



INVESTING IN COMMUNITY PROJECTS TO BOOST SUSTAINABLE URBAN DEVELOPMENT

Community engagement and household waste management are two key issues that can contribute to the achievement of the objectives of the Stormwater Management and Climate Change Adaptation Project (PROGEP). To address these two key issues, the project has undertaken two flagship initiatives: Community Investment Projects (PICs) to support better integration of drainage systems into the urban landscape and ensure their preservation; and Clean Neighborhood Operations (CNOs) to foster a sustainable community movement of healthiness and improve neighborhood living conditions.

■ BACKGROUND

In Senegal, the treatment of household waste is a major concern of the public authorities. Despite the many measures taken to make the various actors involved responsible, the great difficulty of waste management remains a recurrent issue. Uncontrolled dumps, illegal dumps and failure of collection systems; household waste is visible in the various local communities. The misconduct of citizens, fostered by the lack of sustainable practical solutions, is one of the main causes of dysfunctional household waste management and, consequently, of obstruction of stormwater drainage systems.

Before 2012, in the absence of sanitation operations in the peri-urban neighborhoods of Dakar, waste accumulated in existing drainage canals or in natural rainwater drainage canals. This was a major cause of obstruction of regular water flow and a factor in the persistence of flooding with all the consequences related to the deterioration of both the living environment and the health of the population.

The shortcomings relating to the low level of community involvement and the high level of unsanitary conditions around stormwater systems therefore posed major challenges for the sustainability and proper functioning of the drainage network system that PROGEP was planning to implement.

At the same time, the question of community participation in the process of setting up infrastructure projects, which had not been sufficiently taken into account in the past, was increasingly gaining interest as it certainly contributed to good ownership and the sustainability of achievements.

Experiences conducted in contexts similar to those of the PROGEP intervention area, in Brazil, Vietnam and India, among others, demonstrated that communities can make a very important contribution to the implementation, operation and maintenance of urban systems. Thanks to the involvement of the residents in the activities and their ownership of the infrastructure, the results are better adapted to local needs and more sustainable.



Street in the "Cité Soleil" district of Dakar before PROGEP's work begins.

■ DESCRIPTION OF THE INTERVENTION

PROGEP has developed an innovative approach consisting in supporting in part, community engagement through the implementation of an information, education and communication (IEC) strategy and the establishment of Local Committees for Stormwater Management and Climate Change Adaptation Initiatives (COLIGEP)¹, and in addition, the social appropriation of the drainage facilities built by the operationalization of Community Investment Projects (PIC) and the mobilization of residents in the management of household waste through Clean Neighborhood Operations (CNO).

To support the implementation of the community engagement component, PROGEP used two social facilitation organizations (the NGO ENDA ECOPOP and the firm MSA) to support communities in their structuring and in the activities to be carried out in relation to them.

On the basis of the procedures manual designed by the project, the facilitators assisted the communities in identifying, setting up and monitoring the projects. The selection of projects was made on the basis of the potential impact on improving the community's resilience to floods and developing measures to adapt to climate risks.

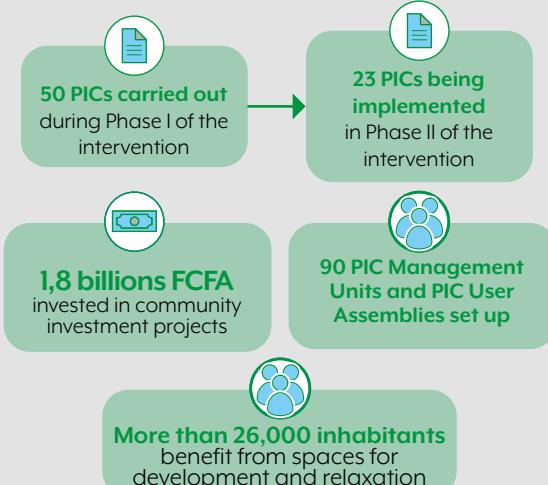
For the implementation of the CNOs, the Municipal Development Agency (ADM) worked in partnership with a World Bank Department in charge of research, the Development Impact Evaluation (DIME) and Trinity College Dublin, with the support of ENDA ECOPOP's social facilitation teams and the MSA firm in the field. These operations have stimulated the active engagement of residents for the cleanliness of their neighborhoods through a sustained mobilization of Community Based Organizations (CBOs). The initiative was accompanied by an impact assessment and an experimental approach based on the Randomized Comparative Testing method with a community reward system.

