities based on (i) regions; (ii) rural/urban areas; (iii) income; (iv) results
• Causes

Section 7. Financing the WASH Sector
• Government income
• Aid
• Household financing
• Other (e.g. blended)
• Additional financing options

Section 8. Key Policy Issues
• Cost recovery, affordability, tariff structures, cross subsidies, vacancy rates, MTEF, disconnect between plans and budgets, etc.
WASH Budget Brief: Example analyses

**Figure 2** Trend in the budgetary allocation to the Water sector (TShs BILLION)

- 2011/12: 621.6
- 2012/13: 616.9
- 2013/14: 563.1
- 2014/15: 665.1
- 2015/16: 573.5

**Figure 3** Trends in the shares of priority sectors in the total budget

- Education: 1% (2011/12: 3.8%, 2012/13: 4.6%, 2013/14: 5.8%, 2014/15: 5.2%, 2015/16: 0.8%)
- Infrastructure: 1% (2011/12: 6.6%, 2012/13: 3.8%, 2013/14: 6.9%, 2014/15: 3%, 2015/16: 2.4%)
- Health: 1% (2011/12: 8.6%, 2012/13: 12.1%, 2013/14: 7.8%, 2014/15: 7.6%, 2015/16: 7.7%)
WASH Budget Brief: Example analyses

**Figure 5** Share of the recurrent and development budgets of the water sector (FYs 2011/12–2015/16)

**Figure 6** Trends in the allocation of water sector resources across different entities
WASH Budget Brief: Example analyses

**FIGURE 15** EXECUTION RATE FY 2015/16*

- Sanitation and hygiene: 98.1%
- Rural water supply: 59.8%
- Total: 44.7%
- Urban water supply and sewerage: 27%
- Programme delivery support: 21.3%
- Water resources management: 20.6%
WASH Budget Brief: Example analyses

**FIGURE 11** TRENDS IN PLANNED AND ACTUAL RELEASES FOR NSC (TSHs BILLION)

**FIGURE 14** LOCAL AND FOREIGN RESOURCES: WSDP BUDGET FOR FY 2015/16
WASH Budget Brief: Example messages

• Overall spending: The water sector has seen significant drops in budgetary allocations in recent years. At 2.4% of the overall state budget, the water sector lags behind other priority sectors, including education, infrastructure, health and agriculture, and falls far below the minimum spending requirements to achieve even the water and sanitation MDGs (3.4% of GDP). (Tanzania)

• Overall spending: The lack of a clear budget line for WASH at both national and county levels limits the ability of policy makers to understand how much and how well spending is performing in the WASH sector. It is imperative that a working group is put together to identify WASH-relevant spending and to introduce a budget line for tracking budget resources to this sector. (Kenya)
Public Expenditure Reviews (PERs)
WSS PER: Objectives

Review the level and composition of public expenditures, structures of governance and the functioning of public institutions in order to:

1. Consider how budget allocations fit strategic development requirements
2. Track whether and how allocations reach their intended destinations
3. Analyze whether expenditures favor efficient, effective, equitable and sustainable services
WSS PER: Policy Goals Considered

- Contribution of expenditures to poverty reduction
- Expenditures targeted at activities that private sector cannot deliver
- Expenditures targeted at activities with high socio-economic impact
- Contribution to reduction of recurrent costs, such as non-wage funds, or expenditures on activities that are labor-intensive
- Expenditures targeted at those activities that can affordably be extended to the whole target population
- Activities that favor disadvantaged groups
WSS PER: Sample Structure

Executive Summary
1. Introduction
2. Methodology
3. Sector Background
4. Performance of WSS
   - Access to improved services
   - Rural and urban performance
   - International benchmarks
   - Functionality of water points
   - Sustainability of water utilities
5. What is Being Spent on WSS
   - Size of funding
   - Different funders

6. Is Spending Well Allocated?
   - Allocation across budget categories
   - Recurrent and capital expenditure
   - Allocation to relevant ministries
   - Allocation to different regions

7. How Efficient is Spending?
   - Allocative efficiency (best programs)
   - Technical efficiency (best outputs)
   - Budget efficiency (funds delivered/spent)
   - Investment planning
   - Procurement processes

8. Conclusions and Recommendations
   - Main findings
   - What is required for the future (e.g. policy directions, financing, capacity issues)
   - Next steps

