SWA Webinar
Incentive Based Financing to end inequalities and Climate Financing for sanitation and water
3-5 March 2020
Agenda

- Incentive based financing to end inequalities
- Question & Answer
- Climate financing for sanitation and water
- Green Climate Fund
- Question & Answer
Incentive Based Financing- An overview

Presented by Lesley Pories, Sector Strategy Manager, water.org

And

Nguyen Quang Vinh, Sr. Water and Sanitation Specialist, World Bank Water Global Practice – East Asia and Pacific

Prepared by Bill Kingdom, SWA Senior Adviser
What is Incentive (Results) Based Financing?

- **Results-based financing (RBF):** A mechanism that rewards the delivery of outputs or outcomes with an incentive, upon verification that the agreed result has been delivered. Often requires pre-financing of activities before payments are made.

As opposed to:

- **Input Based Financing:** Provides financing to deliver an asset – which may or may not deliver results. Traditional method of sector financing.
Results Based Financing can be used at different levels and degrees of risk transfer.

Different levels of RBF:
- Sector level – by IFIs to incentivize governments towards sector reform/sector performance improvements
- Sector level – by Governments to incentivize utility performance
- Project level – by utilities to incentivize delivery of project results

Different degrees of RBF risk transfer:
- Minor – performance bonus for delivering particular results
- Major – substantive capital or operating costs at risk in event of non-performance
Two Pillars of World Bank Program for Results Instrument (PfR): Programs and DLIs

**Program Definition/Program of Expenditures**
- PforR has supported a range of government programs
- The majority have supported sub Programs, either sectorally or geographically
- Program boundaries also define the scope of the assessments to be carried out

**Disbursement Linked Indicators (DLIs)**
- PforR has supported a range of DLIs depending on the Program
- DLIs include service delivery indicators, outputs and/or outcomes
- DLIs also include institutional indicators including on fiduciary and environmental and social issues
- Each DLI has a specified verification protocol before disbursement

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*Program-for-Results Overview and Applications*
Key to Incentives - Disbursement Linked Indicators (DLIs)

PforR operations disburse funds based on “Disbursement-linked Indicators (DLIs)”

- Depending on the Program, DLIs can be:
  - Tangible
  - Transparent
  - Verifiable
  - Under government’s influence

- DLIs should be:
  - DLIs can be scalable, meaning disbursement is proportional to progress in achieving the DLI. This helps provide a more stable basis for disbursements than threshold-type conditions.
DLIs (or any RBF model): Verification Mechanisms

- Credible verifications arrangements to be put in place

- Verification is typically handled by government independent entities (usually in charge of conducting audits) or by private firms contracted by the government

- Each DLI should have a specified verification protocol agreed upon during preparation and appraisal
Example DLIs from an RWSS Project

- DLI 1: Number of people with *access* to an improved water supply
- DLI 2: Number of *sustainably functioning* water points
- DLI 3: Number of people with *access* to an improved sanitation facility
- DLI 5: Number of villages that *achieve and sustain* community wide sanitation status
- DLI 7: Number of entities *submitting accurate and complete* sector M&E data
- DLI 8: Rural support agency *established* and operationalized
National scheme to incentivize performance improvements and mobilization of market finance.
Project level RBF for improved efficiency through reduced NRW – HCMC, Vietnam

- Type of contract - Output-based: design, build, operate contract with strong performance element

- Payment:
  - Small fixed fee
  - 'Priced Activity Schedule' for DMA establishment (lump sum price per DMA established)
  - Performance fee per m3 leakage reduction
  - BoQ (supply and installation) for unforeseen works and works to connect new customers

- Contract duration - 4 years + 1 year maintenance period

- Performance Indicator:
  - m$^3$/day with a minimum level to avoid penalties
  - But with a special provision for adjustments driven by changes in pressure

- Monitoring: HCMC Water Supply Company supported by special consultants (regular construction supervision and periodical independent auditor)
Benefits of leakage reduction

<table>
<thead>
<tr>
<th>DMA 5B-03</th>
<th>DMA 5B-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Before</td>
<td>Pressure After</td>
</tr>
</tbody>
</table>