1 See Capitalization Brief "Promoting community engagement to support the resilience of local populations and the preservation of drainage systems"

ACHIEVEMENTS



COMMUNITY INVESTMENT PROJECTS (PICS)



CLEAN NEIGHBORHOOD OPERATIONS (CNOS)



■ RESULTING CHANGES

Integration of facilities into the social and urban fabric

The drainage ponds and canals built by PROGEP have brought about significant changes in the urban and social organization of the neighborhoods concerned. The risk of rejection by residents could be serious, however, the implementation of PICs has permitted communities to participate in the development choices of their neighborhoods. This mobilization facilitated the appropriation of the facilities built. The PICs have made it possible to finance 50 recreational facilities (relaxation areas, sports courses and stations, children's playgrounds, pedestrian walkways, etc.) in the vicinity of the drainage systems. The residents take full advantage of these new amenities, which promote the social development of children, women and the elderly.

Improvement of the living environment in the neighborhoods

The urban developments carried out within the framework of the PICs can be of different natures: walking areas, green sports paths and stations with solar lighting; relaxation areas with children's playgrounds; recreational areas; collective catch ponds for domestic wastewater management. They contribute to enhancing the surroundings of the facilities and have improved the living conditions of the residents of Pikine and Guédiawaye.

Securing the surroundings of the facilities

The drainage systems built by PROGEP are subject to significant risks of degradation. Improper installations in the vicinity of these projects can jeopardize their proper functioning in various ways: deterioration of protective walls, deterioration of erosion slopes, dumping of solid and liquid waste, etc. The developments carried out through the PICs thus make it possible to set up buffer zones that preserve the rights-of-way and protect structures from unregulated construction and harmful behavior.

In addition, the completion of safety work on the facilities, through the development of ponds and the implementation of PICs, has made it possible to significantly reduce the risk of drowning. Before the construction work, between 2009 and 2013, the municipality of Dijida Thiaroye Kaw recorded 11 cases of child deaths by drowning in the pond of Nietyl Bar. Since the inception of PROGEP, no cases of death have been recorded.