PF4C – UNICEF for every child
WSS PER: Costs, Timelines and Types

- Rapid PERs carried out in two months and cost between US$50,000 and US$100,000
- Comprehensive PERs can run two years and range US$200,000 to US$400,000
- Types: Can be a standalone PER devoted to WASH or as a chapter or section within a national PER
WSS PERs: Some examples

- Since 2003, WB funded >40 PERs that contain analysis of WSS sector
- Normally discussed alongside other sectors, but many standalone in Africa

**Water**

**Water and Sanitation**
- World Bank (2011) Sierra Leone PER: Water and Sanitation Sector
- World Bank (2016) Ethiopia PER: National (with WSS chapter)
WSS PER: Ethiopia example (2016)

Figure 4.1: Improvement in access to water supply and sanitation during MDG period

Access to improved Water Supply

- 1990: SSA Average 48%, Ethiopia 13%, 35% gap
- 2000: SSA Average 55%, Ethiopia 26%, 29% gap
- 2015: SSA Average 64%, Ethiopia 57%, 7% gap

Access to Improved Sanitation

- 1990: SSA Average 24%, Ethiopia 3%, 21% gap
- 2000: SSA Average 26%, Ethiopia 8%, 18% gap
- 2015: SSA Average 30%, Ethiopia 28%, 2% gap

Table 4.4: Capital budget utilization by major components

<table>
<thead>
<tr>
<th>Description</th>
<th>Budget</th>
<th>Expenditure</th>
<th>Utilization Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H&amp;S</td>
<td>417.7</td>
<td>237.8</td>
<td>57%</td>
</tr>
<tr>
<td>O/W Institutional WaSH</td>
<td>103.4</td>
<td>72.1</td>
<td>70%</td>
</tr>
<tr>
<td>Rural WS</td>
<td>3,840.2</td>
<td>2,344.2</td>
<td>61%</td>
</tr>
<tr>
<td>Urban WS</td>
<td>3,003.2</td>
<td>2,642.2</td>
<td>88%</td>
</tr>
<tr>
<td>Not Classified</td>
<td>3,825.5</td>
<td>3,671.6</td>
<td>96%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11,086.6</td>
<td>8,896.4</td>
<td>80%</td>
</tr>
<tr>
<td>Administrative level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>2,441.8</td>
<td>3,401.2</td>
<td>139%</td>
</tr>
<tr>
<td>Regional/Zonal office</td>
<td>5,315.6</td>
<td>3,440.3</td>
<td>65%</td>
</tr>
<tr>
<td>Woreda/Towns</td>
<td>3,329.3</td>
<td>2,054.9</td>
<td>62%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11,086.6</td>
<td>8,896.4</td>
<td>80%</td>
</tr>
</tbody>
</table>

Source: World Bank staff calculations, based on MoFED data in BOOST format.
WSS PER: Ethiopia example (2016)

Figure 4.2: Capital budget utilization by Regions’ average (2008/09-2011/12)

Source: World Bank staff calculations, based on MoFED data in BOOST.
WSS PER: Ethiopia example (2016)

Figure 4.3: Share of WSS, as percentage of total public capital expenditure by Regions

Source: World Bank staff calculations, based on MoFED data in BOOST format.
WSS PER: Ethiopia example (2016)

Figure 4.4: Per capita public expenditure in WSS in US$

Source: World Bank staff calculations based on MoEFD data in Boos format.

Figure 4.5: Public Expenditure on WSS as percent of GDP

Source: World Bank staff calculations, based on MoFED data in BOOST format.
Exercise on Financial Tracking

Look at PPT slides and UNICEF Guideline:
1. Which financial tracking tool best meets the needs of your country?
2. What data sources do you have? What data do you lack?
3. How will these data be collected?
4. How will financial tracking be promoted and sustained in your country?
Financing Needs Assessment and Gap Analysis
Limited taxes and transfers to meet the higher SDG targets means that tariffs have to be increased to finance the gap.
Tools to Assess Sector Spending Needs / Gaps

Costing tools
- OECD’s FEASIBLE model
- IRC WASHCost budgeting tool
- SWA Country SDG WASH Costing tool (World Bank / UNICEF)
### SWA Costing Tool (UNICEF, World Bank)

#### User can change

- Technology choice
- Current coverage
- Target in 2030
- Duration of hardware

- Capital costs per service
- Recurrent costs per service
- Cost recovery
- Current financing
- Discount rate for future values