### BEFORE (September 2010)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply (m³/day)</td>
<td>3,487</td>
</tr>
<tr>
<td>Consumption (m³/day)</td>
<td>1,461</td>
</tr>
<tr>
<td>Average Pressure (m)</td>
<td>4</td>
</tr>
<tr>
<td>NRW Volume (m³/day)</td>
<td>2,026</td>
</tr>
<tr>
<td>NRW %</td>
<td>58%</td>
</tr>
</tbody>
</table>

### AFTER (October 2011)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply (m³/day)</td>
<td>1,891</td>
</tr>
<tr>
<td>Consumption (m³/day)</td>
<td>1,583</td>
</tr>
<tr>
<td>Average Pressure (m)</td>
<td>8</td>
</tr>
<tr>
<td>NRW Volume (m³/day)</td>
<td>308</td>
</tr>
<tr>
<td>NRW %</td>
<td>16%</td>
</tr>
</tbody>
</table>

NRW Reduction: **1,718 m³/day**
Summary results – HCMC, Vietnam

- **What:**
  - Service population of ~1 million people
  - Number of connections 140,811
  - Length of distribution system 662,063 m

- **Result:**
  - Volume of water saved = 92,000 m$^3$/d (final amount ~100,000 m$^3$/d)
  - Almost half the pre-project amount of leakage
  - Saved water could serve 500,000 people in HCMC
  - Saved power (23,000 kwh/d) could serve 2,500 HH in HCMC

- **How:**
  - Number of DMAs created: 114
  - < 1% of distribution system replaced
  - 8,535 connections replaced = 6%
  - 12,000 leaks fixed in 662 km of pipe = one every 50 m
  - Performance based payment: fixed + variable per m$^3$/d saved
Output Based Aid to Incentivize Commercial Financing of Water and Sanitation in Kenya

The Challenge
- WSPs face growing populations, increased investment needs, and lack access to finance for water and sanitation
- Investments in infrastructure exclude low-income areas (e.g., informal settlements)
- Market intelligence and perceived risk of lending/borrowing for water and sanitation

The Solution
- Sector reforms created an environment conducive to commercial lending to help fill investment gaps (e.g. Kenya Water Act 2002 /16; autonomous WSPs; independent sector regulator; ring fencing revenues)
- OBA incentive to target low-income populations
- WSP creditworthiness assessments
- Technical assistance to assess financial viability and technical feasibility of projects/ improve bankability of WSPs
- USAID partial credit guarantee to mitigate lender credit risk
OBA for Commercial Financing of Water and Sanitation in Kenya

Outcome

• Pilot: 35 communities borrowed $3.4 million from K-Rep bank benefitting 200,000 people

• Ongoing projects: 9 utilities have accessed $20 million in commercial loans from 4 domestic lenders on market terms, benefitting an expected 300,000 people

• Going forward: Establishment of a pooled water facility (KPWF) to mobilize local private capital to finance water and sanitation infrastructure

• WSP had to pre-finance the investment and only received OBA grant on delivery of results

OBA subsidy combined with partial credit guarantee supports domestic lending to water service providers
Results based financing can be applied to a wide range of PPPs

Increasing operator’s time commitment and / or conducive context for PPP

Source: Suez (2014)
Impact Bonds: Financial Structure

Every impact bond is different, but all include the investor, service providers, outcome funder, and evaluator.
In Summary

• Results Based Financing is a broad-based approach where part of a payment (to government, utility, contractor) is linked to delivery of verifiable results

• Results based, performance based, incentive based ………..many terminologies

• RBF can be applied at the sector level and at the project level

• The degree of risk transfer can be wide ranging – from a “bonus” through to material risks linked to capex and opex payments

• Changes stakeholder mindset from “what shall we build?” to “what do we want to achieve from this investment?”

• RBF approaches will typically result in faster, more efficient, more effective and more sustainable solutions
Question and Answer
Climate financing for sanitation and water – An overview

Presented by Marissa Streyle, SWA Secretariat

Prepared and adapted by Jose Gesti Canuto, SWA Adviser

Original slides created by Louise Whiting, WaterAid
Climate finance and WSS

- Climate change impacts the sustainability of water supply and sanitation services.

