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Urban Planning & Infrastructure in Migration Contexts VISION, AREA PLANNING & ACTION PLAN REPORT



Acknowledgments:

This project is funded by: Swiss State Secretariat for Economic Affairs (SECO)

The spatial and narrative analysis has been developed by UN-Habitat's Urban Practices Branch, Planning, Finance and Economy Section, under the Planning for Humanitarian and Development Practice Programme.

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Cover Photo: Road in Ndogpassi Plage, Douala, Cameroon @UN-Habitat

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Urban Planning & Infrastructure in Migration Contexts VISION, AREA PLANNING & ACTION PLAN REPORT



ABBREVIATIONS

AFD	French Development Agency
BAU	Business As Usual
BRT	Bus Rapid Transit
CAD3	Douala 3 City Council
CAD4	Douala 4 City Council
COTECH	Technical Comittee
CUD	Douala City Council
GCM	Global Compact for Migration
FAO	United Nations Fund for Agriculture
IDPs	Internally Displaced Persons
MINADER	Ministry of Agriculture and Rural Development
MINAT	Ministry of Territorial Administration
MINDCAF	Ministry of Domains, Cadaster and Land Affairs
MINDDEVEL	Ministry of Decentralization and Local Development
MINEE	Ministry of Water Resources and Energy
MINEPAT	Ministry of the Economy, Planning and Regional Development
MINEPIA	Ministry of Livestock, Fisheries and Animal Industries
MINFI	Ministry of Finance
MINHDU	Ministry of Housing and Urban Development
MINSANTE	Ministry of Public Health
MINTP	Ministry of Public Works
INS	National Institute of Statistics
NGO	Non-Governmental Organization
OCHA	United Nations Organization for the Coordination of Humanitarian Affairs
PCD	Communal Development Plan
POS	Land Use Plan
RN	National Road
SDG	Sustainable Development Goals
SECO	Swiss State Secretariat for Economy Affairs
SWOT	Strengths, Weakness, Opportunities and Threaths
	United Nations Organization for Human Settlements
UNHCR	United Nations High Commissioner for Refugees

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EXECUTIVE SUMMARY

With over 55% of the global population currently residing in urban areas—a figure projected to rise to 68% by 2050—cities are facing increasing challenges in meeting the diverse needs of their inhabitants. Urban spaces have become the primary destination for migrants and displaced populations, with more than 60% of refugees and 80% of internally displaced persons (IDPs) seeking shelter in cities. This trend intersects with growing climate change challenges, posing unprecedented difficulties for cities and local governments in ensuring the well-being, integration, and social cohesion of urban dwellers, particularly in the most vulnerable neighbourhoods.

As of January 2024, Cameroon continues to be affected by three complex humanitarian crises:

1.Instabilities in the northern regions, bordering Nigeria; 2. The Anglophone crisis in the North-West and South-West (NOSO crisis);

3. The civil war in the Central African Republic (CAR). Considering this, more than 2 million people are on the move in Cameroon.

The economic capital city of the country, Douala, has emerged as a prominent location and a concentration centre for internally displaced persons (IDPs).

The influx of new arrivals is concentrated in specific areas of Douala, namely the municipality (or subdivision) of Douala 4, Douala 3, and Douala 5, sequentially.

The influx of IDPs and their informal circumstances, including housing and employment, create new spatial, social and economic dynamics. In April 2023, the UNHCR study on the census of the number of displaced people within the different communes of Douala reported 2 871 refugees and 1 358 asylum seekers in Douala 3. As for Internally Displaced Persons the municipality had 12 422 IDPs in 2021 (OCHA 2019). The urgency for long-term sustainable solutions tailored to urban environments highlights the need for a stronger connection between humanitarian and development efforts, especially in the face of protracted crises and displacement.

ABOUT UPIMC PROGRAMME

UN-Habitat's Urban Planning and Infrastructure in Migration Contexts (UPIMC) programme has partnered with the Swiss State Secretariat for Economic Affairs (SECO) to improve access to reliable services and socio-economic opportunities for migrants and host communities in urban settlements. The programme is currently implemented in different three countries: Cameroon, Egypt, and Jordan.

OBJECTIVES

UPIMC aims to contribute to national and international efforts to improve the quality of life of migrants and host communities by supporting effective and evidencebasedinvestments for durable solutions at the local level. UPIMC seeks to mitigate the vulnerabilities associated with migration and displacement, empowering local governments and stakeholders to foster complete integration and sustainable development for both migrants and host communities By doing so, UPIMC significantly contributes to achieving the Sustainable Development Goals (SDGs) at the local level.

The UPIMC programme consists of four interlinked components:

(1) Spatial Profiling - to understand the city

(2) Strategic Vision & Area Planning, and the Action Plan - to plan the city

(3) Prioritized Infrastructure Investments and Linkage to Finance - to transform the city

(4) Knowledge exchange.

Due to the large number of internally displaced persons (IDPs) and the considerable urban constraints it faces, Douala 3 Subdivision (CAD 3) has been selected as the second site to implement the UPIMC Programme in Cameroon after Douala 4. In the first component - Spatial Profiling - to understand the city - the UPIMC team developed the Douala 3 Spatial Profile based on a spatially focused cross-sectoral situational analysis of urban settlements hosting internal displaced populations, allowing local stakeholders and the target group to get a comprehensive spatial understanding of the existing situation as a basis for decision-making, longterm urban development strategies, and infrastructure investment planning. The spatial profile identified and mapped challenges, provisions, and gaps in public infrastructure services in coordination with humanitarian interventions at the national, regional, city, and neighbourhood levels.

A questionnaire was developed to collect the sociospatial challenges but also the needs of Internally Displaced Persons (IDPs) living in Douala 3 in terms of their daily basis. The questionnaire is divided in 4 parts, composed of 48 questions, and submitted to a sample of 110 individuals: 1. Identification 2. Martial Status 3. Professional Situation 4. Living Condition. These questions were then transferred on the KoboToolbox application. This data was then extracted from the KobotToolBox platform in Excel format and integrated in shapefiles and processed with GIS tool for the elaboration of maps and graphs.

The Spatial Profiling itself has been built upon data collected by the UPIMC Cameroon Team and validated with the technical services of the Municipality of Douala 3, sectoral ministries, representatives of NGOs or international humanitarian organizations, the IDPs groups, academia and the civil society among others, during the various technical validation meetings and workshops embedded in the Planning process.

Community participation sessions was ensured through mapping workshops with over 100 participants to ensure the local voices are heard and to identify gaps, a propose urban interventions.

ABOUT THIS DOCUMENT - VISION, AREA PLANNING & ACTION PLAN COMPONENT

This report is the output of the second component and builds on the developed Spatial Profile.

After the profiling exercise and stakeholders' workshops, Ndogpassi Plage neighbourhood has been validated as the pilot area, most in need of intervention.

The second phase of the methodology begins with the formulation of an urban vision for Douala 3 and this pilot area. An urban vision is a strategic and collective roadmap that outlines the desired future state of a city or neighbourhood. It aims to define what the urban area should look like spatially, socially, economically, and environmentally, usually in the next 10 to 15 years. It reflects the long-term urban intentions and aspirations of key stakeholders, including governments, communities, and other local entities. The vision should also be in alignment with global goals such as the SDGs, the New Urban Agenda (NUA).

During the Vision workshop held on the 6th of March 2024, local authorities as well as a representative number of displaced persons, residents of the Ndogpassi Plage neighborhood among others among others, proposed several keywords that they wished to be included in the final Vision statement. As a result, the UN-Habitat Cameroon team and the target audience generated a vision statement for the Douala 3 and Ndogpassi Plage neighbourhood that considers their needs and aspirations for sustainable and prosperous development in the next 10 years.

By 2035, the Douala 3 Municipality will be compact, connected, resilient, healthy, in a prosperous and equipped environment.

This turned into 5 trategies that have been punctually developed :

- 1. Compact City
- 2. Connected City
- 3. Resilient and Sustainable City
- 4. Prosperous City
- 5. Recreational and inclusive City

INTRODUCTION

The area planning exercise acts as the crucial bridge between the vision and the reality of sustainable infrastructure development.

The focus shifts from aspirational needs to actionable plans, considering how the built environment can be modified to best serve the community.

This component also includes a scenario building exercise, which visualises various potential future conditions based on past and present trends. Scenarios typically include

- the "Business as Usual" (BAU) scenario which visualises the future if no significant measures are taken, and

- **the "Optimal" Scenario** outlining what should be done to achieve the aspirational urban vision formulated.

To develop these scenarios, detailed data on the current state of the city was collected using a combination of methods, namely GIS mapping, on-site observation, and interviews. These data were then analysed against the five selected variables to determine how Douala 3 could be spatially and functionally configured in 2035.

The optimal scenario of Douala 3 had as a baseline the projects planned and expected by the Municipality of Douala 3 in the Municipal Development Plan (PCD) 2023-2027 and finalized in a participatory manner during the Vision Workshop held on March 6, 2024, at the Douala 3 City Hall. Throughout the process potential indicators, called "variables," that would lead to significant changes in the built environment of Douala 3 were considered, as well as the anticipated impacts and likelihood of these developments. The variables assessed were:

1) population growth; 2) urban footprint;

3) catalytic projects; 4) local economic development; and 5) climate and environmental risks.

The optimal scenario map, once validated, became the action plan which indicates how various sectors combined with needed projects, can enable positive development. The optimal scenario validated for Douala 3 called for the implementation of 15 needed priority projects during the decade that follows.

ABOUT THIS REPORT - PRIORITIZED INFRASTRUCTURE INVESTMENTS AND FINANCE The third phase of the methodology develops an action plan to guide the implementation of the identified needed projects.

