

Promotion of Developing Countries

Frankfurt, May 2005

Water - A Vital and Scarce Resource

Around the world, 1.1 billion people live without access to clean and safe drinking water, and over 2 billion people lack adequate sanitation. The health consequences are disastrous. Every day 6,000 children die as a result of dirty drinking water and poor hygiene, which also cause an estimated 80% of all cases of disease in developing countries.



Kenya: Everyday life in a slum near Nairobi

• Goals of Development Cooperation

By setting itself the *Millennium Development Goals* (MDGs) the international community aims to halve global poverty by 2015. Indicators have been assigned to the various MDGs in order to measure the progress. The goals include providing access to drinking water and basic sanitary facilities.

For Germany, supporting water supply and sanitation projects has a long tradition and plays an important role in development cooperation activities. After Japan, Germany is the second-largest bilateral donor in this field. The partner countries of German development cooperation benefit from commitments totalling EUR 350 million annually. The key development-policy goals of the German federal government here are

poverty reduction as well as **environmental protection** and **resource conservation**.

• “Water” and Poverty

Nearly one out of five inhabitants of our Earth lack access to a minimum daily amount of 20 litres of drinking water from a source located within one kilometre of where they live. These people are the poorest of the poor. They live in urban slums or in rural areas. They live in places where fetching water is frequently either very difficult or costly. Slum dwellers often depend on private water sellers, who offer water from dubious sources at high prices. Rivers, pools and wells are also used, although their water is frequently polluted by sewage and human waste.

For many families, improving the water supply and the hygiene situation lays the groundwork for alleviating key “poverty woes.” Here, indirect impacts also play a vital role; in fact, they are often the actual objective of the support. The health impacts are the most important. Improving the health situation benefits mainly women and children.

The *most common water-based and water-borne diseases* are:

diarrhoea, ascaris, worm diseases, schistosomiasis and trachoma (eye disease).

More than 2 million children die every year of the effects of polluted water and contaminated food.

Over half of the *hospital beds* in developing countries are occupied by patients suffering from water-based or water-borne diseases.

Sources: UN/WWAP 2003 and WHO 2004

At the same time, reliable water supply and better hygienic conditions improve the situation of women, who carry a heavy burden as they fetch and store the water, do the cleaning, or care for sick family members. Once these tasks become

easier, women can concentrate more on raising their children, farming or pursuing commercial activity.

According to a cost-benefit analysis by the WHO, every US dollar that is invested in the water sector generates an economic profit of between USD 3 – 34, depending on the region in which it is invested.

At a first glance the correlation between good water supply and school attendance by children seems rather implausible, yet it has since been proven many times over. This especially affects girls, who are often obliged to help their mothers fetch water, a difficult task that often takes several hours. Sometimes they are even fully responsible for fetching water for their families. If the time this requires can be reduced, the girls will be able to attend school more regularly. The installation of private toilets on the school grounds also encourages more girls to go to class.

Which of the manifold effects are ultimately achieved essentially depends on the specific situation and the cultural context.

• “Water” and the Environment

A good 70% of the Earth’s surface is covered with water. However, most of it is salt water. Only 2.5% of the water is drinkable and usable freshwater, yet two-thirds are in the form of glaciers and ice. Only a comparatively small amount is available for drinking and other purposes, and this small amount differs immensely from one region to the next: for instance, Yemen’s available and ‘renewable water resources’ add up to less than one-tenth of the amount available in Germany per capita and year. This is an extreme example, and yet the number of countries and regions suffering from water scarcity continues to rise.

Additionally, in the world’s arid regions a high share of the water (frequently 80-90%) is used for irrigating crops, and industrial water requirements are also growing all over the world. There is not much left for drinking water supply. Especially in the booming urban agglomerations in developing countries, water consumption and pollution are

increasing rapidly. If the resources that are regularly renewed via the water cycle are inadequate to meet rising needs, either the groundwater is overused (excessively in some cases) or ‘non-renewable,’ i.e. fossil, water resources are tapped. Surface water like that in rivers, lakes and coastal waters is becoming increasingly polluted. The oftentimes irreversible contamination of groundwater reserves through sewage or other chemical pollutants is a particularly serious problem.

