

# FINANCING DEVELOPMENT

Published in cooperation  
with Germany's  
development bank

September 2008



## Sanitation

**[ Albania ]**  
A cleared  
issue

**[ Tunisia ]**  
Water - definite  
and valuable

**[ India ]**  
Latrines  
for everybody

# Flowing reforms

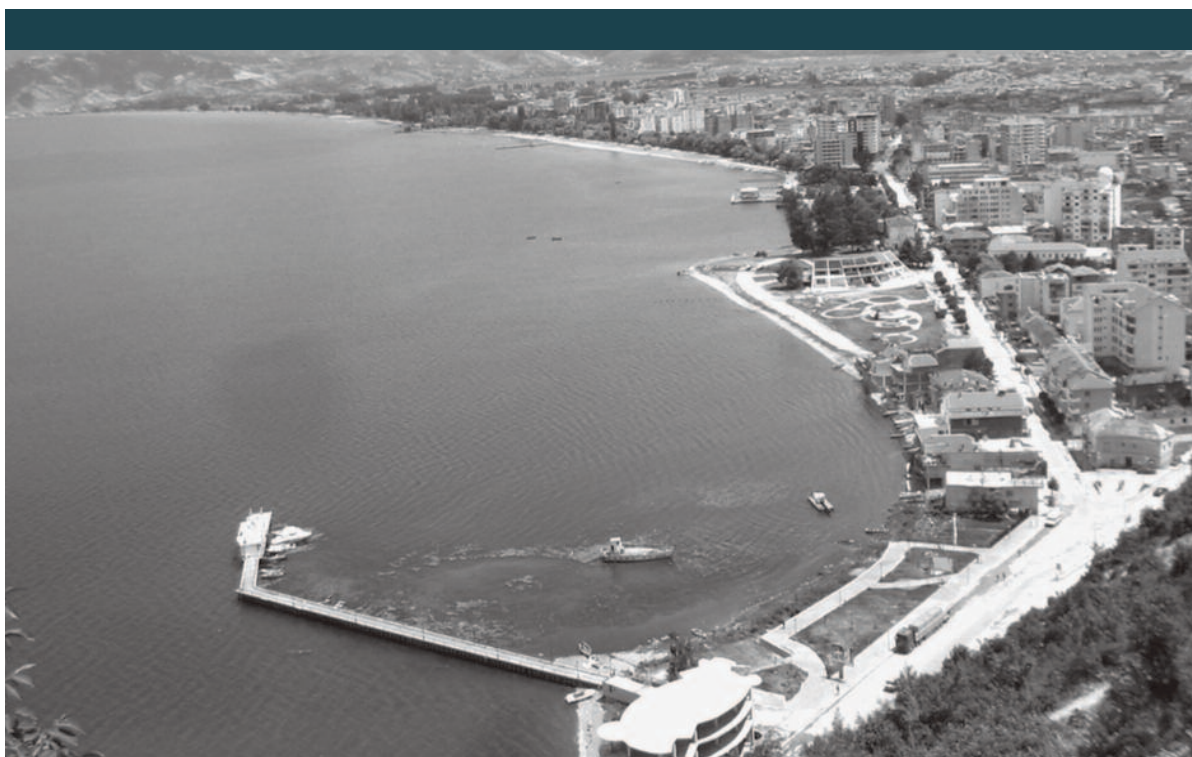
**In Albania untreated sewage poses a threat to the environment and the health of the population. It also hampers the prospects for rising income from tourism in this transition country which is endowed with impressive scenic beauty. On behalf of the Federal Ministry for Economic Cooperation and Development (BMZ) KfW Entwicklungsbank is supporting the country in managing the transition from the structures of a planned economy in the water sector to economically efficient water supply and sanitation systems.**

As one of the world's oldest and deepest lakes, Lake Ohrid on the border between Albania and Macedonia is home to numerous species of fish that thrive only in this lake. It was declared a World Natural Heritage site by the UNESCO in 1979. Almost 50,000 people live on the Albanian side, where only a portion of the households is connected to the sewerage system. Sewage is collected and discharged into the lake without any treatment. The polluted water threatens the unique ecosystem and people's health. This reduces the opportunities which tourism would actually offer the region as tourists would not bathe in the polluted water.