Involvement of residents in the management of household waste

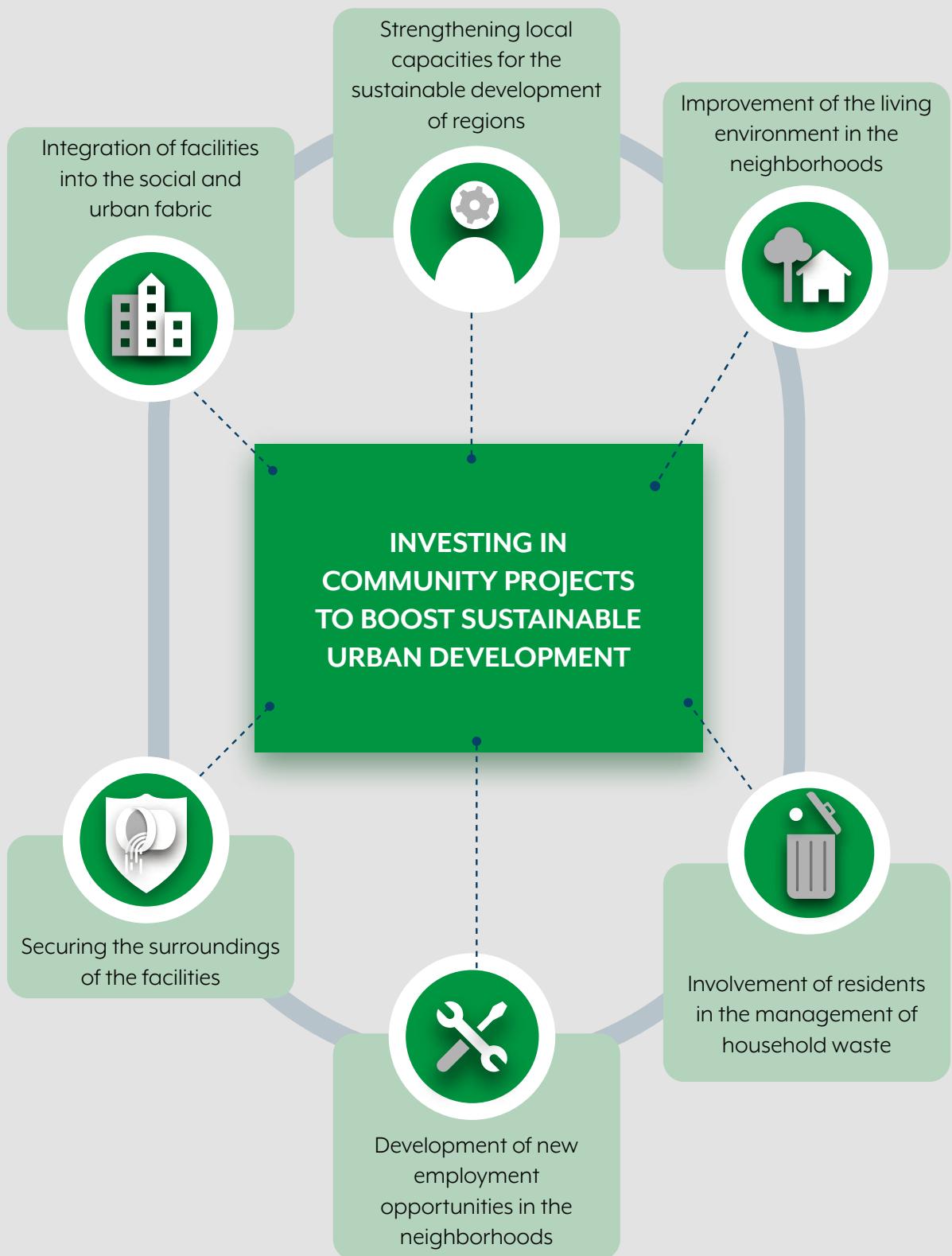
CNOs have made a significant contribution to raising community awareness of the importance of household waste management in maintaining the sanitation of the neighborhood, avoiding obstruction of regular stormwater flow and keeping the drainage system in good working order. These operations have made it possible, on the one hand, to make people aware of the role they have to play on these issues and, on the other hand, to provide CBOs with the means and skills to improve their capacity to intervene. It is now easier to involve the citizens of these neighborhoods in working with ministries, relevant technical services and territorial authorities on waste management.

Development of new employment opportunities in the neighborhoods

The work carried out under PROGEP has had a direct impact on job creation in the neighborhoods concerned. Local labor has been mobilized to carry out many tasks on the sites. In addition, the new activities created for the operation and maintenance of the facilities and the management of public spaces (cleaning of public spaces and maintenance of the facilities) will provide new opportunities for community members. Especially for those who have developed professional experience and skills by getting involved in waste management operations and monitoring the drainage network.

Strengthening local capacities for the sustainable development of regions

The exercise of implementing PICs is a good example of local participatory planning contributing to the sustainable management of urban neighborhoods. It allows progress to be made in the three complementary dimensions of sustainable development: social development and inclusion, economic growth and environmental protection and management. Community members and local government departments involved in the exercise have developed a good understanding and skills in the design, planning and implementation of development projects and programs. They can be applied to other initiatives aimed at improving living conditions in neighborhoods.