The action plan can include all needed projects of the optimal scenario or eventually just the high priority ones. To develop the action plan, the projects are assessed to identify potential synergies, ensuring that the available resources are utilized in the most efficient and cost-effective way and deliver the possible impact. The action plan organizes the projects into three main phases :

short-term, mid-term, and long-term.

Additionally, the action plan should explain how each project triggers and aligns with broader transformational change and the relevant Sustainable Development Goals (SDGs) and other broader objectives at the national and city scale.

After the action plan, project briefs are produced for a selected number of high-priority projects to be implemented in the short-term phase. The brief is used to present the project to partners, donors, and potential financiers for its implementation. The project brief contains a timeline for implementation and a comprehensive overview of the project life cycle: the objectives, challenges addressed, and expected outcomes and impacts are also presented.

Financial aspects are crucial and include the calculated initial cost and an analysis of the project's viability.

The optimal scenario validated for Douala 3 called for the elaboration of an action plan of 30 needed projects, and the implementation of 15 priority projects during the decade that follows.

Considering this, 7 projects brief have been developed and used to enable bilateral meetings with potential donors during the last phase of the project.

By presenting a well-structured and comprehensive project brief, stakeholders can better understand the project's value, feasibility, and alignment with broader goals, thereby increasing the likelihood of securing funding and support for implementation.



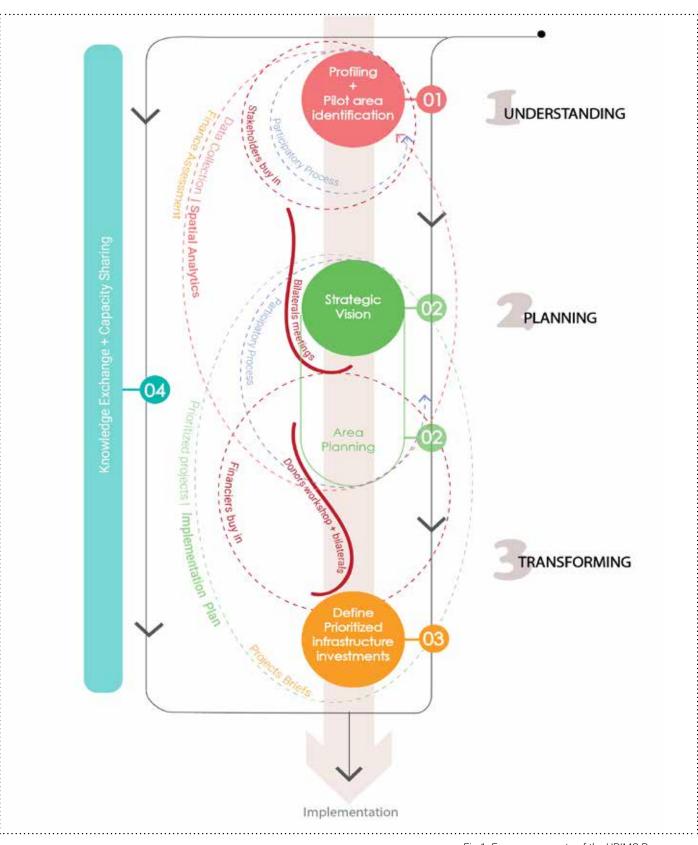


Fig 1. Four components of the UPIMC Programme Source : @UN-Habitat

INTRODUCTION

ABOUT THIS REPORT - KNOWLEDGE EXCHANGE

This second phase of the planning process was also characterized by a participatory planning approach. The UN-Habitat Cameroon team wanted to ensure the integration in the decision-making process of various but decisive stakeholders such as: internally displaced persons and their representatives, academia and the host community above all. Therefore, different types of participatory activities were carried out to ensure that the voices of all the different interlocutors were integrated into the formulation of the Douala Vision 3 and in the process for its implementation.

The different activities helped to enrich the UPIMC Cameroon programme and to forge the basis for a very dynamic and collaborative path, consisting of

MEMORANDUM OF UNDERSTANDING (MoU) WITH THE UNIVERSITY OF DOUALA

The purpose of this MoU, signed in November 2024, is to provide a framework for cooperation between UN-Habitat and the Department of Geography of the University of Douala to support the UPIMC Cameroon team with a focus on the pilot neighborhood of Ndogpassi Plage, in a socio-spatial analysis of its challenges and strengths.

The collaboration aimed to improve knowledge and skills related to the spatial data collection tools used by UN-Habitat, developing the capacity to organize and facilitate workshops within the UPIMC Cameroon program, while improving their understanding of the various phases of participatory urban planning.

A general theoretical training on urban planning methodologies was facilitated to a large group of students, but a selected group of 8 students followed the UPIMC Cameroon team. They were provided with further training, aiming to develop a comprehensive multimedia database from the site visits, incorporating photos, videos and queries of the pilot intervention area.

SITE VISITS

Following the approach adopted during component 1 of field visits across the CAD3 extension for primary data collection, component 2 was also characterized by visits to the pilot neighbourhood with the selected university students and local authorithies. The visits to Ndogpassi Plage allowed to immortalize key areas of the neighbourhood and the projects needed to provide solutions to: lack of local markets, lack of equipped public spaces, efficient waste disposal systems among others.

Other visits have been undertaken to understand the essential dynamics that affect the 3rd Municipality such as the urbanization of the Marshes and the deforestation of the mangrove in Boko which, although not entirely within the intervention area, has a major environmental impact on the ecosystem of CAD3 and the human activities to which it is subject are similar to those affecting the marshes of Ndogpassi Plage.

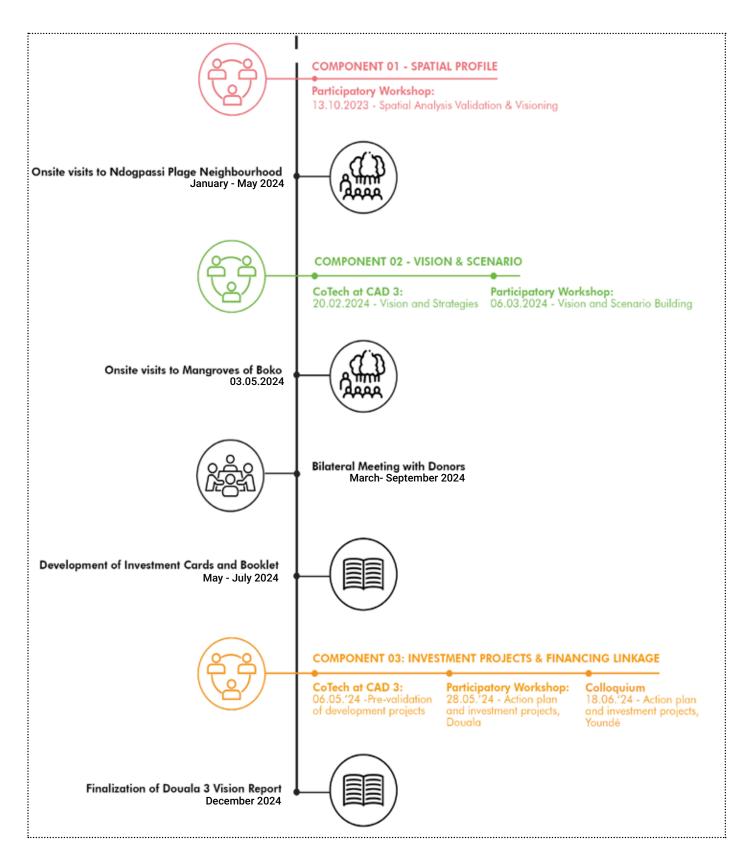
COTECH – Technical Committee

Three official validation meetings, called COTECH, were held during this semester with the technical experts of the Douala 3 Council to validate the decisive formulations of: the Douala 3 Vision, the priority matrix of necessary projects, the priority projects of the Action Plan or the content of the project briefings. These meetings were held systematically before the associated official workshops, to ensure that UN-Habitat's work was aligned with the priorities of the Douala 3 local government and community.

WORKSHOP

Parallel to COTECH, participatory planning workshops were held for the wider audience of representatives of sectoral ministries, international organizations, academia, civil society and for the Action Plan workshop in Douala and the Colloquium in Yaoundé with potential donors. These official meetings allowed to share the work done together with Douala 3, but also to trigger that mechanism and process of seeking funding to achieve the implementation of the infrastructure projects identified.

UPIMC DOUALA 3 - PARTICIPATORY ACTIVITIES TIMELINE



INTRODUCTION

DOUALA CITY SCALE

Over the past 30 years, Douala's urban footprint has more than doubled with the following trends: (a) Rapid and uncontrolled expansion of the city, (b) A large area of informal housing (almost 65 percent of the residential area), often on unbuildable land, (c) Vulnerability to environmental risks and urbanization of the natural environment (d) Lack of good roads and good quality services.

Douala currently has 4,203,110 inhabitants (worldpopulationreview 2024) and a surface area of 210 km². Is one of the most important economic and cultural centres of the continent. This trajectory is marked by new dynamics such as the arrival of vulnerable populations in situations of humanitarian and health crisis from neighbouring countries and the regions of the far north, north and south-west of the country. These cross-border and internal movements have been amplified by the return of conflicts in 2016.

SUBDIVISION OF DOUALA 3 (CAD3) SCALE

Douala 3 Subdivision or Municipality of Douala 3 is the most populous and largest municipality in the city of Douala. The biggest challenge of Douala 3 is certainly its size and population: with its more than 150 km2 and approximately 1,400,000 inhabitants (worldpopulationreview 2024). CAD3 holds an economic hub with the Industrial Zone of Douala -Bassa and Douala - Yassa. However, a large part of the population living in Douala 3 that does not benefit from these economic activities gives rise to a network of informal local economic activities. A mapping of the villages and neighborhoods of Douala 3 has been carried out and serves as a basis for the reflection study on the measures that must be put in place to counteract its uncontrolled population growth.