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>RURAL/ URBAN</th>
<th>TECHNOLOGY</th>
<th>HOUSEHOLDS WITH TECH. OPTION</th>
<th>SERVICE COVERAGE (LEVEL 2015)</th>
<th>COVERAGE TARGET 2030</th>
<th>FINANCIAL COST PER CAPITA (US$ in 2016) with DISTRIBUTION OF COST RECOVERY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>CAPITAL COSTS (TOTAL)</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>COSTS</strong></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Caplix</td>
</tr>
<tr>
<td>Basic Water</td>
<td>Urban</td>
<td>Tubewell</td>
<td>50%</td>
<td>80%</td>
<td>100%</td>
<td>423.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dug well</td>
<td>50%</td>
<td>80%</td>
<td>100%</td>
<td>259.0</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>Tubewell</td>
<td>50%</td>
<td>80%</td>
<td>100%</td>
<td>423.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dug well</td>
<td>50%</td>
<td>80%</td>
<td>100%</td>
<td>0.1</td>
</tr>
</tbody>
</table>
Unit Costs – Capital

Capital expenditure and software costs are one-off costs per person reached which are repeated according to the duration.

Countries should seek to validate (and adjust) these values using local benchmark costs, and must be all-inclusive.

For the formulae, duration is entered as a negative number.

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>RURAL / URBAN</th>
<th>TECHNOLOGY</th>
<th>HOUSEHOLDS WITH TECH. OPTION</th>
<th>FINANC</th>
<th>CAPITAL COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CapEx</td>
</tr>
<tr>
<td>Basic Water</td>
<td>Urban</td>
<td>Tubewell</td>
<td>50%</td>
<td>62.5</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dug well</td>
<td>50%</td>
<td>29.8</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>Tubewell</td>
<td>50%</td>
<td>42.8</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dug well</td>
<td>50%</td>
<td>8.1</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Software = for education, awareness, demand-generation to support uptake and sustained use. Avoid double-counting if included in CapEx already.
Structure and User Interface

• Excel file
  • When shared, advise to save an original copy before working on it

• Three simple sheets
  • User guide (3 pages, printable)
  • Data verification sheet: this is where input values are checked and edited
  • SDG Costing Summary report: this is where results are viewed

• Calculation sheets are hidden
  • Should be no need to access these

• Global helpdesk will be provided to guide implementation and check adjustments, as well as partner support at country level
**SWA Costing Tool**

**Multiple tool outputs automatically generated**

<table>
<thead>
<tr>
<th></th>
<th>Ending OD</th>
<th>Water</th>
<th>Sanitation</th>
<th>Hygiene</th>
<th>WASH</th>
<th>Water</th>
<th>Sanitation</th>
<th>WatSan</th>
<th>Targets 6.1 + 6.2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maintaining services for served in 2015</strong></td>
<td>271</td>
<td>30</td>
<td>96</td>
<td>6</td>
<td>132</td>
<td>30</td>
<td>96</td>
<td>126</td>
<td>243</td>
</tr>
<tr>
<td><strong>Reaching unserved 2015 to 2030</strong></td>
<td>32</td>
<td>92</td>
<td>601</td>
<td>57</td>
<td>750</td>
<td>92</td>
<td>601</td>
<td>693</td>
<td>1396</td>
</tr>
</tbody>
</table>
SWA Costing Tool

Multiple tool outputs automatically generated
SWA Costing Tool

Financing Gap

<table>
<thead>
<tr>
<th></th>
<th>Water Urban</th>
<th>Water Rural</th>
<th>Sanitation Urban</th>
<th>Sanitation Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>New services: basic access</td>
<td>35.9</td>
<td>42.0</td>
<td>404.0</td>
<td>94.2</td>
<td>576.1</td>
</tr>
<tr>
<td>New services: safely managed</td>
<td>138.4</td>
<td>148.3</td>
<td>512.1</td>
<td>409.8</td>
<td>1,208.6</td>
</tr>
<tr>
<td>Maintaining services: basic access</td>
<td>14.3</td>
<td>22.9</td>
<td>74.5</td>
<td>21.8</td>
<td>133.5</td>
</tr>
<tr>
<td>Maintaining services: safely managed</td>
<td>12.1</td>
<td>16.5</td>
<td>85.8</td>
<td>205.0</td>
<td>319.4</td>
</tr>
<tr>
<td>Funds available</td>
<td>100.0</td>
<td>50.0</td>
<td>30.0</td>
<td>12.0</td>
<td>192.0</td>
</tr>
<tr>
<td>Financing gap</td>
<td>50.5</td>
<td>114.7</td>
<td>568.0</td>
<td>602.8</td>
<td>1,336.1</td>
</tr>
</tbody>
</table>