COMMUNITY INVESTMENT PROJECTS (PICS)

Community Investment Projects (PICs) are participatory micro-projects (between 6 and 35 million FCFA) submitted first through a process of identification, for social confirmation, then technical, and finally financial validation. They take the form of initiatives to develop recreational spaces, leisure activities and sanitation facilities for the management of domestic wastewater (grey water from laundry and cooking).

Within the framework of PROGEP, the PICs have been a tool to encourage the participation, involvement and ownership of the population, in order to create the conditions necessary for the proper use, maintenance and preservation of the facilities built.

PICs are successful in participatory and inclusive management, innovative in terms of engineer-

ing and social communication for community mobilization and engagement. They have made it possible to channel personal and sectorial interests and to build a consensus based on collective and community interest.

The projects funded have contributed, among other things, to: (i) maintenance and upkeep of drainage systems at the local level; (ii) protection and rehabilitation of non-aedificandi areas; (iii) protection and rehabilitation of social infrastructure affected by floods (schools, health posts); (iv) reforestation and improvement of the living environment; and (vii) development and strengthening of COLIGEP.

During Phase I of PROGEP's work, 50 PICs were carried out for a total amount of approximately 1,200,000,000 FCFA:



1 PIC for the donation of office and IT equipment for COLIGEP



1 PIC for the donation of cleaning equipment to the 80 CNOs processing districts



1 PIC for awarding prizes to the 50 districts with the Clean Neighborhood label



20 Recreational development PICs for the area around drainage systems in the Dalifort, Baghdad, Nietyl Mbar, Madié and Wakhinane pond areas, in the Phase 1 sector



9 Recreational development PICs in the area of drainage systems in the Medina Gazon Pond area in the Phase 2 sector



5 PIC sumps near drainage systems in the municipalities of Djida Thiaroye Kaw, Médina Gounass, Wakhinane Nimzatt, Yeumbeul North, Yeumbeul South.



6 Recreational development PIC for the area around drainage systems in the Medina Gounass, Hann Bel Air and Dalifort areas



7 PIC provision of cleaning equipment for municipalities and COLIGEPs to sustain sanitation initiatives around stormwater channels in the municipalities of Dalifort, Djida Thiaroye Kaw, Medina Gounass, Wakhinane Nimzatt, Yeumbeul North, Yeumbeul South and Keur Massar.

In the sectors concerned by Phase II of the project, 23 PICs will be implemented for a total amount of approximately 630,000,000 FCFA. A total of 73 projects will be financed through the mobilization of a budget of approximately 1,800,000,000 FCFA.



PRACTICAL GUIDE² FOR THE IMPLEMENTATION OF PARTICIPATORY LOCAL PROJECTS: CASE OF COMMUNITY INVESTMENT PROJECTS (PIC)



The guide was produced to capitalize on the action-research process of developing and implementing PICs under PROGEP.

