Subsidies

Johan Kruger Afcap Consulting March 2017





Learning Objective

To provide World Bank TTL's with material to assist:

- □ Government to formulate an appropriate subsidy policy and approach to support water utilities in pursuit of clean water for all (utility as receiver)
- □ To support utilities with an approach that would ensure that the most vulnerable of society will have access to safe water (utility as provider)





Outline

- 1. Rationale for utility subsidies
- 2. Government support to utilities
- 3. Pro-poor Policies to support individual customers





Key Messages

Having a policy on subsides and the instruments that can be used is important for the creditworthiness of a water utility.

 Subsidies can potentially impact revenues, alter user perception, and therefore impact the opinion of credit rating agencies.

An inadequate subsidy policy can lead to financial problems and a hardship for the poor

The achievement of SDG 6 is also tied to subsidy policy.





Discussion Point

Do utilities in your region?

- 1. Receive subsidies?
- 2. Are they adequate?
- 3. Are they targeted?
- 4. Is there an opportunity to assist Government and utility with rationale subsidy policy approaches
- 5. Don't Know





Rationale for Utility Subsidies





Characteristics of Financing Needed by Water Utilities

- Water and sanitation projects are often large investments with long term benefits.
- Assets are not suitable to use as collateral (often unknown, underground and not maintained)
- Funding through the budget in a single year is not possible.
- Long term financing is needed to match the useful life of projects and ensure intergenerational equity
- Mismatch between funding and assets economic life
- ☐ Revenue (tariffs) can be subject to political influence
 - Breakeven point can take some time due to long design horizons and construction times





Characteristics of Financing Needed by Utilities (2)

- Maintenance often neglected with substantial rehabilitation costs
- Revenue and costs relatively inflexible.
- Foreign exchange risk to be avoided as all income is domestic.
- Natural Monopoly requires regulation





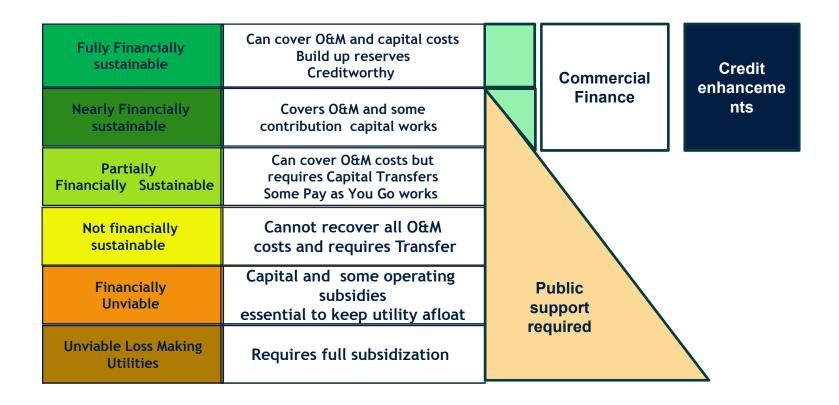
The Rationale for Government Support

- 1. To improve the quality of life of its citizens.
- 2. To enable utilities and municipalities to meet the SDG of government.
- 3. To ensure that the population enjoys access to clean water and safe sanitation.
- 4. To reduce the costs of the education and health budget and to promote higher productivity.
- 5. To facilitate projects with high economic return but low financial viability.
- 6. To ensure the implementation of strategic projects