Mali: Women washing and doing the dishes in the Niger River



Careful management of the freshwater reserves and extensive investments in protecting them are necessary to ensure that future generations will have sufficient water of sufficiently good quality.

• KfW’s Contribution

KfW Entwicklungsbank (KfW development bank) looks back on many years of experience in the fields of water management, irrigation of agriculture and particularly in improving the water supply and the sanitary infrastructure. The share of financing committed to water and sanitation projects of KfW’s total annual financing commitments is a good 20% (approx. EUR 250 – 350 million) and thus high in comparison to other areas of promotion. We are currently involved in some 350 projects with a total funding volume of nearly EUR 3 billion. In view of the rising environmental problems, sewage disposal is becoming increasingly important. Today a good 70 million people benefit from German Financial Cooperation programmes, and every year KfW Entwicklungsbank reaches another 10 million people in this sector.

As regards the design of Financial Cooperation programmes, the expectations are high, yet there is no standard. All of the measures have to be adapted on a case-by-case basis. In so doing, socio-economic, economic and ecological conditions play a decisive role.

• **Ensuring Impact: From a Project to a Long-Term Promotional Strategy**

KfW Entwicklungsbank mainly finances investments in water infrastructure, including feasibility studies, as well as advisory and training measures. The aim is always to ensure the long-term use and impact of the project. We know that although good construction work adjusted to the project, a well-organized operator and trained personnel are needed to achieve this, they alone are not enough in many cases. Instead, a project's institutional, organizational and legal framework is decisive for its long-term success. For example, a water utility needs not only trained staff but also the funds to pay them adequately. Not only does it have to know its costs, but it also has to be able to cover them with sufficient tariff revenues. Owing to a high degree of centralization or strong political influence, this is seldom the case in reality in the developing countries.

This is why KfW Entwicklungsbank - in coordination with the German federal government and frequently in collaboration with other major donors – calls for and supports the drafting of a national sector policy by its partners and the implementation of corresponding reforms. Individual projects are integrated into just such a national strategy through a long-term commitment, and their implementation is increasingly tied to the fulfilment of certain conditions. Generally the situation in the sector does not develop sustainably until there is close cooperation over a longer period of time build on mutual trust and tenacity. Setbacks that may spoil progress that has already been achieved cannot always be avoided. An important lesson we have learned is: sustainable development takes time.

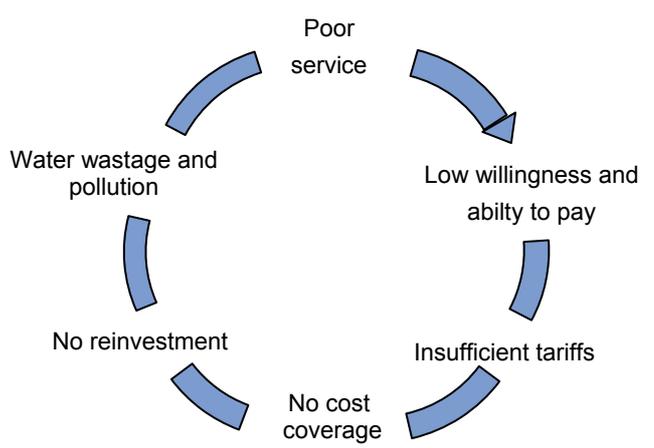
• **Water Supply in Cities**

Around two-thirds of the FC promotional volume benefits urban water supply and sewage disposal systems. Most of them are in small to mid-sized cities with preexisting infrastructure in poor condition. These projects enable us to reach some 50 million people.



Ibb, a city in Yemen whose population has doubled in the past ten years.

The operators of these systems are mainly state-owned or communal agencies that, more often than not, are unable to accomplish their task adequately. Before the partnership begins the development in the project region is often caught in an ominous downwards spiral:



The challenge is to stop the downwards trend. This can be achieved through investments in the water supply systems, on the one hand, and improvements in the technical and commercial management of the utilities on the other hand. A

clear improvement in customer orientation and in overall service orientation frequently plays a significant role as well. Decisive for a project's long-term success is that the utility has legitimacy, a vested economic interest and sufficient scope for action. In many cases, this requires a supplier with administrative structures to evolve into a company with its own accounting and with supervisory organs whose members include representatives from the supply area. This company must be able to make decisions on the planning and performance of investments, staff selection and payment, and on tariff structures. Key state agencies should restrict their activities to monitoring adherence to regulations and standards.