Lake Ohrid used to be very popular for bathing among Albanians during the Communist era. The mayor of the city of Pogradec, Arkan Tani Shkembli, remembers that up to 20,000 visitors used to come each day. After the regime of Enver Hoxha collapsed the city initially enjoyed an economic upswing that changed a lot. More and more people moved

into the city and many new buildings were erected. This finally overburdened the already dilapidated sewerage system, and the water quality of the lake continued to deteriorate. Tourists began to stay away and the economy contracted again.

"People now understand how important it is for them to keep the lake clean - for their own quality of life and for their income", says mayor Shkembli. He adds that environmental protection today is popular in the region and the construction of sewage treatment plants is being accepted. People are even prepared to pay fees for clean drinking water. This is an important prerequisite for sustainable and environmentally sound sewage treatment.



Lake Ohrid is a potential holiday paradise.

KfW

Title: Kontrolle an einem marokkanischen Abwasserkanal. Photo: KfW

To protect Lake Ohrid KfW Entwicklungsbank is financing projects on the Albanian and Macedonian side with funds from the German federal government together with Swiss development funds. In Pogradec they are jointly supporting the rehabilitation and expansion of the water supply and sewerage systems - construction of the treatment plant began in August 2007. KfW is also supporting the reforms of the company and training staff for operating the water supply. Now, the staff is able to maintain the facilities so that they will still be in operation ten years from now. A computerised accounting system was also introduced to improve efficiency. Today Pogradec is one of only two cities in Albania where drinking water is available around the clock and which will soon have a proper sewage disposal system in operation.

KfW Entwicklungsbank is also active in Kavaja on behalf of the BMZ. In the 1990s drinking water flowed through the faucet for only one to two hours a day. Despite the shortage people used to squander the precious resource as there were no water meters. Besides, only one third of the households were connected to the sewerage system. Yet sewage was still being discharged into the Adriatic Sea without any treatment - in the immediate proximity of holiday beaches. The formerly state-run water utility was converted from a state authority into a supply company with the support of KfW Entwicklungsbank and its personnel was advised and trained in efficient management. In 2006 Albania's first sewage treatment plant went into operation here.

Now more than half the households are connected to the sewage system. But one challenge remains. The tariffs that are being collected do not yet fully cover the costs. So the sustainable operation of the sewage treatment plants is not yet fully assured. This calls for the long-term commitment of the operating company. What is certainly positive is that a tariff system is already in place that generates revenues on a reliable basis.

In its cooperation with Albania since the beginning of the 1990s KfW Entwicklungsbank has been able to provide effective support in the painstaking conversion from state authorities into efficiently operating supply enterprises. The Albanian government values the partnership, which is designed to be a cooperation over many years. Prime Minister Salih Berisha confirmed this recently, not least by personally attending the laying of the foundation stone ceremony for the sewage treatment plant in Pogradec.

## Policy objective: Wastewater management is preventive health care and resource protection

The Millennium Development Objectives which the United Nations adopted in the year 2000 include halving the number of people without adequate access to sanitation by the year 2015. Building sewage treatment plants is important to achieve higher water quality - an objective also shared with other international treaties such as the Convention on the Protection of the Mediterranean Sea.



German development cooperation has been committed to public hygiene and wastewater management for decades. It applies tailor-made solutions that are adapted to the circumstances of the partner country. Poor people are the most important target group. The water and sanitation sector is the second biggest area of investment of the German Federal Ministry for Economic Cooperation and Development (BMZ), receiving around 350 million EUR every year.

Water and sanitation form a cycle and must be managed jointly. Hence the principle: no drinking water project without taking into account the sanitation situation. The guiding principle of the BMZ sector strategy "Water" is integrated resource management with the three dimensions of

- environmental sustainability,
- social justice and
- economic efficiency.

In addition to financing necessary infrastructure, Germany always supports improvements in the overall sector conditions as well. This includes adjusting legislation and setting up functioning regulatory authorities, for example. Together with other donors the BMZ is increasingly supporting the planning and financing of sector-wide approaches in a country's water and sanitation sector. In order to enhance the partners' sense of ownership and strengthen local structures the BMZ promotes the participation of target groups in the planning and subsequent operation of the projects, for instance through the creation of user groups in rural areas.