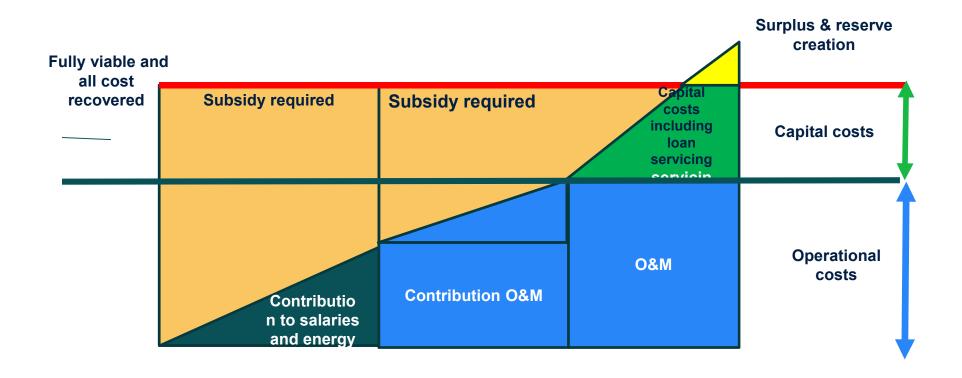
Hierarchy of Utility Financial Sustainability







But Operational Feasibility Sometimes also Challenging







Government Financial Support to Utilities

Government can provide predictable formula driven regular transfers to utilities as a general subsidy

- An example is in South Africa where municipalities get an equitable share transfer used to provide free water
- Such transfers positively influences creditworthiness

More common in developing economies is that government provides ad hoc transfers (subsidies) on a ad hoc project base or for bail outs

 Creditworthiness is relatively neutral to project subsidies but negative to bail outs

Government can also provide credit enhancement

This would imply that government provides guarantees for the financial exposure of utilities





Appropriate Basis for Government Support

The project must be economically viable.

The economic benefits must exceed the value of the contribution from the government.

Government must be able to absorb the fiscal impact.

Global and local economic and fiscal conditions must be very stable if long term government subsidy commitments are to be sustainable.

The subsidy must be targeted: too many countries unintentionally subsidize utility inefficiencies and (even worse) the more affluent customers and the commercial industrial consumers.





Instruments for Support Interventions

Government can provide direct subsidies to utilities through... Viability Gap Funding (VGF) Official Development Assistance (ODA) allocation **Up-front capital contribution** Temporary operating deficit contributions Concessionary loans that decrease the weighted average cost of capital (WACC) Annual Interest rate subsidies





A Common Problem...

If subsidies are not targeted to the poor or specific projects, there is a high risk in terms of subsidising:

- 1. Inefficiency of the utility

 For example, a utility with low billing/collect
 - For example, a utility with low billing/collection efficiency asking for subsidies to finance their inefficiencies (implicit)
- 2. Overstaffing
- 3. Inadequate management
- 4. The affluent part of the community





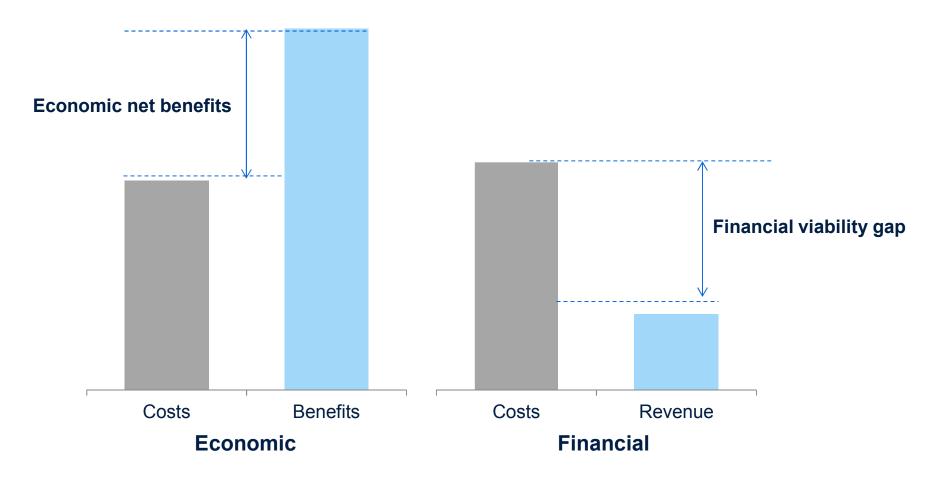
Government Project Support

Objectives, Mechanisms, and Outcomes





Provide Subsidies When a Project is Economically but Not Financially Feasible







Summary Matrix of Government Support

Non-Bankable

Bankable

Financially viable

inancially viable

nitially not

If not bankable because of high perceived risk, Government can provide Partial Credit Guarantees

If payback period is too long and greater than available private finance terms. Govt. can support to extend maturities.