Units: Million US$
Interpretation and Use in the Financing Dialogue

1. The analysis is only as strong as its weakest data point
2. The numbers from such an analysis are only ‘ballpark’
3. The main objective of this costing study is to stimulate the dialogue on national financing, with a view to the SWA high level meetings in April 2017
   • Plus motivate a more detailed (and even decentralized) investment plan, with better cost and financing data
4. The user can experiment with different cost sharing scenarios, different targets and service levels – to see how the financing can be sufficient to cover the targets
   • Copy tables / graphs to another worksheet each time a change is made
Affordability – A Key Consideration

Limits to what poor households can afford

- Cash limits for high upfront costs and weak credit markets
- Inefficient operations push O&M tariffs out of reach of some households

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>RECURRENT COSTS</th>
<th>CAPITAL COSTS</th>
<th>NON-FINANCIAL COSTS</th>
</tr>
</thead>
</table>
| Water   | • Water tariff or user fee  
          • Bottled or vendor water  
          • Maintenance fees | • Piped network connection  
          • Water supply construction | • Collection time for water |
| Sanitation | • Wastewater tariff  
            • Public toilet user fees  
            • Maintenance costs | • Toilet construction  
            • Sewer network connection | • Travel time to community facility or open defecation |
| Hygiene | • Purchase of soap  
           • Menstrual hygiene materials  
           • Maintenance costs | • Handwashing station  
           • Bins for menstrual materials | • Collection of water for handwashing and anal cleansing |
### Pros + Cons of Different Tariff Policies

<table>
<thead>
<tr>
<th></th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low tariffs</td>
<td>Poor people receive service</td>
<td>High income people benefit</td>
</tr>
<tr>
<td></td>
<td>No targeting of subsidy needed</td>
<td>Services might not cover poor people</td>
</tr>
<tr>
<td>Cost recovery tariffs</td>
<td>Service provider balances books</td>
<td>Poor people cannot afford service</td>
</tr>
<tr>
<td></td>
<td>Service can be improved &amp; extended</td>
<td>Do targeted subsidies reach the needy?</td>
</tr>
</tbody>
</table>
Exercise on Investment Needs/Gaps

With reference to the Excel costing tool:
1. Explore the data input sheet, select your country, and assess what input data might need to be updated
2. Where will these data come from?
3. Adjust some of the data inputs for your country
4. Review how it impacts on the results in the graphs
5. Discuss if and how you will use this tool for your country, and what support is needed
Investment Case
Public Investment Case

Can contain one or more of the following elements

• Costs of inaction
• Cost-benefit analysis
• Cost-effectiveness analysis
• Cost estimation
Business Case

Can contain one or more of the following elements

• Market size
• Cash flow analysis
• Profitability analysis
• Corporate Social Responsibility arguments
Value for Money Analyses

Value for Money and Sustainability in WASH Programmes (VFM-WASH)

Assessment of the Value for Money of DFID's Sanitation and Hygiene Programme in Zambia

Final report, short version
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What is VfM?

The relationship between the resources spent and the results they 'buy'

Limited resources imply...

... need to get biggest bang for buck – use resources as efficiently and effectively as possible
At Programme Level, Conduct «Value for Money» Studies

Lower cost and more practical solutions need greater visibility
Cost-efficiency: Key concepts

• Relationship between costs and outputs
• How well programmes perform at the operational level
• Measured by cost-efficiency ratios
  ▪ What are the costs per output (e.g. to build a water point, gravity water system, connect a community, latrine, handwashing station)?
  ▪ What are equivalent costs per assumed beneficiary?
Cost-effectiveness: Key concepts

• Relationship between costs and outcomes/impacts
• Helps choose programmes by showing how much it costs to achieve policy goals using different designs
• Can apply existing programmes (ex post) or to future programme options (ex ante) using simulations
• Measured by cost-effectiveness ratios
  ▪ What are the programme costs per beneficiary over time?
  ▪ What are overall costs (to all parties) per actual beneficiary?
  ▪ How cost-effective have been efforts to reach the poor?
WASH VfM Analysis: Example indicators

**Water point construction**

*Cost-efficiency:*
- Total cost per new water point constructed
- Total cost per person who gained access to a water point

*Cost effectiveness:*
- Total cost per person who has gained access to a water point *and uses it*
WASH VfM Analysis: Example indicators

**Hygiene**

*Cost-efficiency:*
- Total cost per person able to recall X key messages
- Total cost per person installing handwashing station

