

Sanitation – Tunisia

Sustainable water management

In a joint NIF-programme of the KfW with the Agence française de développement (AfD) and the European Commission, a total of 19 wastewater treatment plants and 130 associated pumping stations in 19 Tunisian cities are to be rehabilitated or renewed, covering a target population of approximately 1.1 million inhabitants by 2021, spread over 11 of Tunisia's 24 governorates. It includes the financing of engineering studies and works, as well as the supervision, civil engineering, supply and installation of equipment.

In light of the scarce water resources in Tunisia, the project represents an effective contribution to (i) the protection of regional surface and underground water by preventing further pollution of groundwater resources (ii) the preservation of the Mediterranean Sea. It aims for the efficient, ecologically sound, sustainable and proper collection, treatment and disposal or recycling of domestic and industrial wastewater.

However, Tunisia has not yet fully succeeded in adequately protecting the environment and water resources and in managing them in a sustainable manner in accordance with an integrated water resources management. The quality of wastewater from Tunisia's wastewater treatment plants often varies considerably, so that recycling, particularly in agriculture, is not yet reliably possible. Sewage sludge is also often insufficiently treated and recycled. This is the case with the existing sewage treatment plants in the programme locations, which are overloaded and no longer able to meet the treatment targets.

Project name	Rehabilitation of sewage treatment plants and pumping stations
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Country/Region	Tunisia
Project partners	French Development Bank (Agence Française de Développement), European Commission

Background

Tunisia has a limited supply of water. Only around 450 cubic metres can be mobilised per year and per capita, making Tunisia what is known as a “severely water-stressed country”. In this context, even more than in other regions, the protection of water resources, and particularly wastewater treatment, is a national priority. In addition, the sustainable use of water resources is important from an economic point of view, for example in the case of reuse of wastewater in agriculture and industry.



Project approach

While until a few years ago the focus of cooperation was on the expansion of the disposal infrastructure in places not yet supplied, the rehabilitation and expansion of existing sewage systems is becoming increasingly important in order to maintain and improve the standard of disposal achieved. In cooperation with the French Agence française de développement (AfD) and the European Commission, the KfW-led project is designed to renovate and expand the treatment capacity of about 19 treatment plants and 130 associated pumping stations of the National Office of Sanitation of Tunisia (ONAS) across 11 of the 24 Tunisian governorates. It includes the financing of studies, engineering and works supervision, civil engineering, construction supply and installation of equipment.

The existing wastewater infrastructure in the programme locations was in part technically outdated and had too low a capacity to treat the wastewater produced in the regions in a health and environmentally sound and sustainable manner, which repeatedly leads to social conflicts. Therefore, extensions with modified, adapted technology or new buildings at the same site were considered necessary. New wastewater treatment plants are equipped with climate-friendly technology (partly anaerobic digestion), providing methane, a biogas reused in the energy supply of the stations.

This allowed the improvement of the hygiene and living conditions of a target population of approximately 1.1 million inhabitants by 2021. In addition, the project contributed to the protection of regional surface and underground water resources by preventing further pollution of the scarce groundwater resources and to preserve the ecosystem of the Mediterranean Sea.

The promoter of the project, the National Office of Sanitation (ONAS) was supported by a training programme in the field of operation and maintenance of wastewater treatment plants with anaerobic treatment.



Coastline in Tunisia near one of the wastewater treatment plants



Wastewater treatment plant in Nabeul

Impact

With the additional capacities gained in wastewater treatment, the quantity and quality of the treated wastewater are improved. By providing an efficient, environmentally sound, sustainable and proper collection, treatment, disposal and even reuse of domestic and industrial wastewater, this project helps to protect scarce water resources and reduce environmental and health risks. It ultimately increases resilience to the negative consequences of climate change.

The programme was the first effective financing of the European Commission's Neighbourhood Investment Facility (NIF), which aims to promote European co-financing, in this case between the German KfW and the French AFD. It therefore paved the way for further international development cooperation.



Kontakt

KfW Group
KfW Development Bank
Palmengartenstrasse 5–9
D-60325 Frankfurt am Main
Phone +49 69 7431-0

Water North Africa
christine.greve@kfw.de

KfW Office Tunis
kfw.tunis@kfw.de