CANTON AND VILLAGE SCALE

The following scale of the 3rd Municipality is the canton that includes villages and neighbourhoods. Douala 3 has the Bassa canton. It is composed by twenty-three villages that includes the Bonadiwoto - Boko village. Ndogpassi Plage is part of the traditional extension of the village of Bonadiwoto – Boko headed by a Chief that respond to the Mayor of Douala 3.

NEIGHBORHOOD SCALE

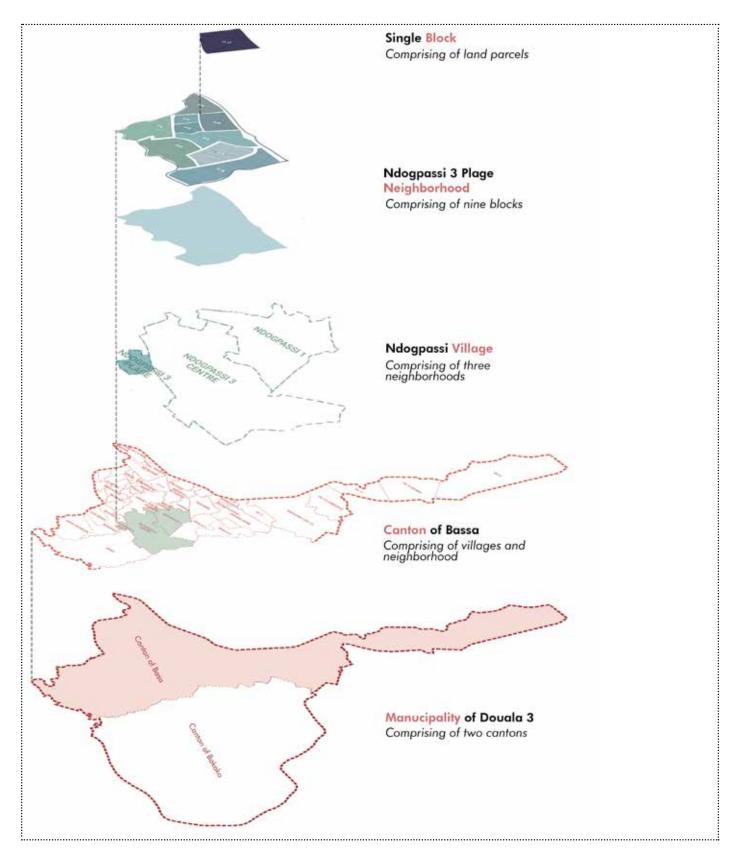
Ndogpassi Plage, is included in the group of 105 neighborhoods that characterize CAD 3. It has a neighborhood chief who answers to the village chief. It is delimited by the National Road N3. As a subdivision of a territory, under the village, it has an exposure to a marshy area to the extreme south and a hydromorphic soil.

The surface is approximately 0.25 km², while its population is significant.For the last national census of 2005, the population counted 7 800 inhabitants. In 2024 it is approximately 16 249 inhabitants (worldpopulationreview.com) and density of 65 Hab/m². It is expected that the population in 2035 will reach 23 550 inhabitants (growth of 3.03%). The trend is rural-urban since the population leads a predominantly rural lifestyle: agriculture, plantation and scattered economic activities.

BLOCK AND PLOT SCALE

Ndogpassi Plage is made up of 9 blocks which in turn are made up of plots of land. These blocks are a mix of different types of buildings ranging from high to low standards. Divided by traffic lanes, the blocks of Ndogpassi Plage are administered by block chiefs who are subordinated to the neighborhood chief.

DOUALA 3 ADMINISTRATIVE BOUNDARIES



OVERVIEW OF THE PILOT NEIGHBOURHOOD

01

NDOGPASSI PLAGE NEIGHBOURHOOD INTRODUCTION

Taking up the spatial attributes of the CAD3 in which it is located, Ndogpassi Plage (created in 1996) is geographically delimited by:

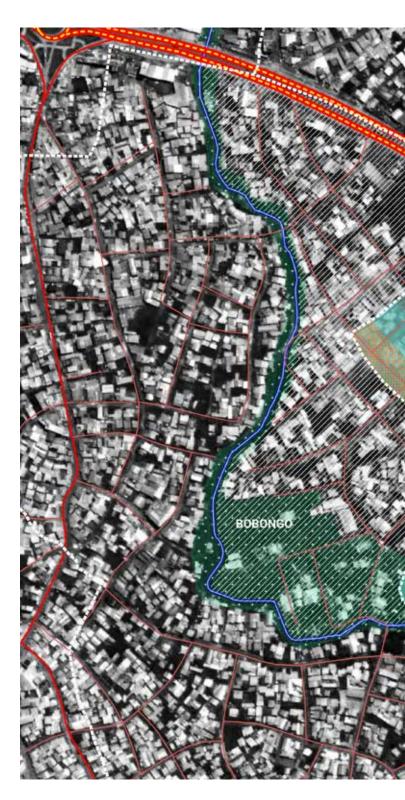
- to the north by the neighbourhood of Ndogpassi Centre,
- to the west by the Bobongoneighbourhood,
- to the east by the Boko neighbourhood with the "3 million" bridge,
- and to the south by the Cité Berge neighbourhood.

Formerly linked to Ndogpassi, the Ndogpassi Plage neighbourhood has been managed by Pierre Ekami since its creation.

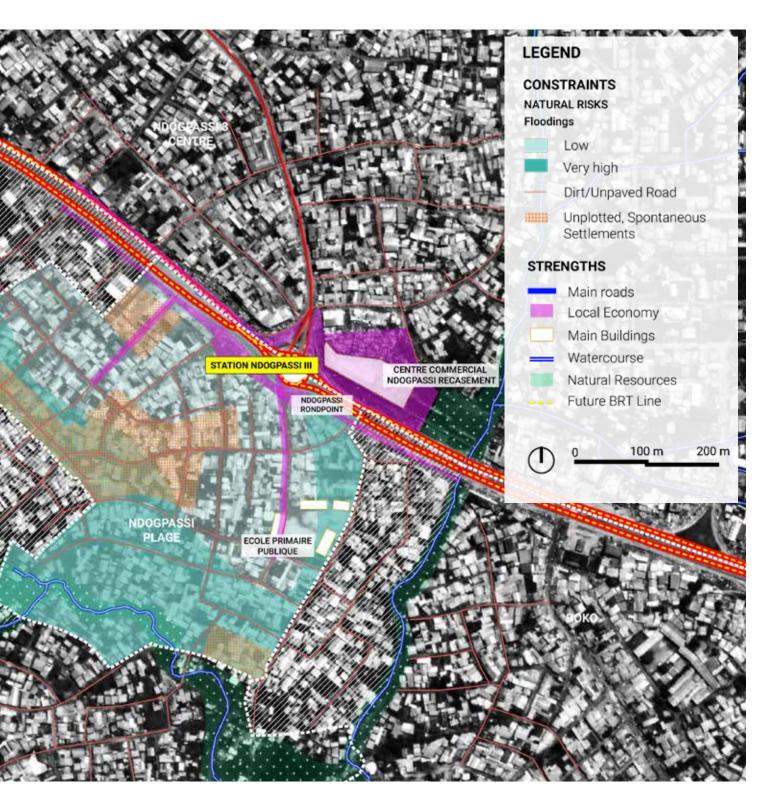
In line with the UPIMC program,me Ndogpassi Plage was designated as a pilot area of intervention because of the presence of urban challengies corresponding to various constraints of CAD3 neighbourhoods, but also with a view to boosting development from the smallest urban scale. With a significative presence of IDPs, Ndogpassi Plage is one of the main landing points for this group of migrants living in Informal in settlememts and with a high - or even very high - density.

Other challenges are:

- Governance. The neighbourhood of Ndogpassi Plage presents a complex management characterised by athe leading of different level of leading from the villages, neighborhoods and plots.
- Transportation and Inherent Infrastructure. Mobility from and back of the neighbourhoodd or within is challenging and costly due to the lack of a road network in good condition despite the pronounced proximity of the National Highway N°3;
- Basic urban facilities and services. The services, are more or less insufficient at the neighbourhood level. Ranging from educational institutions to health centres, the deficit in public provision creates opportunities for the private services, leading opportunities reserved for wealthy population;
- Environment. Ndogpassi Plage has an environment conducive to flooding due to its vegetation and soil typology. This environment is also affected by human activities which are leading to the urbanization of its swamp areas.



Sanitation. As the problems are linked, sanitation is impacted by the lack of waste management systems, insufficient road network, costy health services.



PERCENTAGE OF URBAN CHALLENGES



10% Unplotted and spontaneous settlements 23% Highly flooded area



LOCAL GOVERNANCE

Photo 01. Ndogpassi Plage housing, Douala 3, Cameroon Source: @ UN-Habitat 2024

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LOCAL GOVERNANCE

Ndogpassi Plage is divided into 9 blocks, which are themselves subdivided into plots. Its internal urban fabric is the result of the layout produced by plot owners. There are several types of boundaries in Ndogpassi Plage, namely administrative boundaries, traditional boundaries, and natural boundaries.

While traditionally, Ndogpassi Plage is under the dome of the chiefdom of Boko. This reality leads to misunderstandings that are nevertheless managed by the public authorities.

The building conditions range from high standards to very low standards with a strong connotation of "low standards". Regarding the dwellings, they vary from typology A10 (residential housing zone) to A11 (spontaneous habitat zone). However, there is a much greater concentration of spontaneous constructions in marshy areas, i.e. in blocks 2, 4, 6 and 7.

