

Improving solid waste management



PROJECT OWNER

Government
of Djibouti



NATURE OF SUPPORT

► Technical, environmental
and social studies for the
construction of a new landfill
site



PERIOD

2022-2024



CLIMATE FOCUS

Mitigation



CICLIA FINANCING

€347 400



OUTCOMES

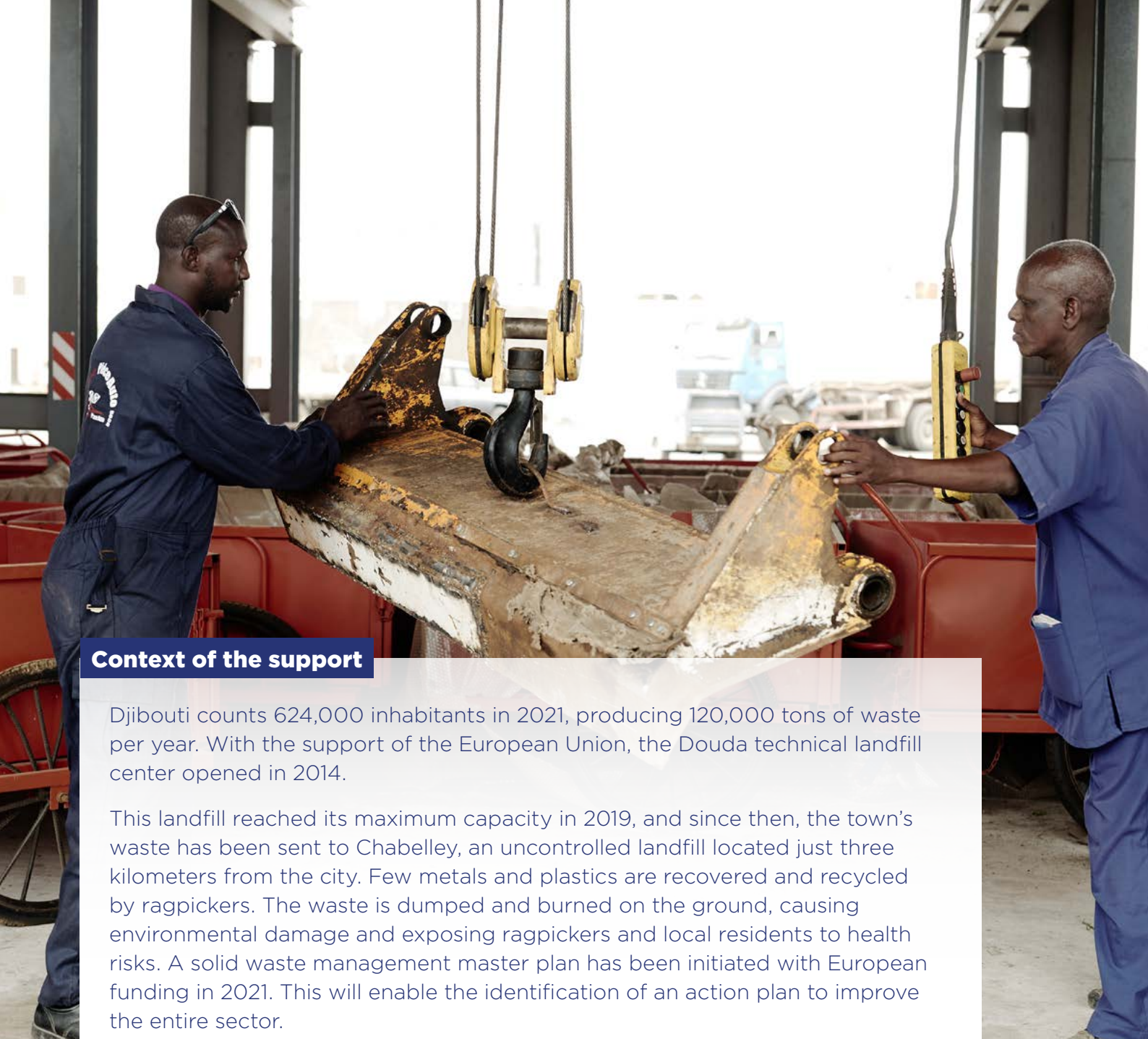
€16.5M of subsidy
(€11.5M AFD and €5M EU)



WASTE



DJIBOUTI



Context of the support

Djibouti counts 624,000 inhabitants in 2021, producing 120,000 tons of waste per year. With the support of the European Union, the Douda technical landfill center opened in 2014.