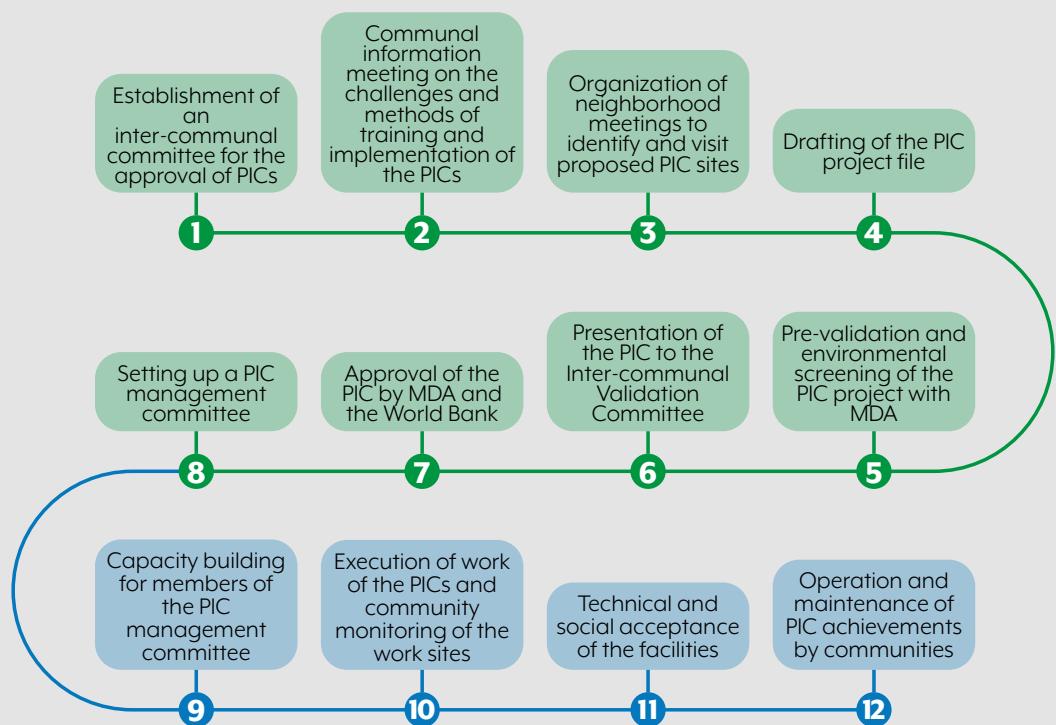
This document provides information, practical experiences and simple approaches to support community actors, NGOs, technical and financial partners,

who wish to support similar initiatives. The guide is structured in three parts: the first part deals with the introductory aspects relating to the context, the target objectives and the structure of the guide; the second recalls the progress of the implementation of PICs within the PROGEP framework; the third part develops the approach to be followed for the implementation of a PIC in a local community, drawing on the PROGEP's experience.

STEPS FOR CARRYING OUT PICS WITH PROGEP

The process of implementing PICs within the PROGEP framework has been developed in two main phases:

- Phase I: preparatory phase
- Phase 2: implementation, monitoring and management phase



2 The guide is available for download on the PROGEP website: www.adm.sn/progep



CLEAN NEIGHBORHOOD OPERATIONS

Clean Neighborhood Operations (CNOs) are initiatives that are voluntarily and undertaken by local communities to promote efficient waste management and keep neighborhoods clean. These operations have made it possible to establish a respectful behavior of residents and to stimulate a sustainable dynamic of health and improvement of the living environment.

Within the framework of PROGEP, this dynamic is valuable. In the absence of sanitation operations, waste accumulates in drainage systems or in natural stormwater channels. This is both a major risk of obstructing the regular flow of rainwater and a factor in the persistence of flooding with all the consequences associated with this phenomenon.

The CNO initiative carried out under the project resulted in a partnership between ADM, the World Bank's DIME Research Department and Trinity College Dublin. It was an experimental approach aimed at assessing the impact of the behavior of communities (CBOs and households) on the health of their environment and the phenomena of floods and related risks. The PROGEP impact assessment therefore sought to collect data demonstrating the effectiveness of the CNOs, in relation to all other investments and actions undertaken within the framework of PROGEP and by other initiatives in the same areas.



The youth of Djida Thiaroye Kaw engaged in the maintenance of the areas adjacent to the stormwater drainage pond.



PRACTICAL GUIDE FOR BETTER NEIGHBORHOOD SANITATION: CASE OF CLEAN NEIGHBORHOOD OPERATIONS (CNO)



This guide capitalizes on the experience conducted within the PROGEP framework to promote the commitment and mobilization of institutional and community actors around the healthiness of their neighborhoods for the preservation of zones, roads and rainwater structures and the improvement of the living environment. It is a practical tool that presents the activities carried out, the results obtained, the difficulties encountered, the lessons learned and the best practices of the implementation of the CNOs conducted in the municipalities concerned by the PROGEP's work. The guide is aimed at the various actors involved in solid waste management and flood control: state actors (administrative authorities, decentralized technical services, public implementing agencies); grassroots community organizations (women's groups, sports and cultural associations, COLIGEP, management units, user groups); municipalities (local elected officials and municipal technical services, neighborhood delegate organizations); civil society organizations and NGOs; technical and financial partners and members of the formal and informal private sectors.