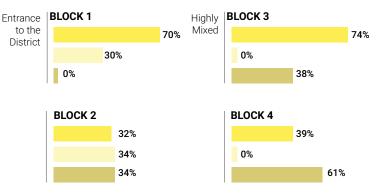
ADMINISTRATIVE BOUNDARIES OF BLOCKS

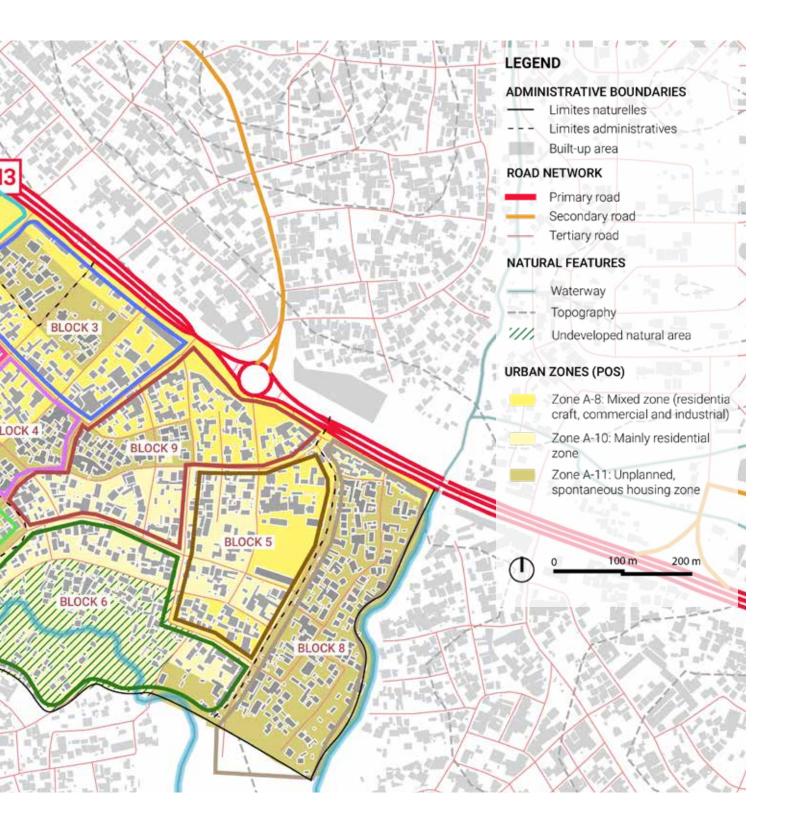
The subdivision of the district has gradually increased from 7 to 9 blocks. The growth of the blocks is due to the galloping population that has increased with the massive arrival of IDPs. The blocks are positioned in a crescendo or decrescendo according to the direction chosen by the observer

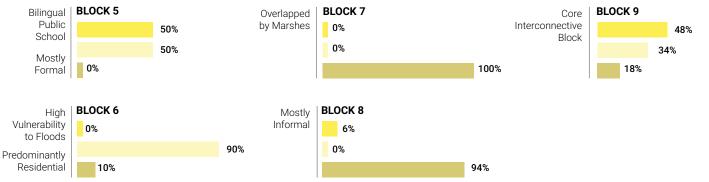
- 1. From the city centre towards the Ndogpassi district, the blocks are stratified from 1 to 9.
- 2. From Ndogpassi district towards the city centre, the blocks are classified from 9 to 1.
- 3. The central blocks of the neighborhood are:
- Block 1 is located at the entrance to the district,
- Block 5 with the bilingual public school,
- Block 6 is the block with the highest flood vulnerability rate.
- Block 7 is the block where the marshy area begins.



BUILDING CONDITIONS AND USE PER BLOCK







Graph 2. Building conditions and use per block in Ndogpassi Plage Source: @ UN-Habitat 2024



ENVIRONMENT AND NATURAL RISKS

Photo 02. Ndogpassi Plage green space, Douala 3, Cameroon Source : @UN-Habitat 2024

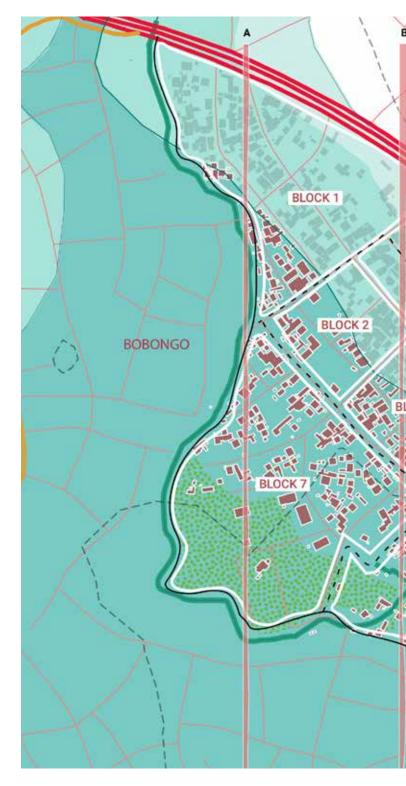
ENVIRONMENTAL RISKS

Naturally occupied by the coastal forest (FAO.org), Ndogpassi Plage is a highly flood prone zone – with heights sometimes exceeding one metre – due to its topography, its soil type, its vegetation, its climate (rainfall, etc.). Although humanized, the environment is nevertheless conducive to agricultural practices. Generally made up of banana trees, vegetables or fruits, in this case tomatoes, this peri-urban agriculture is of the following types:

- Home Gardens and
- Spontaneous vegetable gardens.

Spontaneous vegetable gardens are practiced along roadsides, while family-friendly ones usually occupy well-defined plots of land. This type of agriculture allowed families to carry on small businesses along the roads, which produced economic dividends. In another case - which is the most widespread - the harvest from this peri-urban agriculture is directed towards consumption at the family level.

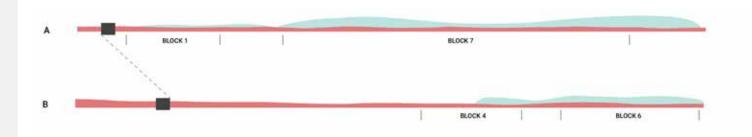
Ndogpassi Plage is drained by several seasonal streams, watercourses that tend to disappear due to the anthropization of this environment. The coastal forest, a fragile and protected ecosystem, is enormously solicited by the cutting of its flora, used as firewood...

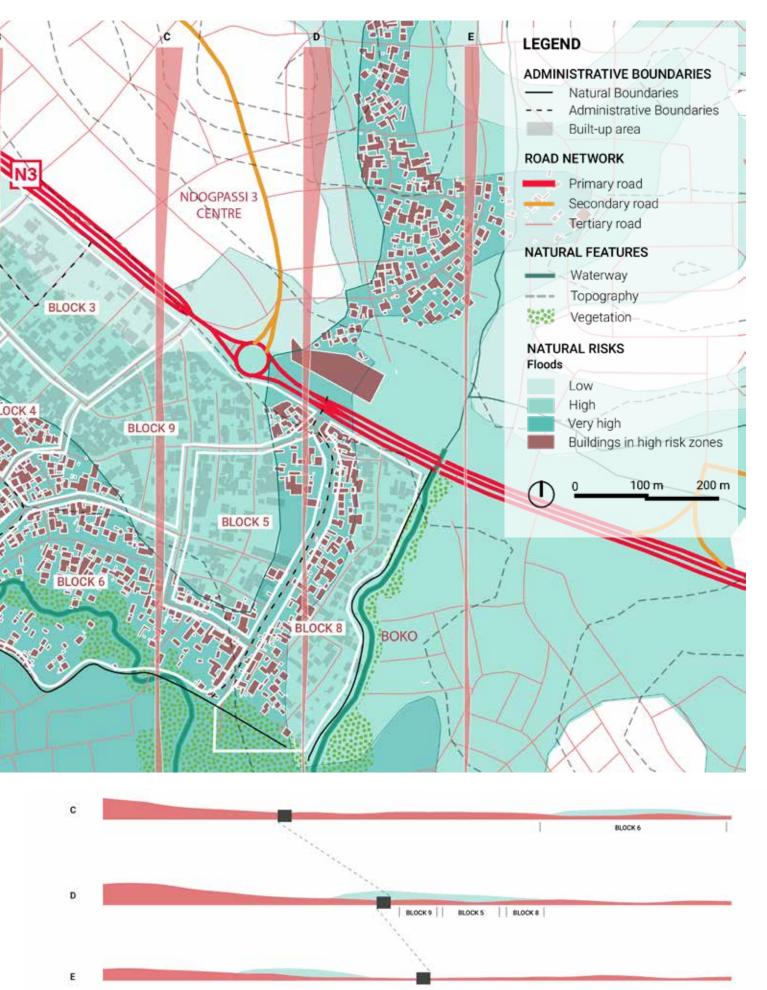


CRITICAL LEVELS OF FLOOD VULNERABILITY

N3 HIGHWAY

VERY HIGH FLOODS







CONNECTIVITY AND ACCSESSIBILITY Photo 03. Unpaved road in Ndogpassi Plage, Douala 3, Cameroon Source: @UN-Habitat 2024

CONNECTIVITY AND ACCSESSIBILITY

The Ndogpassi Plage district presents a paradoxical context. Although the **district lacks internal roads**, it is bordered by the "National Road N°3". Several unpaved tertiary-class roads, forming the internal road network of Ndogpassi Plage.