Further information: <http://www.bmz.de>

## Imprint

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KfW Bankengruppe

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**Publisher and printer:**

Frankfurter Societät,

Postfach D-60268 Frankfurt

# “We don't get entangled in individual project details”

Sewage disposal is an important aspect of efforts to eliminate poverty but one that commands little attention. Acting on behalf of the German federal government, KfW Entwicklungsbank provides long-term support for its partners by offering them appropriate individual solutions.



**Doris Köhn**  
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## What does sanitation have to do with the United Nations Millennium Development Goals to reduce poverty worldwide?

A great deal. Goal number 7 on environmental sustainability includes, for example, halving the number of people without basic sanitation. Few people realise that, because public attention is always focused on the other side of the coin – halving the number of people without safe access to drinking water. The one cannot be achieved without the other because deficient sanitation leads to the pollution of drinking water. There is also a direct link to the United Nations health goals to be reached by 2015. Water-related diseases are closely connected to insufficient sewage disposal – and still account worldwide for some 5% of all deaths. To me, the connection with gender equality seems particularly important, as in almost every country it is the women who are particularly hard hit by illness.

## The UN has declared 2008 the “International Year of Sanitation”. That must mean that not enough attention has so far been paid to this subject.

I wouldn't put it quite like that. Clear progress in the field of sewage disposal has been made in the past ten years. This is especially important to enable poor countries to equip themselves to deal with the consequences of climate change, which is leading to further water shortages. It means that people have to make more efficient use

of the resources available. A number of regions still have a long way to go to catch up. That is particularly true of Southern Asia, but also of Sub-Saharan Africa. In that sense, it is true that the United Nations have, so to speak, trained a spotlight on the subject.

## With regard to environmental issues in poor countries, people often think that we first need to get development going, and then when poverty has been reduced, we will also find means of limiting emissions. Does the same thing apply to sanitation?

A differentiated approach has to be adopted. There is no such thing as one solution for all. A special, appropriate approach needs to be developed for each individual case. It depends on the state of development of the country in question but also on the types of settlement and other aspects. In scattered rural settlements, for example, centralised sewage treatment plants generally make no sense and the appropriate solution is to provide low-cost, decentralised facilities. Densely populated urban areas and slums with a low supply standard, however, require more complex systems as in those areas the risk for people and the environment is particularly great. It would not be realistic, however, to try to introduce West European standards in one go. But if the partners wish and the local people can afford to pay higher fees, in some cases we also implement solutions which are technically very demanding – for example, producing energy from sewage sludge in a capital city. All in all, it often makes sense not to consider a location in isolation but rather to look at an entire water catchment area and to try to work out an integrated approach for that region by using treated wastewater or sewage sludge in agriculture, for example.

## What are KfW Entwicklungsbank's strengths?

We are good at seeking, finding and implementing individual solutions with the partner. We can back the different approaches with a wide range of financing instruments as needed and can help to develop the required capacities when planning and implementing the partners' projects. We do not turn up with a standard blueprint for all and sundry. We always analyse the specific situation and take care to ensure that projects are not carried out in isolation but are adapted to the local context. The concepts must also be in line with the policy in the entire water sector and, if possible, also provide support for strategies in other policy areas that are relevant to development. We therefore don't get intangled in individual project details, but support the development of the sector as a whole. That also includes effective cooperation with other donors and the development of common approaches and standards.

### That sounds like a lot of work.

We adopt a long-term approach. We work with some of our partners for decades and the dialogue that this entails is very productive. It helps us to make a meaningful contribution to important decisions – about setting tariffs, for example. Turkey and Tunisia are countries in which we have spent many years developing joint strategies and carrying out programmes with the partners – also in the field of wastewater management. Today, the successes are plain to see.

### Socio-cultural factors are crucial to gaining acceptance for sanitation facilities. It is not enough to build an infrastructure; the people also have to use it.

Right, an appropriate infrastructure is a necessary condition for improving hygiene – but not the only one. Campaigns which aim at changing people's attitude to hygiene are very important. We work with partners who adopt such approaches on a fairly large scale. By this, I mean official bodies in the partner countries but also the local civil society and technical cooperation organisations.