3 The guide is available for download on the PROGEP website: www.adm.sn/progep



Mayoro SAMB

Coordinator of the Thiaroye-Kaw Local Committee for Stormwater Management and Climate Change Adaptation Initiatives (COLIGEP)



I was involved in a flood control committee before PROGEP arrived. I naturally continued my activities when the project gave me the means to strengthen my commitment to stormwater management.

PROGEP has taught me a lot. The training provided has allowed me to understand how the drainage system works, what I can do and what I shouldn't do with my fellow citizens to keep it in good working order.

Together with the other members of the committee, we have been at the forefront of the implementation of PICs. We were involved at every stage: mobilization of CBOs, project development, choice of investments to be made.

Thanks to the PICs, ponds are an integral part of the urban and social fabric. Communities have taken ownership of them. Children come to play in the playgrounds, the elderly sit on the benches to enjoy the coolness, the young train with the sports equipment, women walk safely thanks to the presence of public lighting powered by solar energy.

The equipment and initiatives financed by PROGEP have contributed to improving our living environment. We alert the town hall in case of damage and do everything possible to limit the damage."

LESSONS LEARNED

For PICs to achieve the objectives all conditions must be met

PICs are a factor in the socialization and integration of stormwater facilities into the urban fabric of neighborhoods. In order to ensure their success and function, they must be developed through a participatory process, have a clear community interest or impact and enjoy broad social approval. CBOs have a major role to play in these aspects. In addition, in order to be useful for flood control, the link with the preservation and securing of roads, drainage systems and/or the improvement of the environment must be clearly demonstrated. A further, but no less important, issue to be taken into account is the viability and sustainability of projects that need to be adapted to the local context.

The commitment of municipal authorities supports the success of initiatives

Evaluations conducted as part of the implementation of CNOs have shown that community initiatives that have explicit support from the mayor's office have a greater scope and potential for success. This shows that the synergy of actions between communities and collectives is an important aspect to be addressed to ensure the desired mobilization and sustainability.

The scope of PROGEP's activities extends beyond the neighborhoods concerned

The success of CNO activities in the intervention areas has created a sense of competition in waterfront areas that have not been associated with the initiative. The positive practices brought by the project, and the resulting improvements in the quality of life, have been a source of inspiration for the residents of the surrounding neighborhoods who have organized themselves around the CBOs to carry out similar cleaning activities as well as for government services through the "Zero Waste Districts" initiative.

Some PICs carried out in the communes of the PROGEP intervention area.



Baïdy BA

Mayor of Medina Gounass



Floods were an obstacle to the development of our municipalities as well as our region. Water prevented people from living, from flourishing. Today, the facilities built make it possible to drain stormwater and the groundwater table has dropped. The residents have clearly understood the importance of these structures.

"Anything you do without me, you do against me." PROGEP has been able to take into account and put into practice the words of a wise man. It has involved all stakeholders in the planning and construction of drainage systems and has been able to mobilize the population to take ownership of them.

The outreach activities conducted provided them with the means to understand the issues and the usefulness of the work done. Awareness has enabled them to take responsibility for the maintenance of the drainage system. PICs have provided them with the means to integrate infrastructure into their daily lives.

Life has returned to our neighborhoods, families have returned to homes that were once inaccessible or abandoned because of the water. The mayor's office works alongside the COLIGEPs to keep the momentum alive, but the resources are limited.



