Supporting Water Utilities during COVID19

August 11, 2020

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Agenda

- Context and Overview of World Bank Support to Water Utilities during COVID 19
- COVID 19 Financial Impact Assessment Tool for Water and Sanitation Service Providers
- Considerations for Financial Facilities to Support Water Utilities in the COVID 19 Crisis
Context and Overview of World Bank Support
Context: COVID has posed additional pressure on water service providers to ensure continuity of services

- Lower revenues (e.g. from inability for households to pay, suspension of disconnection)
- Increased costs (e.g. overtime, safe work environment, higher chemical use)
- Demand increase in under-served communities (e.g. use of tankers)
- Debt service pressures (IFI financing, PPPs)

Cashflow problems of Water Service Providers

WORLD BANK GROUP
World Bank’s Water Global Practice has developed tools to support clients respond to COVID 19 crisis

These tools were developed with funding support from Global Water Security and Sanitation Partnership (GWSP)

There are other ongoing World Bank initiatives (Utility of the Future, Policy, Institutions, and Regulation, City Wide Inclusive Sanitation, Circular Economy and Resilience etc.)
COVID Financial Impact Assessment Tool
Objective: Demonstrate the financial gap associated with COVID in justifying claim for resources to serve customers

Simple, for wider use, only need access to Microsoft Excel

Short-term (12 months) to assess impact of COVID

Not the only tool, and is protected

Color Codes For Numbers and Cells:

- Light Blue Cells and Nos. = Input Areas
- Black Nos. = Formula Cells. Do not input
Principles applied to the tool

- **Revenues** are sourced from water sales, sewerage sales, connection revenue, and other revenues.
- **Operating costs** consist of salaries, water extraction, electricity, chemicals, maintenance, pension, administration, and other costs.
- **Working capital** requirements and debt service obligations are fulfilled from internally generated funds before new investments or loan obligations are considered.
- **Accrual accounting**, and includes the income statement, balance sheet, and cash flow statement.
Process of using COVID 19 Financial Impact Assessment Tool includes three steps

**Step 1**
Develop a **baseline projection** assuming normal operational and financial circumstances without the COVID contagion.

**Step 2**
Develop a **financial impact assessment** assuming the likelihood of COVID affecting certain operations and finances.

**Step 3**
Use the results to develop an **emergency response plan** designed to minimize the cash flow gap.
Five Worksheets each for (i) Baseline and (ii) COVID Financial Impact

1. Dashboard: opening data, key financial indicators
2. Assumptions: opening balance sheet position and financial management parameters
3. Connections and operating expenses: key operating indicators for revenue and expense projection
4. Project and Financing: new investment program, financing for new loan, amortization of outstanding loans, and depreciation of existing and new assets
5. Output Statements: three financial statements, investments, and borrowing

Summary Sheet: Results of COVID financial impact assessment
### COVID Impact Assessment Worksheet

1 Revenue Section of the Income Statement
- Starting month is actual average
- Billed and collected revenue
- Local government transfers

2 Cost Section of the Income Statement
- Starting month is actual average
- Water and wastewater operating costs
- Depreciation and interest

3 Cash Flow Statement
- Profit after taxes
- Operating cash flow, debt payments
- COVID related capex

4 COVID CAPEX Response Program
- Additional capex requirements

### Revenue and Cost Build Up Worksheet

1 Production & Connection Program for Households and Commercial Customers
- Non-revenue water
- Tariff increase
- New connections
- Production capacity

2 Sewerage Treatment, Connection Program & Other Revenue
- Sewerage tariff
- New connections

3 Water Supply Service Operating Costs
- Water extraction costs, production, chemical, maintenance, repair, salaries, and pension costs

4 Wastewater Service Operating Costs
- Salaries, electricity, maintenance, repair costs
## Snapshot of the Results: Regular Version