This landfill reached its maximum capacity in 2019, and since then, the town's waste has been sent to Chabelley, an uncontrolled landfill located just three kilometers from the city. Few metals and plastics are recovered and recycled by ragpickers. The waste is dumped and burned on the ground, causing environmental damage and exposing ragpickers and local residents to health risks. A solid waste management master plan has been initiated with European funding in 2021. This will enable the identification of an action plan to improve the entire sector.

CICLIA was involved in the preparation of the new landfill project, for which the authorities have requested AFD financing.

Objectives



To produce feasibility and design studies for the construction of a landfill: preliminary and detailed design, environmental and social impact study, climate analysis, livelihood restoration plan (people affected by the project) and gender action plan for the project.



To carry out the pre-feasibility study for a Build Operate Transfer (BOT) -type operation of the future landfill facility and prepare the tender documents.



Achievements

| In terms of mitigation

- › **Drawing up a carbon footprint for the project:** comparing expected greenhouse gas emissions between the current baseline situation and the project, if financed.
- › **Sizing the leachate management system.**
- › **Study an option for energy recovery of biogas** (electricity production).

| In terms of adaptation

- › **Assess the impact of climate change on the project,** integrating current and future climate risks identified on the site.
- › **Defining adaptation measures** and their implementation.

The study also carried out **a comparative analysis of possible management methods of the facility** (public management, partial or total delegation to the private sector).

A gender action plan has been elaborated. As a significant proportion of ragpickers are women, their specific needs and expectations were analyzed through focus groups organized as part of a socio-economic survey.

Results

According to the carbon balance, the new landfill would reduce greenhouse gases emission by 55% compared to the current uncontrolled landfill, thanks to biogas recovery and the installation of solar panels.

It would avoid **109,000 tons of CO₂ equivalent** emissions over its lifetime.

Extreme heat, fire and rain are the risks identified in the project area. Solutions for adapting to climate change, such as creating a second leachate storage basin to manage excess leachate in the event of rain, have been suggested.

The study recommends recruiting a private international operator to run the landfill facility under a BOT-type contract covering the construction, operation and maintenance of the infrastructure. It also **calls for the transfer of skills to the Djibouti authorities.**

The gender action plan has identified **initiatives to provide education for rag-picker children, help women and young people find employment, and create income-generating activities.** Added to this are awareness-raising campaigns on health and hygiene, and the prevention of gender-based violence.

Study follow-up

CICLIA's support provided the Djibouti authorities and AFD with all the information needed to build and finance a new landfill facility, while also planning the future management of this infrastructure.

- › Increased capacity of the solid waste management system.
- › Increased performance.
- › Reducing greenhouse gas emissions.
- › Creation of local jobs during the construction and operation phases of the infrastructure and equipment.
- › Improved living conditions and livelihoods for local residents and ragpickers at the dump.

In 2023, the project for a new landfill site, which the Agence Djiboutienne de Développement Social (ADDS) as the contracting authority, received joint AFD and European Union funding of €16.5 million (€11.5 million AFD and €5 million EU) in the form of a grant.

Launched in 2016 by AFD and supported by the European Union and SECO, CICLIA is a technical assistance and preparation facility for urban projects with climate co-benefits. It contributes to sustainable urban development in Africa, acting as the missing link that enables international and national climate strategies to be adapted and put into practice, as closely as possible to the needs of fast-growing cities. In concrete terms, CICLIA finances studies and technical assistance to help local players develop low-carbon urban projects that are resilient to the effects of climate change.



Find out more:

<https://www.afd.fr/en/ciclia-building-african-cities-resilience-climate-change>