### Who are the key partners? Is it more important to have the local mullah or the mayor on your side?

Best of all, both of them. But it is not quite as straightforward as that. We have to think about the best approach and the right partners in each individual case. That applies to the technical design as well as the people's attitude to hygiene. In rural areas the right partners are often user



Helmut Netonomy / Linear

In Mali women wash their clothes and their dirty dishes in the Niger River – and draw water from it, too.

groups. Local decision-makers and opinion leaders play an important role, and a mullah may well be among them. However, I would like to stress that this is an area where women are particularly important. The chairwoman of a women's association or a key figure from an informal women's group can therefore be more important than the mayor.

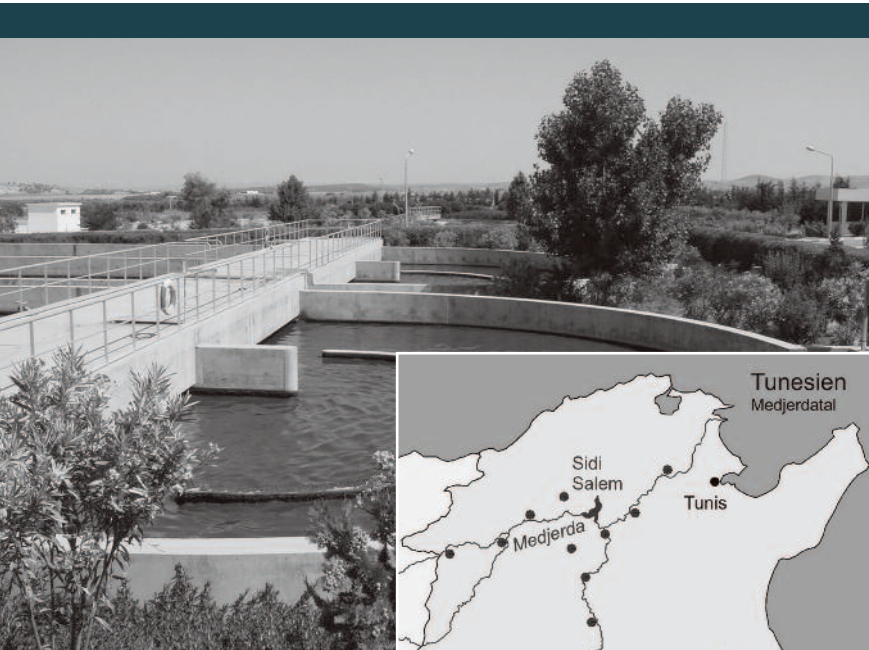
### What role do private companies play in the sanitation sector?

Private enterprises take part in the normal procedure for awarding contracts. As a rule, private construction companies are contracted to build sewage plants and relevant firms supply the sewage treatment technology. The private sector enthusiasm for investing in the infrastructure (e.g. for operations models) has now waned again. A few years ago it was probably too great even if this is a way of finding solutions in some cases. Water supply and sewage disposal are clearly sovereign functions. The state has to ensure that its people have appropriate supply services.

*The interview was conducted by Hans Dembowski.*

# Every drop counts

**Like northern Africa as a whole, Tunisia suffers from an acute shortage of water. The government has already taken steps to improve sewage and refuse management. Thanks to the support of KfW Entwicklungsbank, 85% of sewage is now treated and around 30% reused in agriculture.**



Sewage treatment plants along the Medjerda River.

In the past, Tunisia has done a great deal to tap its water reserves. Today, the country has 26 dams and several thousand groundwater wells. Tunisia is currently exploiting almost all renewable water resources in the country. At the same time, the groundwater level is falling in some regions, and sewage and leachate from waste dumps are affecting the quality of the “blue gold”. Agriculture absorbs most of the water in Tunisia: more than 80% is used to irrigate the fields.

The government’s present aim is to make sensible use of the available resources and to protect them against pollution. The German federal government has been working in this area via KfW Entwicklungsbank since the 1970s. In the early days, the task was to provide support for drinking water systems in rural areas and to introduce efficient irrigation systems. In the mid-1980s it began to tackle the issue of sewage disposal and recycling it for agricultural purposes – on peach and olive plantations, for example. Since the late 1990s support has also been provided for environmental waste disposal. In these areas, KfW Entwicklungsbank works closely with the German Technical Cooperation (GTZ).