### Projection Month

<table>
<thead>
<tr>
<th>Month</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Cumulative</th>
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<tr>
<td>Baseline Ending Cash Flow</td>
<td>0.346</td>
<td>0.016</td>
<td>0.047</td>
<td>0.066</td>
<td>0.065</td>
<td>0.052</td>
<td>0.053</td>
<td>0.053</td>
<td>0.052</td>
<td>0.051</td>
<td>0.051</td>
<td>0.051</td>
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<td>Covid Financial Impact</td>
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<td>0.438</td>
<td>0.534</td>
<td>0.796</td>
<td>0.795</td>
<td>0.812</td>
<td>0.812</td>
<td>0.806</td>
<td>0.829</td>
<td>0.490</td>
<td>0.495</td>
<td>7.695</td>
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<td>Ending Cash Flow Difference</td>
<td>0.010</td>
<td>0.454</td>
<td>0.630</td>
<td>0.861</td>
<td>0.864</td>
<td>0.865</td>
<td>0.859</td>
<td>0.880</td>
<td>0.534</td>
<td>0.541</td>
<td>0.545</td>
<td>7.923</td>
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### INCOME STATEMENT

<table>
<thead>
<tr>
<th>Category</th>
<th>Baseline Pre Covid</th>
<th>Post Covid</th>
<th>Financial Impact</th>
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</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>21.190</td>
<td>21.903</td>
<td>0.713</td>
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<td>WATER BILLED REVENUE</td>
<td>10.910</td>
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<td>SEWERAGE REVENUE</td>
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<td>OTHER REVENUE</td>
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<td>OPERATING REVENUES</td>
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<td>OTHER INCOME</td>
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<td>INTEREST ON TIME DEPOSITS</td>
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<td>INSTALLATION CHARGES</td>
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<td>NON OPERATING INCOME</td>
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<td><strong>TOTAL INCOME</strong></td>
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<td>WATER OPERATING COSTS</td>
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<tr>
<td>ELECTRICITY</td>
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<td>SALARIES &amp; WAGES</td>
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<td>DOMESTIC AVERAGE FACTOR</td>
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<td>PENSION EXPENSE</td>
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<td>0.000</td>
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<tr>
<td>DEPRECIATION</td>
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<td>1.205</td>
<td>0.000</td>
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<td>INTEREST</td>
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<td>0.196</td>
<td>0.000</td>
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<td><strong>TOTAL INCOME BEFORE TAXES</strong></td>
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<tr>
<td>INCOME TAXES</td>
<td>2.549</td>
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<tr>
<td><strong>NET PROFIT/(LOSS)</strong></td>
<td>1.784</td>
<td>2.254</td>
<td>0.469</td>
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</table>

### CASH FLOW STATEMENT

<table>
<thead>
<tr>
<th>Category</th>
<th>Baseline Pre Covid</th>
<th>Post Covid</th>
<th>Financial Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>2.549</td>
<td>3.219</td>
<td>0.670</td>
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<tr>
<td>INCOME STATEMENT</td>
<td>21.190</td>
<td>21.903</td>
<td>0.713</td>
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<tr>
<td>WATER OPERATING COSTS</td>
<td>8.121</td>
<td>8.792</td>
<td>0.670</td>
</tr>
<tr>
<td>WASTEWATER OPERATING COSTS</td>
<td>4.172</td>
<td>4.172</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>TOTAL CASH FLOW</strong></td>
<td>16.513</td>
<td>16.855</td>
<td>0.342</td>
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</table>

### INTERNAL CASH GENERATION

- **Net Income**: 1.784, 2.254, 0.469
- **Add: Interest Expense**: 0.196, 0.196, 0.000
- **Add: Depreciation Expense**: 1.205, 1.205, 0.000
- **Operating Cash Flow**: 3.185, 3.654, 0.469
- **Working Capital Change**: 3.888, 12.282, 8.394

### CASH AFTER DEBT SERVICE

- **Total Cash Surplus/(Deficit)**: 0.228, 7.695, 7.923
Snapshot of the Results: Simplified version