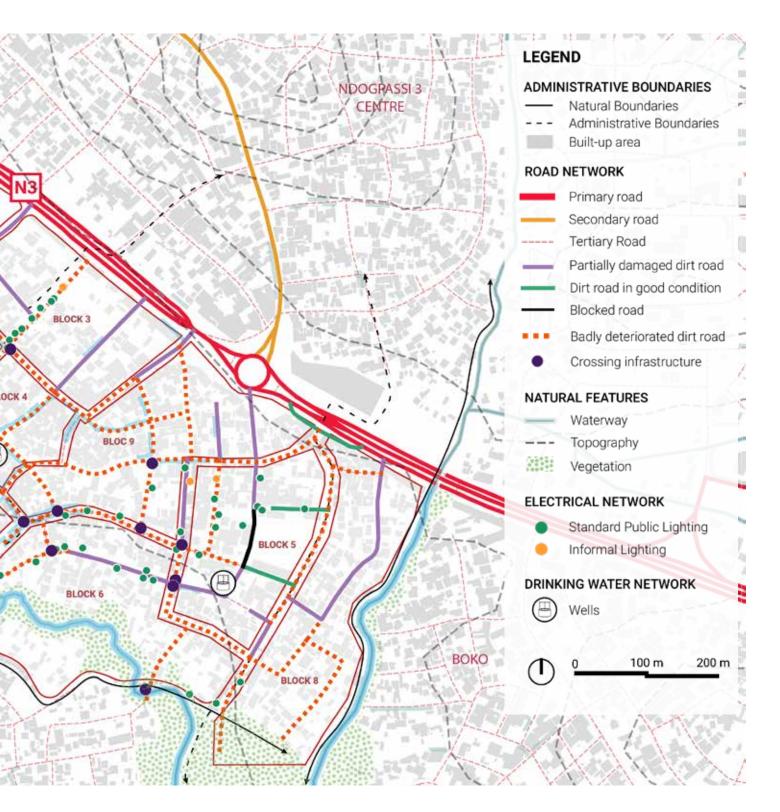
With dual utility, the Ndogpassi Plage road network provides access to the interior of the district (commercial spaces, clinics, etc.) while also connecting to other districts via the National Highway N°3. The dirt roads (unpaved) are bordered by gutters meant to evacuate wastewater or rainwater. The state of the roads in Ndogpassi Plage makes motorized travel difficult due to the district's sandy soil, as its name suggests, "Ndogpassi Plage". This difficulty is exacerbated during the rainy season, rendering the roads almost impassable.

Internal transportation is predominantly on foot or by motorcycle taxis, with fares ranging from 100 to 1,000 FCFA or more. The fluctuation in transport costs depends on factors such as the weight carried, distance traveled, number of passengers, and road conditions at the time of travel. Motorcycle taxis are located at strategic points that can be described as informal stations. These stations are generally located at the entrances to the main roads of the district:

- COGENI Entrance
- Entrance hardware store the regular
- Public School Entrance
- Pharmacy entrance time
- Santa Barbara Entrance
- The internal roads of the pilot district formed by "Dirt Roads" can be subdivided into classes:
- Degraded roads,
- Partially degraded roads
- And Roads in good condition.

The pilot district's internal roads, all dirt roads, can be classified into three categories: degraded roads, partially degraded roads, and roads in good condition. Accordingly, the road network is predominantly degraded, with some areas being very degraded. The absence of road compartmentalization increases the accident-prone nature of these roads.





PERECENTAGE OF STREET DETERIORATION

BADLY DETERIORATED DIRT ROADS 55%	PARTIALLY DAMAGED DIRT ROADS 30%		BLOCKED ROADS
		10%	5%



100 BLIC FACILITIES AND SOCIAL SERVICE Photo 04. Social service in Ndogpassi Plage, Douala 3, Cameroon Source : @UN-Habitat 2024

PUBLIC FACILITIES AND SOCIAL SERVICES

ECONOMIC CENTERS

The Ndogpassi Plage district does not have a market specific to its territory, forcing its populations to turn to the Ndogpassi market. The shopping areas in the Ndogpassi Plage district are located along the arteries which, it should be noted, are mostly streets related to the National N°3 and therefore to the Ndogpassi market.

EDUCATIONAL AND CULTURAL CENTERS

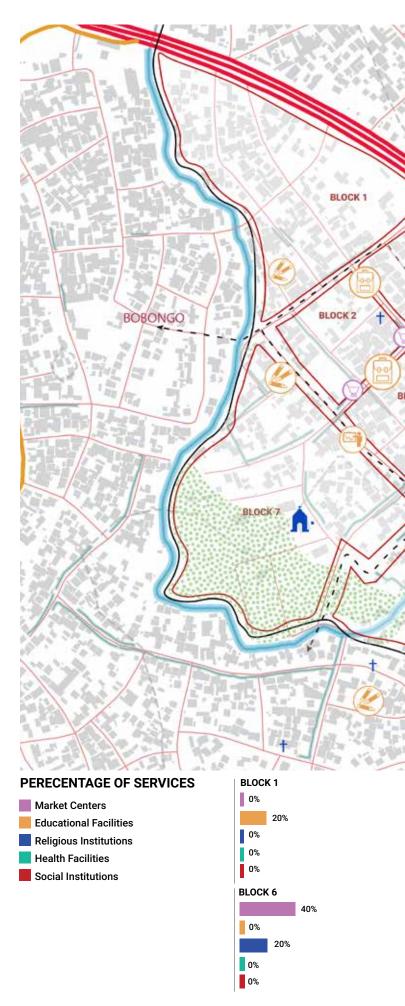
From an educational point of view, the Ndogpassi district has several primary schools and training institutes. Led by the overcrowded "Ndogpassi 3 Bilingual Public School" (facilities are insufficient to meet the needs of host communities and displaced people), Ndogpassi Plage has other private educational institutions. The majority of the latter are bilingual, responding to the linguistic problems of IDPs. Now that the language barrier has been lifted, there is still the financial problem that IDPs face.

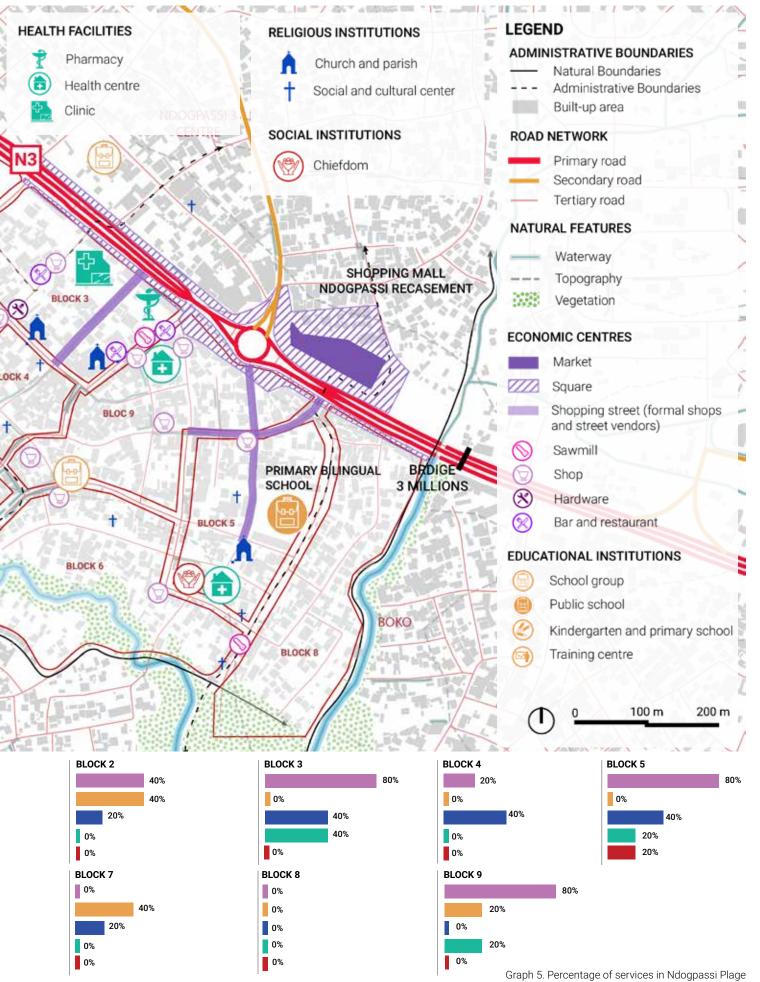
Private schools such as the bilingual school group La méthode de Boko or the bilingual school group Tchapda et fils have been built to meet the demand for education. This offer from the private sector is growing, as evidenced by other educational institutions under construction, such as the Windows School.

HEALTH CENTERS

There is a total absence of a local public health centre in Ndogpassi Plage , despite the presence of large-scale health facilities in CAD 3. Faced with the demand for health care from a growing population, private health centres have been set up to meet local needs (such as the Saint Albert le Grand health centre). The care provided in its private health services is not always accessible to everyone (disadvantaged families and displaced persons) in Ndogpassi Plage due to the cost of these services.

Faced with health costs, the use of traditional medicine is becoming essential for these populations. Remedies of all qualities (bark, herbs, etc.) and origins (depending on the region) are used to deal with cases of disease.



