



Project Finance Factsheet

Redevelopment of the Stormwater Retention Basin in the *Zone de Captage* of the Commune of Grand Yoff Dakar, Senegal

TYPE
Adaptation



SECTOR
Water

OVERVIEW

Through the project, the City of Dakar seeks to improve the functioning of a large stormwater retention basin in order to improve resilience to flooding and to reduce health hazards. The construction of the stormwater retention basin in the zone de captage in the commune of Grand Yoff was the result of the 2005 floods in the area. Today this area is densely populated and the basin is under severe pressure. The basin, whilst it was built to collect stormwater to prevent localised floodings, has been increasingly used over the years to receive wastewater and solid waste. The basin, therefore, poses a health risk to the neighbouring community and has limited potential to attenuate floods during heavy rainfall events. Climate change will even increase the vulnerability of the city of Dakar and the commune of Grand Yoff to flooding in the coming years. In addition to the rehabilitation of the rainwater retention basin to limit the frequency of floods in Grand Yoff and attenuate the impacts as well as tackle the health hazard currently posed by the basin, the city of Dakar wishes to create a functional green space in parts of the basin, which will aim to improve the quality of life and build resilience of local residents to recurring floods, while reducing health risks and improving the life of the city of Dakar.

The objectives of this project are:

- Reduce the vulnerability of the commune of Grand Yoff to floods and contribute to the City's overall strategy of building flood resilience
- Optimising the management of waste and wastewater in the area
- Create green, clean, and functional spaces around the basin
- Reduce health risks for neighbouring communities

Implementing agency

City of Dakar, l'Office National de l'Assainissement du Sénégal (ONAS) (National Sanitation Office of Senegal).

Timeline



After completing the required technical studies, the planning, design, financing, and implementation of the interventions will commence.

The next steps will involve detailed planning for the rehabilitation of the retention basin.

Summary of Development outcomes

- Major reduction in flooding and improved resilience of low-income groups
- Significant reduction of health risks through adequate management of wastewater and solid waste (polluted water, mosquitoes)
- Significant social and environmental benefits of the local population through the creation of a functional, open and

green space that fulfils several functions in dry weather and limits the risk of flooding during winter months

- Socio-economic gains (jobs for young people) by preserving existing economic activities and establishing new activities (sports/ leisure/family activities)
- High cost-benefit ratio considering future financial consequences of the floods

Investment Summary

▶ CAPEX: €11 million

The EUR 11 million will be used to fund the additional studies and monitoring assessments, and largely the required interventions to improve the overall functioning of the basin.

The project can be divided in four packages that needs to be financed:

PACKAGE 1: CREATION OF A MULTI-TIERED BASIN

- An area dedicated to the management of stormwater and runoff
- A dry basin for most of the year (November to June)
- Upper tiers that can be partially submerged during heavier rainfall events in the winter months

PACKAGE 2: IMPROVED WASTEWATER MANAGEMENT

- Rerouting of wastewater (and removing connection) to the appropriate wastewater reticulation networks
- Ensuring polluting activities in the area up to standard (slaughterhouse, tanneries, market) or relocation

PACKAGE 3: CREATION OF A MULTI-PURPOSE BASIN

- Reclaiming public spaces and reducing pressure (floods and waste) by reconsidering the site and integrating it into the urban fabric
- Creation of urban agriculture income-generating activities (non-food) by creating space for gardening, horticulture of ornamental plants, typha, etc
- Creation of a large-scale green urban park for recreational activities (parts of which can be submerged during heavy rainfall events)

PACKAGE 4: URBAN DEVELOPMENT OF THE SURROUNDINGS AND THE NEIGHBORHOOD

- Planted promenades with improved traffic and parking conditions
- Socio-cultural, commercial and recreational facilities

▶ OPEX: €~400.000/year

After the implementation of the proposed measures in the feasibility study, the ongoing maintenance of the basin will be undertaken by the city of Dakar and ONAS.

Proposed Funding

Potentially through grant and development aid

Readiness Issues

All studies necessary to reach status of feasibility are underway and can be made available upon request.

Legal

The project is in line with the Emerging Senegal Plan (PSE), and Grand Dakar Horizon 2025 urban strategy and is also included in the city's master plan. Support is requested to access the financing necessary to implement the necessary interventions to improve the functioning of the basin.



Design scheme of the basin

CFF Support Summary

The city is leading the project's planning and implementation, while the CFF is currently providing the following support:

- Dedicated technical advisor based within the city administration
- Technical, feasibility study on the rehabilitation of the stormwater retention basin
- Conducting of a gender study, a topographical study, a geotechnical study
- Engagement with the relevant stakeholder groups to build ownership of the project
- Knowledge transfer on planning similar projects and capacity development of the project team in Dakar

For additional information, contact: contact@c40cff.org