Such processes, which are often time-consuming and are not foreign to Germany, either, require a great deal of effort. Terms like 'decentralization' and 'regulation' that are used in development cooperation refer to these types of processes.

• ... and in Rural Areas

Overall there are fewer undersupplied people living in sparsely populated areas even though the connection rate is lower in villages than in towns and cities. Nearly one-fourth of the FC funding volume benefits projects in rural areas. The focus is on investing in standpipe systems and on supporting latrine programmes. Measures to involve the target group and awareness campaigns are often key project elements.

Rural regions seldom have institutionalized supply structures. As a result, local water consumers are involved as much as possible in the planning, selection and implementation of the project. This is essential for ensuring the operation of the system – which is usually the task of user groups – once all external aid comes to an end. Some questions that may also arise that seem unimportant yet are decisive to the project's success are, for example, what to do with financial reserves if there is no bank anywhere close by, how to deal with the risk of misappropriation of funds, how to deal with currency depreciation, where to get spare parts, who is in charge of repairs, who pays for repairs, and how to structure the tariffs if some users do not have sufficient

income. The diversity of these problems frequently makes projects in rural areas difficult to prepare and to manage, and the share of 'hard' investments is far lower than for urban projects.



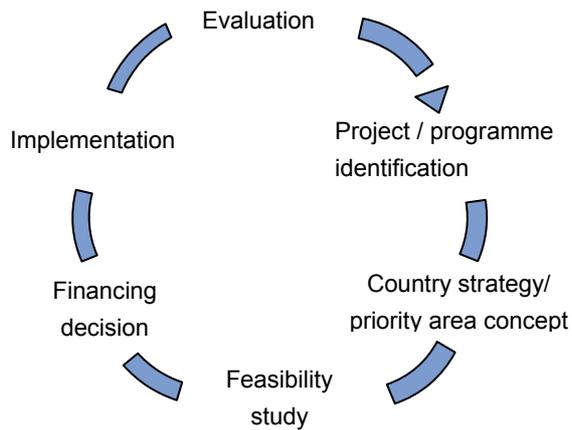
Mali: Water has to be paid immediately

• Activities of Private Companies

The inclusion of private companies in operational subtasks or the transfer of the entire operation of supply and disposal systems to private companies is one possible alternative in order to overcome the deficiencies of the public sector. By including private individuals, especially technological and management experience can be collected quickly and effectively, and operational efficiency can be enhanced. Prerequisites for success are sufficient monitoring capacities in the partner country, careful preparation of the contractual arrangements as well as a transparent and competitive awarding procedure. These are aspects that have been overlooked quite often in the past.

• Independent Evaluation of Project Success

Every one of our projects undergoes an independent evaluation. This evaluation is carried out several years after the external support ceases. The results of the evaluations continually flow into our country strategies and priority area concepts.



The evaluations show that projects in the field of water and sanitation are subject to sustainability risks that are slightly above average. The highest sector-specific risks result from the above described sector conditions, above all excessive political influence on the daily business of utilities. The utilities cannot fulfil the minimum requirement for financial sustainability (coverage of the operational costs). A further substantial risk is that the connection rates aimed for at the beginning of a project (e.g. number of households or people supplied, quality and quantity of the water) are not always achieved. Major obstacles in this regard include frequently high connection fees but also minimal interest of the supplier in serving new customers, in particular poor customers.

• Success Factors for the Future

A number of factors determine whether the activities of KfW Entwicklungsbank in the water sector have sustainable impacts. For example, two aspects that will be important in the sector dialogue and in the design of future projects or programmes are:

- Agreement with partner country governments and organizations on clear and binding concepts to strengthen the autonomy and legitimacy of local and regional suppliers (plans of action or milestone concepts including time frame and indicators). Such a strategy ought to gradually include individual projects and programmes all the way to budget finance and to be coordinated as closely as possible with other donors.
- Careful selection of technical standards, taking into account both socio-cultural acceptance and financial capability but also environmental policy requirements. In practice these criteria are often conflicting. The challenge is to balance them in such a way that they are acceptable to all stakeholders.

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