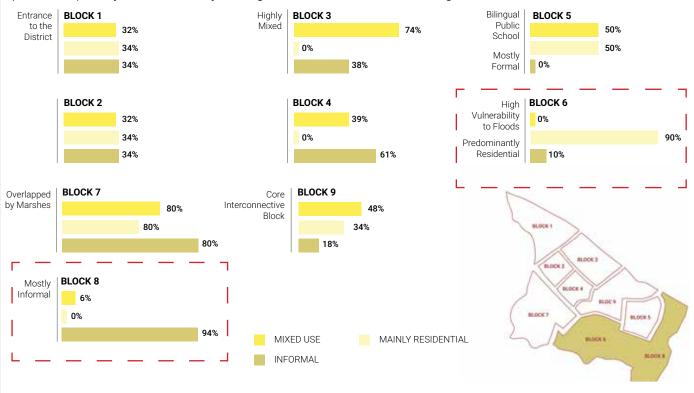


Source : @UN-Habitat 2024

CHALLENGES AND INTERVENTIONS NEEDED IN NDOGPASSI PLAGE

1. INCONSISTANT LAND REGULATION AND INFORMALITY

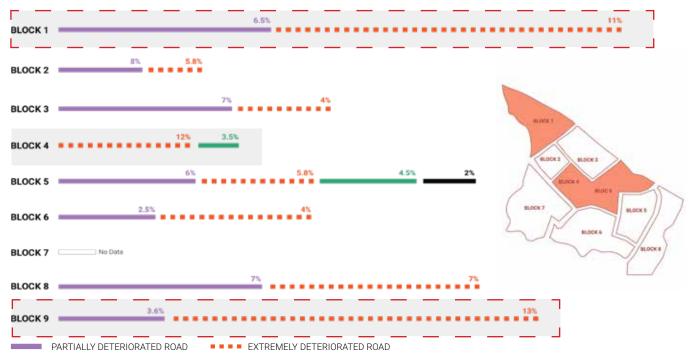
In Ndogpassi plage, informal settlements often arise due to inadequate urban planning and regulatory frameworks, leading to unclear land use, lack of adequate infrastructure, and poor living conditions. Blocks 6 and 8 have become pockets of poverty and vulnerability, lacking basic services and formal recognition.



Graph 6. Land use distribution in Ndogpassi Plage Source : @UN-Habitat 2024

2. FRAGMENTED INFRASTRUCTURAL NETWORKS AND UNEQUAL BASIC SERVICE PROVISION

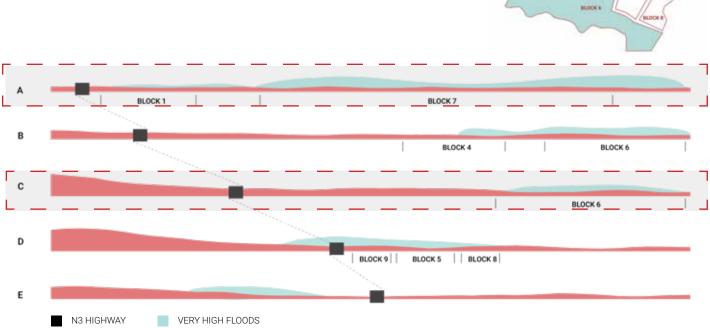
Block 9 and Block 4 are centrally located, making them hubs of activity within Ndogpassi Plage. The road infrastructure in these blocks is heavily used, leading to significant deterioration. Block 1, serves as the main entryway to the Ndogpassi neighborhood, and experiences constant traffic resulting in considerable road deterioration.



Graph 7. Road network conditions in Ndogpassi Plage Source : @UN-Habitat 2024

3. LAYERED VULNERABILITIES AND EXPANDING FLOODSCAPE

The flow of floodwater In Ndogpassi Plage from the lower-lying areas in the south increases flood risks. Specifically, Blocks 6 and 7 are the most vulnerable due to their lower terrains, leading to frequent and severe flooding. Floodwater also reaches N3 highway, disrupting transportation. These issues also showcase regulatory gaps in managing and planning for flood-prone areas.



Graph 8. Flow of floodwater in Ndogpassi Plage Source : @UN-Habitat 2024

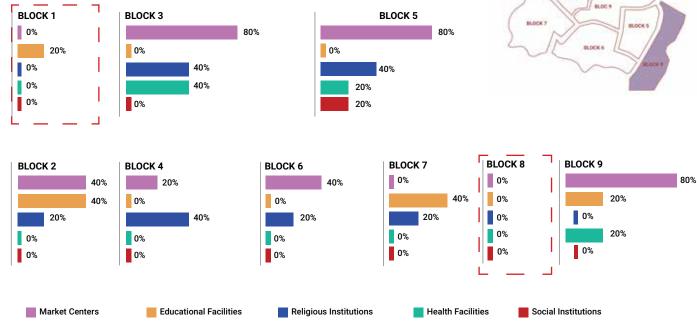
LOCK

BLOCK 3

BLOC

4. URBAN IMBALANCE, CENTRALIZED SERVICES AND MARGINALITY

This centralized nature of Blocks 2, 5 and 9 are causing disparities in access to education, healthcare, and economic opportunities for the marginal Blocks 1 and 8 which is reinforcing cycles of poverty and social exclusion within the Ndogpassi Plage Neighborhood.



Graph 9. Distribution of social services per block in Ndogpassi Plage Source : @UN-Habitat 2024

CHALLENGES AND INTERVENTIONS NEEDED AT NDOGPASSI PLAGE

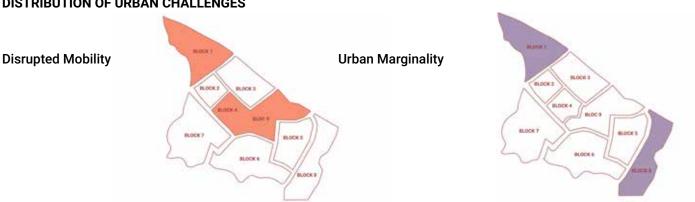
Key issues include significant urban expansion, marked by informal settlements and deteriorated infrastructure. Regions experiencing heavy traffic due to market activities face severe mobility constraints, which hampers economic productivity and exacerbates congestion.

Flood-prone areas, characterized by extensive vegetation coverage, highlight the vulnerability of the region to climate change impacts. This dual aspect is both a challenge and an opportunity. While these areas are susceptible to flooding, the existing vegetation plays a crucial role in mitigating climate change effects and promoting ecological balance. Effective management and climate-resilient infrastructure are required to protect both human settlements and natural ecosystems from adverse impacts.

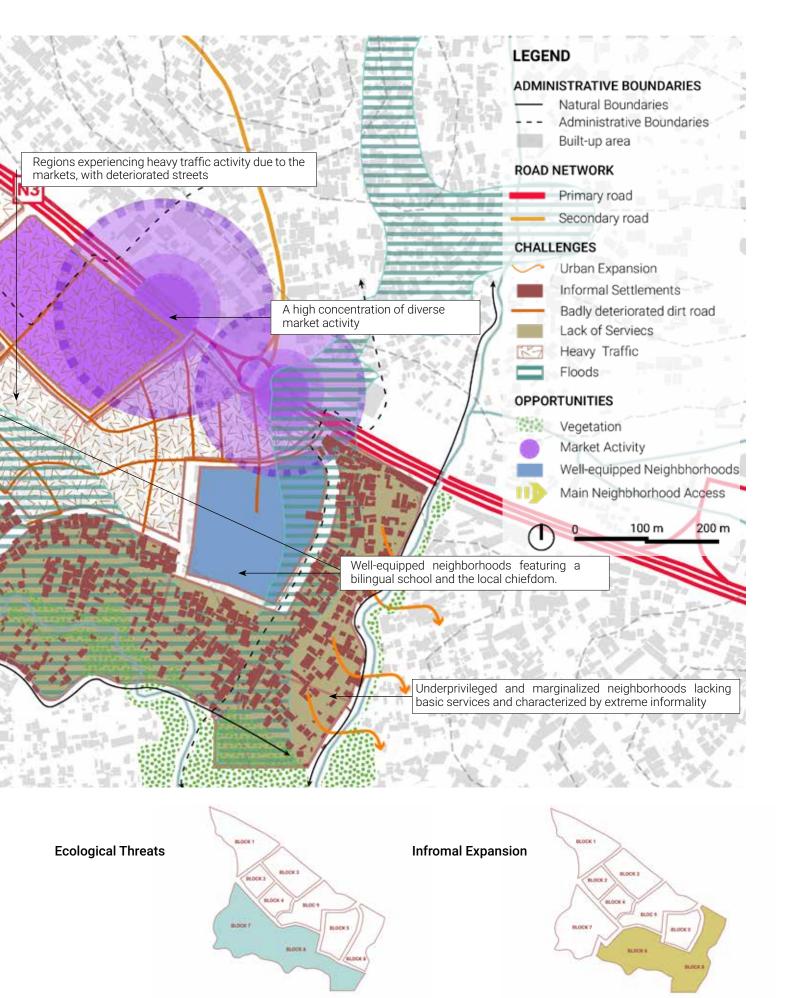
The presence of well-equipped neighborhoods, featuring the bilingual school and local chieftaincies, serves as a foundation for enhancing social cohesion and integrating internally displaced persons (IDPs) into the urban fabric. Market activities, despite contributing to traffic issues, represent a vital economic asset that can be leveraged for inclusive growth.

Targeted interventions in underprivileged and marginalized neighborhoods can address basic service deficiencies and reduce informality while also maintaining equitable urban growth.





DISTRIBUTION OF URBAN CHALLENGES



Graph 10. Distribution of urban challenges per block in Ndogpassi Plage Source : @UN-Habitat 2024

02 VISION

VISIONING WORKSHOP

This phase of the project is considered highly participatory and inclusive, involving key institutional actors as well as the target group of Intern Displaced Persons (IDPs) and the civil society representatives to provide input into the visioning process.

On 6 March 2024, the UN-Habitat Cameroon team organized a participatory workshop to define the desired Urban Vision for Douala 3 and the Ndogpassi Plage pilot neighbourhood for the next ten years. The workshop brought together 75 participants, including institutional representatives of the Douala City Council, the Mayor of Douala 3, heads of technical services of Douala 3 (social services, environment and waste management, infrastructure, architecture and construction) and line ministres such as: MINHDU, MINEE, MINTP, MINTRANS and DGSN. In addition, a significant number of internally displaced persons (IDPs) took part in the session, members of non-governmental organizations, Academia among others.

During the vision workshop, the audience was divided into six groups of eight participants, each with different backgrounds, to encourage collaboration.