- Climate finance presents an unexploited opportunity to renew focus on resilient development.

- Changes are needed to ensure adaptation finance is of sufficient volume, targeted at the poorest and spent effectively.
## Potential impacts on WASH...

<table>
<thead>
<tr>
<th>Climate trend</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less rain</td>
<td>Reduction in renewable SW &amp; GW (?); threats to WS, WQ &amp; hygiene; growing competition</td>
</tr>
<tr>
<td>More rain</td>
<td>Increases in renewable SW &amp; GW (?) but: flood risk &amp; threats to infrastructure, disruption of supply &amp; treatment, WQ...waterborne disease, sanitation &amp; hygiene behaviours</td>
</tr>
<tr>
<td>Higher temp</td>
<td>Damage to infrastructure; risk of algal blooms, toxins &amp; organic loads in water sources</td>
</tr>
<tr>
<td>Rising sea levels</td>
<td>Flooding &amp; saline intrusion; storm damage to water systems &amp; treatment works</td>
</tr>
</tbody>
</table>

All result in higher costs. Characterised by uncertainty.
Climate change and WSS

**PRIMARY REASONS**
- Low yield
- Poor water quality
- Mechanical failure

**SECONDARY REASONS**
- Poor siting
- Inappropriate design
- Inappropriate materials
- Poor construction
- Low groundwater potential
- Groundwater chemistry
- Lack of access to spare parts
- Lack of basic maintenance
- Operation and management too difficult
- Lack of finance

**UNDERLYING CONDITIONS OF FAILURE**
- Lack of supervision and weaknesses in geological understanding (poor siting, design, construction of boreholes)
- Insufficient access to external support (DWO, NGO, local and national government)
- Lack of knowledge to inform policy
- Low capacity of community management
- Lack of community understanding and role
- Insufficient finance
- Internal community dynamics
- Long-term trends - changes in water demand, climate, groundwater availability and quality
Why does climate finance matter for water supply and sanitation?
Because climate finance presents a powerful opportunity
Regional Trends

TOTAL GLOBAL CLIMATE FINANCE FLOWS 2013 -2018

Source: Climate Policy Initiative
…because money for climate action is taken from aid budgets (ODA)

STATUS OF GREEN CLIMATE FUND PLEDGES AND CONTRIBUTIONS
(As of February 2020)

Total amount announced: USD 10.32 billion*

USD 8.24 billion*

* Amounts indicated are in United States dollars equivalent (USD eq.).
Green Climate Fund

Prepared and Presented by Chibesa Pensulo, Water Specialist, GCF
CLIMATE FINANCE FOR WASH - THE ROLE OF GCF

CHIBESA PENSULO
GCF WATER SPECIALIST

SANITATION AND WATER FOR ALL (SWA) WEBINAR SERIES
MARCH 2020
GCF’s MISSION

As an operating entity of the UNFCCC financial mechanism

we help developing countries take ambitious action on climate change

...to promote a paradigm shift to low-emission and climate-resilient development...
A BRIEF HISTORY

- Established at COP16
- 2010
- First Board Meeting
- 2011
- USD 7.2bn received for IRM
- 2012
- First Projects Approved
- 2014
- USD 9.8bn pledged for GCF-1
- 2015
- 124 Projects – USD 5.6bn
- 58 under implementation
- 95 Accredited Entities
- 105 countries reached
BUILDING GLOBAL PARTNERSHIPS

