WASHCost

Information Sheet

Finance and Cost of Capital

An additional cost made visible

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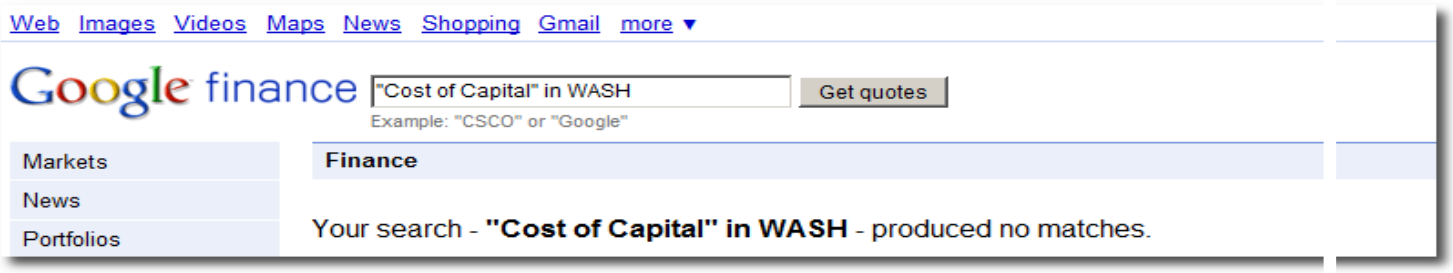


This Information sheet opens the discussion on Cost of Capital. How much is the sector (indirectly) paying for interventions in the past and how much is the sector planning to pay in the future?

Facts:

Year Start:	2010
Loan duration:	50 years
Grace period:	10 years
Payback period:	2040 to 2060
Commitment charge[1]:	0.50%
Service charge[2]:	0.75%
Total capital loan:	20,000,000 US$

Traditionally, the Water and Sanitation sectors in development countries depend on "free" grants. However, more and more countries take up the responsibility for development and instead of waiting for grants, pro-actively engage in loans to meet the challenging MDG demands. These loans, even though they are often strongly subsidized, bring with them considerable financial obligations and costs.

This information sheet provides a fictive, yet realistic example of the costs of a loan given for a large rural water and sanitation project. The service charges (interest) per year are low, but the period is long. In the example, this leads to a financial yearly burden of over 770,000 US$. This value is in no way negligible and shows that there is a need to reflect Cost of Capital in planning and budgeting of interventions in the water and sanitation sector.

[1] This percentage is yearly charged over the funds that have not yet been dispersed to the project.
[2] This percentage is charged on funds that have been disbursed to the project

Introduction:

The Cost of Capital can be defined freely as the amount of money that needs to be paid for borrowing money. The Cost is often a given % over the loan amount. Typical loans that private individuals get at a bank range from 5 – 20 or even 30% per year.

A government often obtains however, much "softer" loans with lower interest percentages. These government loans have normally repayment periods of 25 to 50 years. The percentages are normally adjusted for inflation.

Rural water supply is typically a responsibility of a specific department, within a ministry of water or public works. Financial obligations as a large loan often are the responsibility of the Ministry of Finance. The finance of these loans often is not known to the water sector, let alone accounted for by the sector.

Calculations:

In our example case, the total capital borrowed is 20 million US$. As is often the case, implementation starts only after 4 years. The disbursement is scheduled evenly over the 6 years of implementation (16.7% per year). The grace period (no repayment) is 10 years.

The bank providing the money charges 0.5% per year over the money that has not yet been used (but allocated and reserved) and 0.75% over the money that the project has already spent (service charge). In our example, The costs (or charges) that have been levied during the first 10 years add up to more than one million US$.

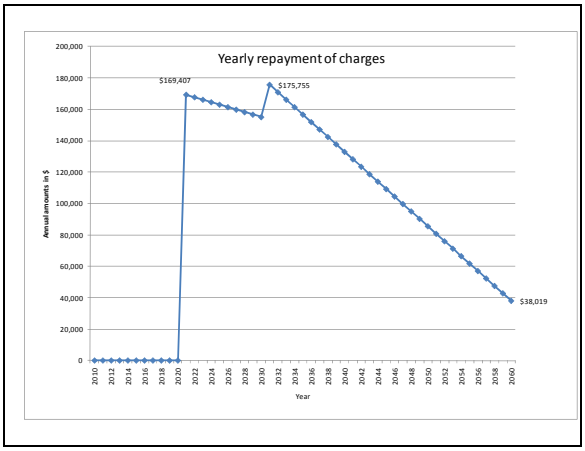
The repayment would be 1% over the first 10 years and 3% over the following 30 years (Table 1). The annual commitment reaches more that 650,000 US$ per year *over forty years*.

Table 1: **Annual Repayment schedule of capital**

Year	%	Amount (US$)
2000-2009	0%	0 US$
2010-2019	1%	20,000 US$
2020-2049	3%	600,00 US$
	TOTAL	20,000,000 US$

At the time the repayment starts (2010), the charge is over 150.000 US$ per year. The repayment of charges is assumed to follow the same percentages as in Table 1. However, each year, the costs of the still outstanding amount (the 0.75% service charge) also need to be paid. The development of the annual payment is depicted in Figure 1.

Figure 1: **Annual repayment of charges**



Costs of charges:

Total Cost of Capital (sum of charges) **4,829,438 US$**

Maximum annual cost of capital: **175,755 US $ (year 2031)**

Cost of Capital represents **24.1**% of initial capital loan

Conclusions:

- Costs of capital are often not considered a cost, as the time frame falls beyond the scope of most planners and politicians.
- Even "Soft" loans with low (subsidized) costs (<1%) lead to high annual financial burdens considering the overall repayment period and the loan size.
- Without taking up loans, development in a country would go slower and population would wait longer for safe water. This social benefit of a loan is difficult to express in financial terms.
- Delay in starting a project has costs due to commitment charges.
- In years to come, the sector or the government will need to pay up to 600,000 US$ per year for repayment of the capital and up to 175,755 US$ for payment of the Costs of the Capital.
- The Cost of the Capital (in this example 4,829,438 US$), should arguably be considered as expenses of the WASH sector. This should be reflected on the yearly sector balance sheets.
- Most of the technical interventions in the rural context have a life span of more than 20 or 30 years. Therefore, the financial burden far surpasses the life span of the structures.