The groups were mainly asked to

- Identify common main urban issues and priority areas of intervention.
- Mention Key words to validate the formulation of the Vision of Douala 3 and Ndogpassi Plage.
- Build the Optimal Scenario in line with the strategies of the Vision
- Integrating additional pilot projects to tackle urban challenges and enable sustainable solutions





Photo 05. Visioning Workshop Douala 3, Cameroon Source : @UN-Habitat 2024

VOICES OF THE LOCAL COMMUNITY AND INTERNALLY DISPLACED PEOPLE

During this phase of the project, a meeting and a questionnaire were submitted to IDPs and representatives of the pilot neighbourhood of Ndogpassi Plage, to ensure that the opinions of the target groups are integrated in the identification of major issues and solutions to be implemented in the future of Douala 3 in the next 10 years. The responses of the representatives of the group of Women, Youth, Men of IDPs are the synthesis of the vulnerable populations while the one the Chief of Ndogpassi Plage, refers to the opinions of the host community. The different voices were merged with the results of the official workshops to develop a roadmap of priority intervention areas. Three maiin guestions were asked to the different stakeholders to be able to compare the ir priorities.

QUESTION 1

1. As the representative of Douala 3, IDPs and community, what are the major socio - spatial challenges that displaced face?

QUESTION 2

2. Which solutions do you propose to meet these challenges?

QUESTION 3

3. Which opportunities would you like to ensure in the future of Douala 3 for IDPs?



REPRESENTATIVE OF YOUTH

QUESTION 1

- Limited access to quality education: Many IDP youth struggle to access quality education due to lack of resources, overcrowded schools, and financial constraints.
- Psychological support: The trauma and stress of the eviction is often prolonged, leading to depression among displaced youth in Douala 3.

QUESTION 2

- School support programme: Establishing a scholarship programme, providing school materials and establishing vocational training centres can help displaced youth access education and school development.
- **Community Integration Programme:** The organisation of community events, cultural exchange programmes and awareness-raising campaigns can strengthen social cohesion and reduce discrimination against young IDPs.
- Mental health services: The establishment of counselling services, support groups, and mental health awareness programmes can address the psychological needs of displaced youth in the Douala 3 District Commune.

QUESTION 3

- Quality education for all: young IDPs should have access to quality education and vocational training to build a successful career;
- **Inclusive community:** IDP youth are fully integrated into the local community and enjoy equal opportunities and access to social life.



REPRESENTATIVE OF WOMEN

QUESTION 1

- Lack of security: Displaced women face harassment and exploitation in public spaces due to the absence of adequate protection measures.
- Limited family support and access to childcare: Displaced families lack subsidies for basic needs and face challenges integrating children into schools.

QUESTION 2

- **Public security projects:** Improve lighting, increase surveillance, and deploy more security personnel in key public spaces to deter harassment and ensure safety.
- Job Creation Initiative: Partnering with local businesses and NGOs to create employment opportunities and provide entrepreneurship training can provide employment opportunities for displaced youth in the Douala 3.
- Children support programs: Regular Programme for integration and family support by the municipalities, NGOs and schools.

QUESTION 3

- **Improved security infrastructure:** The creation of public spaces with large, well-lit roads, reliable electricity, and enhanced surveillance will foster safer environments in Douala 3.
- **Social support for children:** Provision of social centers that provide regular assistance with subsidies for displaced families.



REPRESENTATIVE OF MEN

QUESTION 1

- Limited employment opportunities: High unemployment and limited employment opportunities make it difficult for young IDPs to find stable, well-paid employment.
- Limited access to quality health services and care: IDP youth have a significant health weakness.

QUESTION 2

- **Employment:** Establish businesses to employ IDPs so that these men can take care of their families.
- Affordable housing projects: Working with the government and NGOs to develop affordable housing projects can improve the living conditions of displaced youth in the Douala 3 Commune.
- Improving access to health care: Setting up a network of small clinics offering free or social health services and raising awareness of health issues can improve access to health care for displaced youth in Douala 3.

QUESTION 3

- Create business that can employ IDPs;
- Create a plantation because IDP men are used to working in the fields;
- Accessible health care: comprehensive health care services are effectively available to all young IDPs, to ensure their physical and mental well-being;

HOST COMMUNITY

" Our community is willing to welcome new comers. We aim to find common solutions to better living conditions .. We want opportunities for our youth that have the responsability to ensure the development of Ndogpassi Plage.. "



Chief of Ndogpassi Plage neighbourhood

PRIORITY AREAS OF INTERVENTION

Once the main challenges had been identified in the phase of Spatial Profiling, participatory SWOT analysis, interview with internally displaced persons and additional interview with the local community, made possible to highlight main thematic to focus of, namely priority areas of intervention for which they would have been proposed decisive solutions in the next phase of formulation of the Vision. These were associated with the Sustainable Development Goals to ensure their alignment with the mandate of the 2030 Agenda and the UN-Habitat approach.

CONTROLLING URBAN SPRAWL



Faced with population growth, the problem of access to land and decent housing remains major in the city of Douala and in Douala 3 in particular. The tension on the real estate market has led to an increase in prices and new housing configurations. Populations that cannot find housing in the city centre move to the outskirts of the district, while vulnerable people such as internally displaced persons settle in at-risk areas such as marshes. The District's Land Use Plan does not authorise human settlements in non-aedificandi areas (risk zone, flood zone, etc.), which severely limits the buildable area of the arrondissement and the availability of land. As a result, the existing housing supply is not sufficient in relation to population growth and affordable rents. There is no housing system for internally displaced people and vulnerable populations.

The major challenge is to control urban growth trends and the spatial distribution of populations in order to build a dense and compact metropolis.

The priority actions identified are as follows:

- Discourage urban expansion near risk areas;
- Identify non-building zones;
- Highlight the neighbourhoods housing IDPs and structure their housing through urban restructuring/requalification operations;
- Identify areas of extension;
- Encourage the densification of the least attractive neighbourhoods;
- Promote densification;
- Promote diversity in central areas.

DISTRIBUTION OF BASIC URBAN SERVICES AND FACILITIES



Poorly controlled urban growth and the influx of internally displaced persons are putting pressure on basic urban services (deterioration of access to services, increasingly acute pollution and sanitation problems, etc.) and public facilities. In view of the growing urbanization, Douala 3 is expanding by creating more and more differences and disparities between populations. In order to plan for more equitable urban development, the sectors of basic urban services (water, electricity, drainage, waste), education (school, high school, technical colleges), health, and social and cultural services (rehabilitation of the social centre, development of historical and cultural sites, etc.) must be strengthened and equitably distributed throughout the territory. In addition, the development of open spaces such as public spaces, tourist sites, make it possible to promote interactions between individuals and participate in the maintenance of social cohesion.

The priority actions identified are as follows:

- Extension of the drinking water and electricity network;
- Improve the waste collection and management service;
- Increase the level of services of existing facilities (schools, health facilities, etc.).

CONSOLIDATION OF THE ROAD NETWORK

11	9	10 MILLION
A Ba		l (‡)

Douala 3 benefits from a structured road network composed of primary, secondary and tertiary roads. The network consists of three main axes interconnected with an unspecified network of secondary and tertiary roads of basic development. It is relatively dense but does not allow traffic to be managed in the city centre The main roads are used for commercial activities rather than for the mobility of people and goods (Ndokoti crossroads). The consolidation of the road network consists of promoting economic development by favouring links between administrative, economic and residential areas.

The priority actions identified are as follows:

- Improve the main entrances to the district attached to the national road;
- Improving service conditions: maintenance and development of the road network, development of the drainage network;
- · Create secondary roads in the peri-central districts;
- Develop tertiary roads to ensure the redistribution of secondary road traffic in urban areas, neighbourhood units and business parks;
- Promotion of soft mobility: development of sidewalks and pedestrian paths;

STRENGTHENING PUBLIC TRANSPORT



The supply of public transport is insufficient in relation to demand. The road network has deteriorated, public transport is in deficit, and coverage remains very uneven. These combined elements have contributed to congestion in the network and the intra-urban transport system.

The priority actions identified are as follows:

- Optimising the existing public transport offer: increasing bus service lines;
- Encouraging and developing intermodality for residents
- Strengthening the inland waterway transport system;
- Development of landing stages;
- Flow regulation.

PRIORITY AREAS OF INTERVENTION

MANAGEMENT OF NATURAL HAZARDS



The existing situation is characterized by the invasion of risk areas (areas with steep slopes, marshy areas, etc.) for various reasons. The long-term objective is to limit or even stop urban expansion in these areas and to ensure a sustainable, safe, healthy and secure environmental environment. In the longer term, it is necessary to take measures to resettle populations occupying at-risk and vulnerable areas in order to develop and protect fragile ecological areas.

The priority actions identified are as follows:

- Identification of areas at high risk of flooding;
- Preservation of swampy areas from encroachment;
- Limitation of new constructions (risk of landslides).

DEVELOPMENT OF NATURAL RESOURCES

Increasing urbanization on the outskirts threatens the ecological balance of the Douala 3 district and the subsistence economy of rural communities. The existing situation is characterized by the degradation of the natural environment, the encroachment of mangrove areas, the destruction of terrestrial and forest ecosystems, and water and air pollution. To preserve and enhance this biodiversity and these natural spaces,

The priority actions identified are as follows:

- Mangrove restoration: reforestation;
- Maximization of peri-urban agriculture;
- Protection of watercourses.

EXISTING - CREATION OF NEW CENTRALITIES



Douala 3, with its strategic position, its ecotourism potential, its industries and its strong workforce, strives to position itself as an imposing pole to act on the economy of the City.

To this end, the objective is to develop and diversify economic sectors while considering the orientations of the SDGs and identifying new areas of extension. Thus, accelerate the economic growth of Douala 3 and create job opportunities by relying on the existing industrial and tertiary dynamics and the potential of handicrafts. Indeed, companies in the primary, secondary and tertiary sectors have settled in the first industrial zone and the new zone along the RN1. The identification of other poles will make it possible to balance the economic dynamics of the DLA3, also becoming a source of employment thanks to the installation of new companies. Other negotiations are to be expected in this perspective of private-public partnership (the development of public facilities and road infrastructure).