A Diverse Network of Partners

95 accredited entities
## CLIMATE IMPACTS ON WASH SYSTEMS

<table>
<thead>
<tr>
<th>Climate effect</th>
<th>Hazard</th>
<th>Impact on WASH sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease in precipitation</td>
<td>Drought</td>
<td>Reduction in raw water supplies, reduced flow in rivers, less dilution/increased concentration of pollutants in water, challenge to hygiene practices.</td>
</tr>
<tr>
<td>Increase in precipitation and severe weather</td>
<td>Flooding</td>
<td>Pollution of wells, inundation of wells, inaccessibility of water sources, flooding of latrines, damage to infrastructure, landslides around water sources, sedimentation and turbidity, challenges to sustainability of sanitation and hygiene behaviours, and waterborne diseases.</td>
</tr>
<tr>
<td>Increase in temperatures</td>
<td>Heatwaves</td>
<td>Damage to infrastructure, increase in pathogens in water leading to increased risk of disease.</td>
</tr>
<tr>
<td>Melting and thawing of glaciers, snow, sea ice and frozen ground</td>
<td></td>
<td>Seasonality of river flows affected leading to a reduction in water availability in summer,</td>
</tr>
<tr>
<td>Sea-level rise</td>
<td>Flooding and saline intrusion into freshwater aquifers</td>
<td>Reduction in availability of drinking water, with high impacts on quality.</td>
</tr>
</tbody>
</table>

Source: GWP and UNICEF, 2014
GCF’S INTEREST IN WASH

GCF’s interest in WASH is in enhancing the **climate resilience of WASH systems** and maximizing emissions reductions therefrom.

<table>
<thead>
<tr>
<th>Location</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water quality</td>
<td>Improving resilience of protected wells to flooding; small-scale systems for treating storm water; gully protection and rehabilitation; participatory water quality testing; treating water at the household level; water safety planning.</td>
</tr>
<tr>
<td>Water quantity</td>
<td>Increasing water storage, e.g. small multipurpose reservoirs and sand storage dams; rainwater harvesting technologies and artificially recharging aquifers; solar power water pumping; water conservation; increasing number of boreholes; water recycling and reuse.</td>
</tr>
<tr>
<td>Sanitation and hygiene</td>
<td>Raised pit latrines; septic tanks; relocation of latrines; small-scale biological systems; climate risk informed pre-triggering in community-led total sanitation approaches.</td>
</tr>
<tr>
<td>Enabling environments</td>
<td>Capacity building, e.g. knowledge generation and dissemination; hygiene education; decentralised management; national and local WASH sector coordination platforms that address development, DRR and emergency issues; integration of climate resilience into WASH sector strategies and plans; promotion of integrated water resources management.</td>
</tr>
</tbody>
</table>

Source: GWP and UNICEF, 2014
WASH IN THE GCF PORTFOLIO

• CR-WASH projects make up 53% of GCF’s water portfolio, with approximately 300 million USD allocated to WASH projects, coupled with 485 million USD in co-financing.

• Six of the seven projects are in SIDS, where water supplies are threatened by multiple types of extreme weather events – floods, drought, hurricanes and storm surges.
At the start of GCF-1, there are 14 CR-WASH projects in the pipeline, requesting $622 million in GCF funding.

Half of the projects are in Africa, mostly in response to drought. The rest are spread across the Caribbean, South Asia and the Pacific, responding to different climate hazards.

GCF is drafting sub-sectoral guidance for countries to develop CR-WASH projects that meet both climate and sustainable development objectives.

Improved guidance for project design, enhanced country programming and NAP support, are expected to grow the pipeline for CR-WASH over GCF-1.
KEY REQUIREMENTS FOR WASH PROJECTS

• Clear climate science basis – historical data and projections
• Quantifiable adaptation and/or mitigation impact potential, beyond ‘business as usual’ development project
• Paradigm shift – potential to transform the whole WASH sector in the target country
• Evidence that the project will not worsen future water scarcity
• Water projects should include sanitation interventions, and vice-versa
• Project design based on full water cycle – e.g. groundwater recharge as well as abstraction
• WASH system powered at least partially by renewable energy
For more information, visit www.greenclimate.fund

Quick links:

GCF 101

GCF project portfolio

Simplified Approval Process (SAP) guidelines

Project Preparation Facility

Contact: Chibesa Pensulo

GCF Water Specialist
cpensulo@gcfund.org
Question and Answer
SWA Webinar

Incentive Based Financing to end inequalities and Climate Financing for sanitation and water

3-5 March 2020

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