No support required unless there is no financing available because of market constraints.

In this case, government can co-finance

If economically viable, Government can provide VGF and guarantees through:

- **Direct Grants**
- **Concessional Loans**
- Tax and Other Financial Incentives
- Policy Risk Guarantees

These comprise the bulk of projects

Longer term funding through Government agencies or intermediaries







Other Types of Government Support

- 1. Provide credit guarantees when a project is financially feasible, but risk is too high.
- 2. Provide demand (sales volume) guarantees when demand is unstable or hard to predict.
- 3. Facilitate access to funding when the project can't raise capital because of capital market failures.
- 4. Stretch out repayment obligations with long term government credits, hence increasing bankability.
- 5. Co-invest directly or through intermediaries.
- 6. Provide tax incentives.





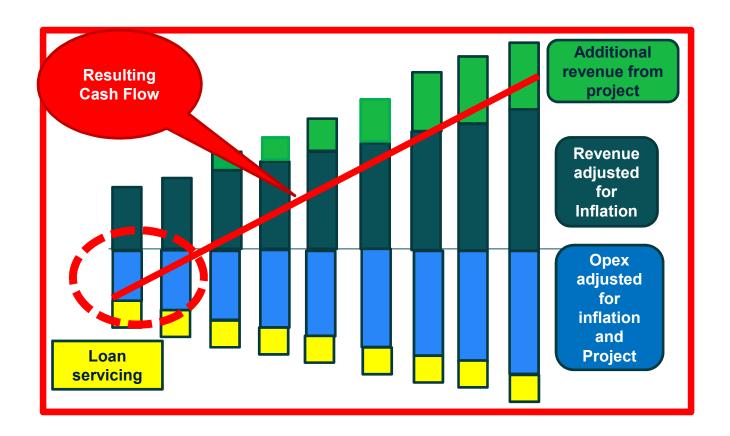
Other Factors Affecting Utilities Creditworthiness

- □ Interest expenditure until the project becomes income generating requires substantial reserves or operational surpluses
- ☐ If funds are raised before the tender is awarded to obtain surety that funds will be available, it impacts on the interest costs





The Cash Flow Impact of Infrastructure Projects







Discussion point: How Can Initial Negative Cash Flows be Covered?

1. Utilize reserves?

For operating expense reasons this is challenging because it depletes reserves which should be at least 3 Months

2. Increase tariffs?

Not always equitable or possible

3. Accelerate income generation?

Some projects don't lend themselves to acceleration

4. Phase into smaller projects?
In WSS projects this may not always be feasible

5. Over-borrow?

Creates extra cost burden

Obtain an initial subsidy or initial viability gap funding (VGF)





The Utility as Provider (Pro-Poor approach)





Accommodating the Poor and Disadvantaged

Society, and especially public entities, have an obligation towards the poor and the disadvantaged.

Since water is essential to life, it is even more crucial to accommodate the poor and disadvantaged.

But

Utilities need to be creditworthy to be able to deliver a service and this requires cost recovery, i.e., tariffs





Pro-Poor Options



Block tariffs, with 1st block subsidized as lifeline (lowcost or free)

Lowered connection fee (also incentivizes poor households to connect to system)



Prepaid cards for access to automated standpipes (Pay per use, also helps in lowering default rate in the utility and enable poor households to become customer of the utility)

Community infrastructure (such as community toilets, stand pipes, kiosks, community taps etc.)







Consequences of A Lack of a Targeted Subsidy Approach

Poor suffer inadequate access to safe water

Affluent benefits the most

Administrative wastage

Behavioral patterns not conducive to conservation





Inherent Conflict



Caution: Tariffs apply only to the connected customers, and in case of lack of connection subsidies, the poor may remain unconnected.