*Cost effectiveness:*
- Cost per person observed practicing key hygiene behaviours at critical times
WASH VfM Analysis: Mozambique PRONASAR

re 11. Cost per water point beneficiary (Average 2012-2014)

- Budgeted unit cost per WP beneficiary: $72
  - Indirect Programme support: $27
  - Direct software support: $6
  - Hardware costs: $38

- Actual unit cost per assumed WP beneficiary: $79
  - Indirect Programme support: $25
  - Direct software support: $5
  - Hardware costs: $49

- Actual unit cost per actual WP beneficiary (estimate): $132
  - Indirect Programme support: $42
  - Direct software support: $9
  - Hardware costs: $81
WASH VfM Analysis: Mozambique PRONASAR

Figure 12. Cost per small water supply system

- Budgeted (average): $593,998 + $194,094 = $788,092
- Actual (average): $906,538 + $289,508 = $1,196,046
Figure 15. Cost per person who gained access to a traditional improved or improved latrine (average 2011-2014)

- Planned Programme unit cost per beneficiary: $30
- Planned total unit cost per beneficiary: $33
- Actual programme unit cost per beneficiary: $14
- Actual total unit cost per beneficiary: $17

- Household contribution in kind per person
- Household contribution in cash per person
- Indirect Programme Support costs
- Programme Direct service costs
Cost-Benefit Analysis

How does CBA overcome the limitations of simple cost-effectiveness ratios?

1. Tries to capture all long-term indirect and secondary benefits of investing in a programme
2. Monetizes the different benefits

Example: CBA in the WASH sector monetizes long-term economic and social benefits of better health, e.g. increased economic productivity and lighter burden on health system
Cost-Benefit Analysis

- Since the benefits may be multiple and very different in nature, they need to be monetized, so that they can be aggregated and compared with costs.
- Benefits and costs are projected far in the future (10-25 yrs).
- Then discounted, using a long-term interest rate to obtain their present value (PV).
- The more benefits outweigh costs, the better the investment.
- CBA provides a powerful investment case to inform decisions on the use of public resources.
Cost-Benefit Analysis

Benefit-cost ratio (BCR) is particularly powerful:
- **BCR** = PV of benefits divided by PV of costs
- If BCR > 1, benefits outweigh costs
- Useful for comparing between programmes: the higher the BCR, the better the investment

![Diagram]

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\text{Total discounted benefits} = \$200 \text{ million} \quad \div \quad \text{Total discounted costs} = \$50 \text{ million} = \text{BCR: How much?}
\]
Cost-Benefit Analysis: Cambodia example

Direct benefits of good sanitation:
1. Time savings associated with better access
2. Labor productivity due to less sickness
3. Health sector and patients costs saved due to less treatment of diarrheal diseases
4. Value of prevented deaths
Cost-Benefit Analysis

Potential benefits that are difficult to quantify:

1. Reduced household expenditure on funerals
2. Reduced water pollution due to less open defecation
3. Potential increase in tourism
4. Re-use human waste for fertiliser and other products
5. Better wellbeing and child care from lowering women’s burden of collecting water
WASH Cost of Inaction Analyses

- Computes losses resulting from doing nothing
- Similar to CBA: Aggregates in monetary terms (and discounts) the multiple and long-term direct and indirect costs of inaction
- Different from CBA: Does not include program costs or benefits
- Different from value for money: Does not assess specific interventions so no information on what to do
WASH Cost of Inaction: Examples

Asia - Economics of Sanitation Initiative

1. Philippines
2. Lao PDR
3. Cambodia
4. Vietnam
5. China
6. Indonesia
7. Mongolia
Exercise on Investment Case

With reference to the different public investment case and business case tools:

1. By weighing up the pros and cons of each one, which one(s) are most relevant for your country context?
   i. VfM (economy, cost-efficiency, cost-effectiveness)
   ii. Cost-benefit analysis ($ returned per $ invested)
   iii. Cost of inaction (e.g. $ losses as a proportion of GDP)
   iv. Market size / profitability analysis (private return on investment)

2. For what and how might it / they be used?

3. What studies need to be conducted to gather the required data for the analysis?
Tool Choice

The most relevant tool depends on

- What is already known
- The purpose of the analysis
  - Monitoring spending, including equity (budget brief, TrackFin)
  - Overall sector efficiency (PER, WASH BAT)
  - Improving operational performance (PER, VfM)
  - Selecting between programme options (VfM, cost benefit)
  - General advocacy (cost benefit, cost of inaction)
- Data, time and resources available
Thank You