DJIBOUTI

DRINKING WATER FOR THE DJIBOUTIANS

The challenge: water scarcity in Djibouti

Perched on the Horn of Africa, Djibouti is one of the hottest and driest countries on Earth, with an average rainfall of 220mm per year.[1] Access to sustainable sources of drinking water is a perennial challenge.

The capital city, Djibouti, which represents about 60% of the nation's total population, accounts for 87% of water consumption in the country. Mounting demographic pressure due to rural flight and the arrival of refugees fleeing unstable neighbouring countries has combined with the dwindling of existing groundwater supplies. These were traditionally pumped from coastal aquifers that have become depleted due to prolonged drought and have also, in some cases, been salinized by seawater intrusion.

'For the past century, Djibouti has suffered from a scarcity of water supply,' says Mohamed Ahmed Awaleh, Minister of Agriculture, Fisheries and Livestock. *'First, we exploited the water table in the Ambouli drainage gallery, which gave us 4 000 m³ per day. Then, the Gulf basalt aquifer, which supplies us to this day, with about 40 000 m³ of water a day. But not only has it been depleted, it also suffers from increased salinity because the boreholes have been overexploited and we are right on the coast, 4 or 5 km from the sea. We had to find another solution [...] Today we are the first in sub-Saharan Africa to have a project of such magnitude, producing 22 500 m³ of water per day.'*

Photo: ©Margot Hardy-Quinty / European Union

PROJECT FEATURES

Year: 2013-2022

Benefiting zone:
Djibouti City

Implementing agency:
National Office of Water and Sanitation (ONEAD)

Total cost of the project:
€78 000 000

EU contribution:
€72 500 000

Partners contribution:
Republic of Djibouti:
€5 500 000

Type of EU support:
Grant, Technical assistance, Policy dialogue

[1] Source: Aquastat.

KEY INDICATORS

500 000 inhabitants
supplied with fresh driking water by the end of the project

Desalination plant with a maximum production **capacity of 45 000 m³ of water / day**

A **5 000 m³** reservoir built


Photo: ©European Union

The first inhabitants to benefit from the project have been enthusiastic:

'Since we were kids we have had problems with water at home', says one neighbour. 'And it is complicated to have to buy bottled water. We don't always have the means to do this and we would end up having to drink water from the tap, which was salty and didn't quench our thirst. Having clean, fresh water from the tap now is truly amazing, you couldn't ask for more.'

The solution: a desalinisation plant to increase water supply

To ensure the provision and distribution of drinking water, the **European Union**, in partnership with the **Government of Djibouti**, is financing the "PEPER" project — 'Production of drinking water through desalination and renewable energy'. This action is implemented by the National Office of Water and Sanitation (ONEAD in French) and follows Djibouti's strategy for sustainable development to eliminate poverty and mitigate the effects of climate change, by supporting the government's reforms of the water and energy sectors.

Results and impact: water for human development and for increased climate resilience

The first phase of the PEPER project was completed in March 2021 with the inauguration of a desalination plant in the port of Doraleh, which will initially produce 22 500 m³ of fresh drinking water per day, covering the needs of over 40% of the population in Djibouti City. The goal is to eventually double the plant's capacity to 45 000 m³/day, serving over 500 000 people, and to run the plant using renewable energy sources. The second phase of the project, which will be financed by the European Investment Bank, comprises the construction of a solar energy plant to fully power the desalination plant.

A 5 000 m³ reservoir was built in Farahad, in the Balbala district, and a 9 km pipeline connects the desalination plant to the city's drinking water distribution system. A consortium of European companies and Djiboutian subcontractors built the desalination plant and the additional infrastructure.

A portion of this €78 000 000 project covers technical assistance for capacity building over a period of five years, to train ONEAD personnel in plant maintenance and the proper management of water distribution.

'*Additionally, prior to the inauguration of the plant, ONEAD carried out the rehabilitation of most of the pipes in the city of Djibouti and strengthened the storage capacity of the drinking water network, through the EU's SHARE EAU programme and FADES, the Arab Fund for Economic and Social Development. Through the SHARE EAU programme, the leak detection system has been reinforced with training and equipment*', explained Marwan Nadim Saad, Project Manager at the EU Delegation to Djibouti.

Through its support for the implementation of the reforms roadmap prepared by the Government in the areas of water and energy, this project is contributing to the financial viability of Djiboutian utility companies and their capacity to ensure smooth and sustainable operations in the future.

The PEPER project will improve the health and living standards of those who are most affected by the impacts of climate change, by providing reliable, sustainable and equitable access to drinking water at affordable prices.

Public Group on Water and Sanitation

https://europa.eu/capacity4dev/public-water_and_sanitation/wiki/success-stories-1

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