Unconnected water is way costlier! Recall any example of unconnected settlements. They either pump their own water (cost/quality /reliability issues), or buy water from informal sellers (cost/quality issues).





Who Pays for the Subsidy?

- More-privileged customers (e.g. crosssubsidization through block tariffs);
- 2. Central government agencies paying per capita subsidies;
- 3. Donors, through, For example:
 - 1. Traditional grant-in-aid programs for capital equipment; or
 - 2. Output-Based Aid (OBA)





Means of Targeting Subsidies to the Poor

Income surveys

• But, this often has a high administrative cost and is subject to manipulation

Registration

• But, this often has a high administrative cost and is subject to manipulation

Vouchers at kiosks

Free facilities in low income communities

Consumer classification and consumption levels determine tariff paid (Block Tariffs)

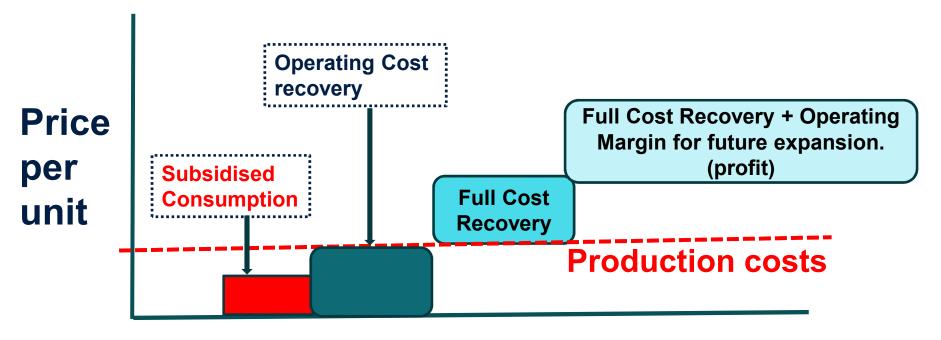
Institutionalisation of innovative solutions: e.g., the instruments that condense atmospheric water vapour.





Consumption Subsidies: Progressive Block Tariff

Block tariff









Discussion point

What would you advise utilities in your area as the foundation of a approach that also serves the poor

- 1 Provide cheaper water to kiosks
- 2 Introduce an aggressive block tariff
- 3 Use registration system and a voucher(token)
- 4 Free water below a certain consumption level
- 5 Ignore the poor and and assume they will use bottled water
- 6 Others and please share





Connection Subsidies

- Consumption subsidies assume that the user benefits from the rates charged for water used – many of the poor do not consume water from the network because they can not afford the cost of the connection
- Connection subsidies enable the poor to gain access to the network and for the WSP to expand the coverage and increase revenues
- Enables better targeting of poor communities
- Output subsidy rather than an input





Economic Rationale of Connection Subsidies

- Consumption subsidies assume that the user benefits from the rates charged for water used many of the poor do not consume water from the network because they can not afford the cost of the connection
- Without connections to the network the poor pay more for lower quality water and utilities record lower revenues
- Connection subsidies can be targeted and reduced over time – also included in initial project costs





Key Take-Aways

Policies on water subsidies enable governments to address providing WSS to the poor and the sustainability and creditworthiness of the water utility.

Important to gradually replace input subsidies with output subsidies

An inadequate un-transparent subsidy policy can lead to financial problems and poor quality of service





THANK YOU





Other Rationale for Subsidies

Subsidies can be justified for financially unviable projects if the economic benefits exceed the cost of the project plus the subsidy, or

If the project is of national strategic importance, or

The government wishes to show commitment to various stakeholders, through steps such as.... Subsidies!





Mechanisms for Government Intervention

Providing financial support (in terms of viability gap funding) for economically viable but financially unviable projects

Provide credit support for projects that are financially viable but not bankable

Combinations of these conditions

Types of support

- Capital subsidies
- Operating subsidies