High energy prices have also made it worthwhile using digested sludge to produce biogas. The electricity produced in this way is almost

enough to cover the entire needs of a sewage plant. Emission certificates for climate friendly electricity production generate additional income.

The largest river in Tunisia is the Medjerda in the north of the country. It is a vital source of water all year round. KfW is supporting the concept of integrated water resource management in this area. It has used BMZ funds to finance the waste disposal sites in the area as well as drinking water and irrigation management and to establish a functioning sewage system. The rainwater and the sewage from private households accounting for 400,000 people in 11 towns in the region are collected and put through a mechanical-biological treatment process; some of it is then used in agriculture. Among other things, sewage treatment was necessary to protect the Sidi Salem reservoir, Tunisia’s main source of drinking water, against excessive algae growth.

In addition, KfW is helping the national sanitation company ONAS to increase its efficiency. ONAS also wants to privatise the operation of sewage treatment plants. The aim is to achieve cost-covering sewage tariffs. So far, state subsidies have been needed in order to cover the operating expenses.

By contrast, industrial water pollution is a cause of concern. Whereas today nearly every household is connected to the sewage system, that is far from being the case for enterprises. Together with KfW Entwicklungsbank, the state set up an environmental fund to help companies to operate in an environmentally friendly manner. In addition, studies are analysing the required underlying institutional conditions to enable businesses to comply with environmental standards.

KfW Entwicklungsbank’s long-term commitment is producing results thanks to the integrated approach, which takes account of drinking water, irrigation, wastewater and solid waste. There has been a marked improvement in the quality of the river water and groundwater. (eli)

# Helping an endangered ecosystem

**As Africa's biggest surface water body, Lake Victoria is both a freshwater reservoir and a biological reserve. The lake is a source of livelihood for many people in bordering Tanzania, Kenya and Uganda - providing them with fishing, trade, tourism and drinking water. The local infrastructure is dilapidated and hardly being maintained. Insufficiently treated or untreated wastewater is constantly being discharged into the lake, endangering the ecosystem and water supply of millions of people.**



KfW

**So far only 6% of the inhabitants of Kampala are connected to the sewerage system.**

Uganda's capital city Kampala is the region's biggest urban agglomeration. Only 6% of its inhabitants are connected to the sewerage system. Even so, the central system of effluent disposal is completely overburdened. It is too small to accommodate the expected population growth. Latrines and cesspits typically used outside the centre are

usually not emptied. They overflow, contaminating roads, rainwater canals, groundwater and the lake. The poorest of the poor must content themselves with "flying toilets" – plastic bags – instead of latrines. In Kampala KfW Entwicklungsbank is contributing to upgrading and expanding the sewage disposal system. Soon a high-performance sewage treatment plant is to be built and the sewerage system enlarged to reach the population and industrial enterprises. Where the treated effluent flows into the river the reeds growing on the banks will be activated as a natural filter in order to enhance the self-purification capacity of the lake. Decentralised systems will be constructed in areas where a centralised system would be too costly. New community toilets are to be built and the emptying of the latrines is to be better organised, that is to say the private local service provider empty the latrines on a regular basis. Faecal sludge will be processed into fertiliser for the farms.

With this project KfW Entwicklungsbank is supporting one of the biggest sanitation programmes south of the Sahara. It is supporting it with 6 million EUR from the German federal budget, and a further 10 million EUR has already been pledged. The programme is being implemented in cooperation with the European Union and the African Development Bank, institutions which are contributing funds of their own. The German Technical Cooperation (GTZ) also joint the programme by supporting the Ugandan partner in the organizational development of the sanitation department, introducing cost-covering tariffs and enforcing the law, as well as with specific capacity-building measures. A similar programme is running in the Tanzanian city of Mwanza, on the southern shore of Lake Victoria. (eli)

## *In brief*

### **Protecting the environment with public-private partnerships**

Private enterprises can contribute innovative ideas to environmentally sound wastewater treatment. One example is the German firm BioPlanta, which has erected a pilot wastewater treatment plant in a tannery in the Me-

xican city of León, in which wastewater is moved through reed beds where it is biologically purified. This is an environmentally sound and cost-efficient method of treating wastewater that meets international standards. DEG - Deutsche Investitions- und Entwicklungsgesellschaft, an enterprise of KfW Bankengruppe, has co-financed the

project on behalf of the German Ministry for Economic Cooperation and Development. Since the start of the PPP programme in 1999 it has implemented around 470 public-private partnerships, almost two thirds of them in environmental protection.