FUTURE PROSPECTS

Support the sustainability of Clean Neighborhood Operations

The CNOs have had clear success in the neighborhoods of the municipalities where they have occurred. They should be continued to maintain the momentum. Municipalities have an interest in continuing to support CBOs in neighborhood health management. CBOs, for their part, could approach projects and programs supporting cleanliness and sanitation in Senegal to capitalize on their expertise and be involved in the household waste management system.

Ensure sanitation in and around ponds

Public mobilization is not enough to ensure effective waste management. In order to take advantage of the current momentum, the services in charge of these issues, in collaboration with municipalities, technical services and CBOs, must develop strategies and make available the necessary means to ensure health and cleanliness in the neighborhood.

Maintain the investments made

Investments made to carry out urban development are exposed to bad weather and sustained use. They tend

to deteriorate very quickly. It is important that municipal services, in collaboration with COLIGEPs, support the National Office for Sanitation of Senegal (ONAS) in the monitoring and maintenance of the equipment built.⁴

Develop income-generating activities around the rain overflow basins

CIPs have contributed to improving neighborhood living conditions, providing previously unavailable services and supporting COLIGEPs and CBOs in logistics and capacity building. The stormwater storage and drainage ponds built by PROGEP are important structures for the municipalities that house them. One area of development to be pursued is that of supporting communities to set up income-generating activities around the basins. The transformation of Typha⁵, which is very present, the development of market gardening activities and fish farming are potentially profitable activities that could be a complementary source for local residents if water quality and other pond protection conditions are met.

4 See Capitalization Brief "Promoting necessary reforms to ensure the sustainable operation and maintenance of drainage systems"

5 Typha are semi-aquatic perennials characterized by large brown spikes. They grow in dense colonies in lakes, marshes and more generally in wetlands.





RÉFÉRENCES

- Practical guide for the implementation of participatory local projects: Case of Community Investment Projects (PICs), ADM, 2019 (In French)
- Practical guide for better neighborhood sanitation: Case of Clean Neighborhood Operations (CNOs), ADM, 2019 (In French)
- PROGEP Project Appraisal Document (PAD), World Bank, 2012
- Terms of reference for the establishment of Community Investment Project Management Units (PICs), ADM/ENDA ECOPOP, 2015 (In French)
- Fact sheet "Development of Community Investment Projects (PIC) within the framework of PROGEP", ADM, 2019 (In French)

Stormwater Management and Climate Change Adaptation Project (PROGEP)

The Stormwater Management and Climate Change Adaptation Project, PROGEP, implemented by the Municipal Development Agency (ADM), is a component of the Ten-year Flood Control Plan (PDLI). It is funded by the Government of Senegal, with technical and financial support from the World Bank, the Global Environment Fund (GEF) and the Nordic Development Fund for a total of USD 121.3 million (FCFA 60.65 billion).

This urban development project implemented over seven years (2012-2019) was aimed at reducing flood risks in Dakar's peri-urban area (Pikine and Guediawaye) and at promoting sustainable city management practices in selected urban areas (Saint-Louis and Diamniadio). It sought to find sustainable solutions using an integrated approach based on a combination of infrastructural and non-infrastructural interventions.

The Municipal Development Agency (ADM)

ADM, the agency responsible for coordinating the implementation of the Stormwater Management and Climate Change Adaptation Project (PROGEP), was established in 1997 thanks to combined efforts of the Government and the Mayors Association of Senegal, AMS. The agency was established in the context of 1996 reforms, referred to as the "regionalization" reforms, aimed at reinforcing decentralization and local development in Senegal. As a key partner to local

authorities, and in accordance with its Strategic Plan, ADM works to make local regions more attractive and competitive and to strengthen their governance. To this end, the agency contributes to building strategic, financial, administrative and technical capacities of local authorities. ADM helps authorities manage territorial information, facilitates cooperation between local authorities, and promotes inter-communality.

This publication is part of a series of briefs that capitalize the achievements of and lessons learned from the implementation of the PROGEP project. This capitalization brief, as well as the publications cited, can be accessed at: www.adm.sn/progep