### CASH FLOW STATEMENT

<table>
<thead>
<tr>
<th></th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Pre Covid Total</th>
<th>Post Covid Total</th>
<th>Financial Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PROFIT AFTER TAXES</strong> (assumes cash collections)</td>
<td>1.774</td>
<td>0.808</td>
<td>0.519</td>
<td>0.593</td>
<td>0.337</td>
<td>0.336</td>
<td>0.583</td>
<td>0.122</td>
<td>0.159</td>
<td>0.355</td>
<td>0.355</td>
<td>0.355</td>
<td>0.355</td>
<td>21.288</td>
<td>2.035</td>
<td>23.323</td>
</tr>
<tr>
<td>Add: Depreciation Expense</td>
<td>0.012</td>
<td>0.012</td>
<td>0.012</td>
<td>0.012</td>
<td>0.012</td>
<td>0.012</td>
<td>0.012</td>
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<td>0.012</td>
<td>0.012</td>
<td>0.012</td>
<td>0.012</td>
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<tr>
<td>Operating Cash Flow</td>
<td>1.786</td>
<td>0.796</td>
<td>0.507</td>
<td>0.581</td>
<td>0.325</td>
<td>0.324</td>
<td>0.571</td>
<td>0.110</td>
<td>0.147</td>
<td>0.367</td>
<td>0.367</td>
<td>0.367</td>
<td>0.367</td>
<td>21.432</td>
<td>1.891</td>
<td>23.323</td>
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<td>Principal Repayments</td>
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<td>0.100</td>
<td>0.100</td>
<td>0.100</td>
<td>0.100</td>
<td>0.100</td>
<td>0.100</td>
<td>0.100</td>
<td>0.100</td>
<td>0.100</td>
<td>0.100</td>
<td>0.100</td>
<td>1.200</td>
<td>1.200</td>
<td>0.000</td>
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<td>Cash Flow After Debt Service</td>
<td>1.686</td>
<td>0.896</td>
<td>0.607</td>
<td>0.681</td>
<td>0.425</td>
<td>0.424</td>
<td>0.671</td>
<td>0.210</td>
<td>0.247</td>
<td>0.267</td>
<td>0.267</td>
<td>0.267</td>
<td>0.267</td>
<td>20.232</td>
<td>3.091</td>
<td>23.323</td>
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<td>COVID-19 Related CAPEX Costs</td>
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<td>0.050</td>
<td>0.200</td>
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<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
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<td>0.000</td>
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<td>0.000</td>
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<td>0.000</td>
<td>0.000</td>
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<td>0.000</td>
<td>0.000</td>
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<td><strong>Month End Cash Flow</strong></td>
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<td>0.946</td>
<td>0.807</td>
<td>0.681</td>
<td>0.425</td>
<td>0.424</td>
<td>0.671</td>
<td>0.210</td>
<td>0.247</td>
<td>0.267</td>
<td>0.033</td>
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<td>0.267</td>
<td>20.232</td>
<td>3.641</td>
<td>23.873</td>
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**COVID Income and Cash Flow Financial Impact**

*Increase = Blue  Decrease = Red*
Considerations for Financial Facilities to Support Water Utilities in the COVID 19 Crisis
COVID 19 Emergency response plan could include establishment of a “Financial Facility”

**Objective:** Lay out options and considerations in designing the Facilities to provide emergency financial support to water utilities in response to the COVID-19 pandemic

**Urgency:** Utilities’ cashflows already badly hit and short- to medium term sustainability of water and sanitation services become questionable.

**Audience:** Government policy makers considering to develop financial responses to ensure utilities continue to function during the crisis, and the World Bank teams assisting them

**Focus on options, not recommendations:** Concrete recommendations depend on local context (e.g. scale of the pandemic, the state of local finances, institutional arrangements, and capacity)

*Next step: Policy makers to apply these options to the local context*
Summary of Key Considerations in setting up a Financial Facility

Flow of funds

Sources of finance for the facility
- Public finance
- Commercial loans/bonds
- Guarantees
- Loan from IMF
- Loans from MDBs
- Concessional finance/grants

In some cases, utilities may obtain commercial loans on their own

Options:
- Ministry of Finance
- National development bank
- Commercial banks
- Line ministries
- Sector agencies
- Other

Modalities and conditions for disbursement to utilities
- Modality of disbursement to utilities
  - Grant
  - Loan
  - Guarantee
  - Equity
  - Hybrid

Amount provided to Utility
- Equal to the reduction in cash flow caused by the pandemic?
- Equal to funds needed to keep operating?
- Equal to funds needed to cover essential expenditure?

Conditions on disbursement
- Does institutional form matter?
- Need to show the pandemic has reduced cash receipts and/or increased OPEX/CAPEX?
- Should there be restrictions on use?

Promoting reforms

Note: CAPEX = capital expenditure; MDBs = multilateral development banks; IMF = International Monetary Fund; OPEX = operational expenditure.
Overview of the Flow of Funds
Access the Tools on World Bank Website


Supporting Water Utilities During COVID-19

Financing Universal Water and Sanitation Services in the COVID Era
Thank you