<http://www.deginvest.de>

# Latrines for Rajasthan

**Although considerable progress has been made, India still has insufficient sanitation and safe drinking water facilities. Women suffer most from these deficiencies. KfW Entwicklungsbank's work shows that there are sometimes simple ways of improving the situation.**

There has been a substantial improvement in India's hygiene standards and water supply in recent years. However, many people are still unaware of the connection between unsafe drinking water, inadequate hygiene and disease. That explains why, compared with other Asian countries, India still has high rates of water-related diseases and infant mortality.

According to official figures, in 2004 only 22% of the rural population in India had their own toilet. Most people relieved themselves in the open fields. That is particularly unpleasant for women, if not dangerous. Many people do not eat or drink anything during the day so that they can wait until darkness falls.

Around one million people live in the poor semi-arid project region in the north-east of the Indian state of Rajasthan. The drinking water pollution frequently exceeds the values recommended by the World Health Organization. It is not uncommon for that to lead to serious illnesses.

Acting on behalf of the German federal government, KfW Entwicklungsbank has been providing support for the supply of water and basic sanitation in that rural region for 15 years; 360 villages have been connected to a regional supply system which draws water from the Indira Gandhi Canal. The region is thus one of the first in rural India to have drinking water 24 hours a day. The people enjoy the luxury: 95% pay their water fees.

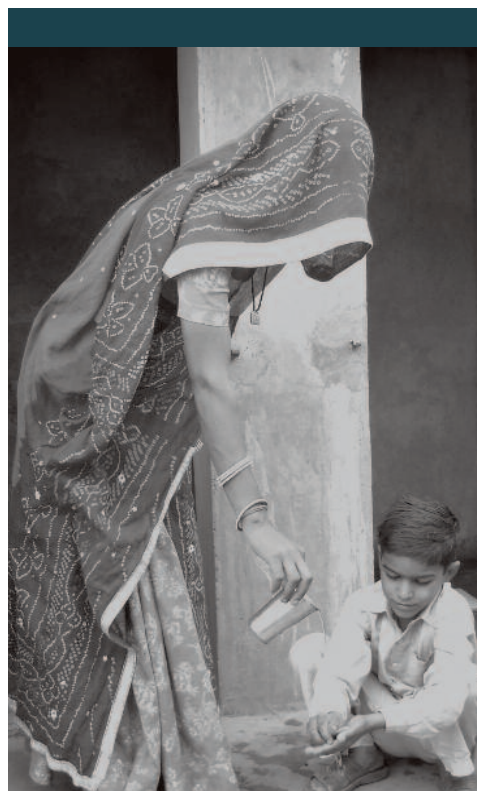
When KfW Entwicklungsbank began working in that region in the 1990s, only 9% of the households had latrines. The villagers were sceptical at first. They were afraid of bad smells and of wasting water. In order to encourage acceptance, "pilot latrines" were built and water committees were set up with the help of non-government organisations. It was part of their task to distribute water fairly, collect fees and ensure that the latrines were kept clean.

A model combining a simple flush latrine and a separate washroom was well accepted. It costs around 135 EUR to build that kind of latrine with solid walls, a roof and doors. It is now so much in demand that only 20% of the costs need to be subsidised. Originally, the users were given around 60% of investment costs in form of construction material. By 2007 funds had been provided to equip schools with build some 30,000 private latrines and 95 sanitary installations.

More and more people are building their latrines independently of the project. Today 55% of the households in this region have access to an improved toilet. A study has shown that participation by the villagers was crucial to the success of the project. Women and children, in par-

ticular, were made aware of the importance of hygiene. They were also involved in the decision-making process. The women decided where the toilet and the washroom were to be built to enable them to wash in privacy.

People's willingness to change their habits is greater than in almost any other rural sanitation programme in India. The Indian government is backing the changeover process and creating additional incentives. As soon as a village has achieved "total sanitation" and every villager has access to a toilet, it is awarded a certificate by the Indian President. *(eli)*



Mothers play a key role in hygiene education.