The priority actions identified are as follows:

- Enhance existing economic hubs (industrial zone, China Mall shopping area, the triangle of centrality)
- Structuring the informal economy;
- Valuation of the industry;
- Creation of commercial areas;
- Promotion of the local economy: handicrafts.

EQUITABLE DISTRIBUTION AND CREATION OF SOCIAL SERVICES IN THE NORTH AND SOUTH-EAST



ESTABLISHMENT OF A NETWORK OF PUBLIC SPACES - ENHANCEMENT OF THE NATURAL AND CULTURAL HERITAGE



Ensuring a fair distribution of services is a crucial aspect of the social responsibility of a District Municipality. Supply chain management is one of the key areas in which the DAC3 can address the challenges of supporting and supporting vulnerable populations, including IDPs. First, equitable distribution and creation of social services helps to ensure that all communities involved are treated equally. This includes suppliers, manufacturers, distributors, retailers, and customers. Fair treatment of stakeholders helps build trust and long-term relationships, which are essential to the success of the business. Second, fair distribution helps reduce the risk of supply chain disruptions.

The priority interventions identified are as follows:

- Enhance existing public services, such as educational and healthcare facilities.
- Develop social centers to meet community needs.
- Create inclusive public spaces to foster community interaction.

The establishment of public spaces can foster social cohesion between IDPs and host communities by addressing social and economic disparities while promoting sustainable and inclusive environments for interaction. These spaces also support mental well-being and resilience through access to recreation and cultural identity. Douala 3's rich cultural and architectural heritage presents an opportunity to drive economic revitalization. Enhancing heritage promotes local pride and cultural integration while preserving valuable resources. Moreover, such interventions can stimulate economic opportunities, such as tourism and local markets, and contribute to sustainable urban development by improving environmental quality and connectivity.

The priority interventions identified are as follows:

- Creation of walks and rest points along the edge of the river
- Creating a green-blue frame
- Creation of parks, esplanades
- Promotion of eco-tourism
- Identification of historic sites

PRIORITY AREAS OF INTERVENTION

The workshop summary table outlines key challenges and priority theme s of intervention, across the two scales: the CAD3 Subdivision and Ndogpassi Plage pilot neighborhood. This table consolidates inputs from multiple participatory activities such as: workshops, interviews and bilateral meetings with local authorities from CAD3, the target group and key stakeholders. As a result, tailored interventions were designed to address these issues at each scale while ensuring that all actions are aligned with the Sustainable Development Goals (SDGs).

IDENTIFICATION OF CONSTRAINTS

Hence, appropriate responses were prioritised. The emphasis was placed on:

- Land use: spontaneous and undeveloped urban fabric
- Environment and risks: landslides and landslides, high rainfall and flooding due to the typology and topography of the soil
- Basic urban facilities and services: Inequitable distribution, lack of efficiency of service

SCALE	THEMATICS	INTERVENTIONS
CAD3 Ndogpassi Plage	LAND TENURE	ADEQUATE LAND USE AND PROPER PLANNED HOUSING
CAD3		PROTECTING, ENHANCING AND DEVELOPING THE
Ndogpassi Plage	NATURAL HAZARDS	NATURAL HERITAGE
CAD3	CONNECTIVITY AND MOBILITY	STRENGTHENING TRANSPORT INFRASTRUCTURE AND DEVELOPING INTERMODALITY
Ndogpassi Plage		INTERMODALITT
CAD3	ACCESS TO SANITARIAN, EDUCATIONAL AND SOCIAL FACILITIES	IMPROVING ACCESS TO SANITARIAN, EDUCATIONAL AND SOCIAL FACILITIES
Ndogpassi Plage		
CAD3	BASIC SERVICES - WASTE	IMPROVING ACCESS TO WASTE
Ndogpassi Plage	MANAGEMENT	MANAGEMENT
CAD3	BASIC SERVICES - WATER	IMPROVING ACCESS TO WATER DISTRIBUTION AND
Ndogpassi Plage	DISTRIBUTION AND TREATMENT	TREATMENT
CAD3	BASIC SERVICES - ELECTRICITY	IMPROVING ACCESS TO ELECTRICITY SERVICES
Ndogpassi Plage		SERVICES
CAD3 Ndogpassi Plage	ECONOMIC CENTERS	STRENGTHENING AND DIVERSIFIYING ECONOMIC CENTRES

ACTIONS	SDGs
 Plan the expansion and densification zones of Douala 3 Council (CAD 3) based on demographic projections. Follow a higher density urban growth model, favoring the compactness of the CAD 3 around mobility nodes, services, and infrastructure. Promote alignment and compliance with urban/city planning rules in urban and territorial planning practices. Ensure better monitoring of land management. Reserve land to accommodate public facilities and infrastructure. Protect vulnerable populations and rehouse displaced persons. 	11 10 <
 Include climate change adaptation and mitigation measures in urban planning documents and regulations. Promote the protection of natural ecosystems and agricultural areas in territorial planning practices. Develop a network of natural parks to enhance the banks of the Dibamba river. 	
 Promote housing adapted to flood zones. Encourage peri-urban agriculture. 	6 Set and the constraints 3 Instruction 13 and the constraints Image: Constraint constraints Image: Constraints Image: Constraints Image: Constraint constraints Image: Constraints Image: Constraints
 Improve and expand the road network within CAD 3 and connection with other council of Douala City. Reduce congestion on main roads by strengthening the network of secondary roads Optimise the pubic transport offer. Encourage resilient construction of road infrastrucutre with materials adapted to flood zones. Develop river transport as an alternative to the automobile and to upgrade the banks of the Dibamba. Connect the secondary roads to the tertiary roads. Asphalte tertiary roads. 	11 minutesian 11 minutesian 9 minutesian 11 minu
- Develop soft mobility (pedestrian, cycling) at the heart of urban planning and development of the Douala 3 council.	
 Integrate the health, education and social dimension into land-use planning practices. Promote the creation of affordable public education and health facilities. Increase the number of public health facilities to meet demographic projections. Ensure equitable distribution of health services in rural areas. Create recreational and leisure spaces to maximize, among others, interaction between displaced populations and the host community. 	
 Create a first aid unit in the neighbourhood for rapid medical care before transferring patients to a referral hospital. Improve access to medicines through formal pharmacies that are equitably distributed in the neighbourhood. 	10 (1000) 17 (1000) 17 (1000) 10 (1000)
 Strengthen and develop the waste collection system in more disadvantaged neighborhoods. Promote the installation of bins, particularly in rural neighborhoods. Promote awareness of recycling and waste treatment through campaign of sensibilization. Augmenter les centres de collecte des tri sur le territoire 	11 strength at 12 strength at 15 star 12 strength at 15 star 13 strength at 15 star 14 strength at 15 star 15 star
 Create a collection and sorting unit for plastic and organic waste. Promote local community engagement (youths, IDP) initiative to boost the waste collection system. Improve maintenance of drains and green spaces. 	🟹 -w 🐼
 Strengthen and expand the drinking water supply network in CAD3, prioritising areas with high demographic density as well as rural areas. Improve the wastewater treatment system. 	
- Create a network of drillings in the blocks to improve water supply in the neighbourhood.	
 Promote the installation of households to the main electricity network, particularly in informal neighborhoods. Equitable provision of electricity of all the neighborhoods. Extend the electricity network to rural areas. 	
 Equitable provision of electricity of all the blocks in the neighborhoods. Extend the street light network in the neighbourhood blocks to improve safety. 	/ ⊒urace ∛ _/↓ 3 aux _/↓
 Create new economic centers. Improve local economic opportunities on a CAD3 scale, including traditional activities and crafts. Develop fish farming activities and aquaculture. Promote the sustainable development of tourism at the CAD3 scale. 	8 REAL CARNON 8 REAL CARNON 1 Real 1 Real
- Transform informal economic linearities in formal economic hubs.	tivêêdî ©

URBAN VISION AT A GLANCE

EQUIPPED STRUCTURED CULTURAL CULTURAL CULTURAL CREATIVE CREATIVE LIGHTENED ACTIVE SECURE CONNECTED SUSTAINABLE RECREATIONAL PROSPEROUS

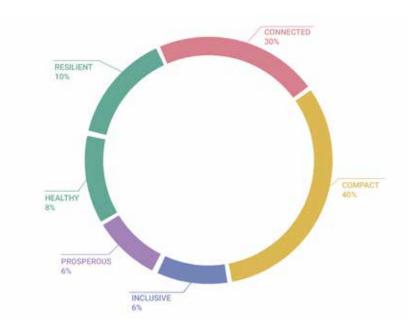


Fig. 4: Recurrence precentage of vision key words proposed by IDPs and Host community Source: @UN-Habitat 2024 During the Vision workshop, participants were asked to highlight the keywords on which they would like the development of Douala 3 and Ndogpassi Plage to focus.

Local authorities as well as a representative number of displaced persons, residents of the Ndogpassi Plage neighborhood, local NGOs, among others, proposed several keywords that they wish to be included in the final Vision statement. The frequency with which a keyword was suggested was taken into consideration.

Accordingly, the highest number of times a certain keyword was suggested among the audience, indicates its relevance to the target group, and therefore its highest priority in its inclusion in the vision statement.

This participatory brainstorming helped identify 5 main keywords

- Compact
- Connected
- Resilient
- Prosperous
- inclusive

As a result, the UN-Habitat team and the target audience generated a vision statement for the Douala 3 and Ndogpassi Plage neighbourhood that considers their needs and aspirations for sustainable and prosperous development in the next 10 years.

The Douala 3 and Ndogpassi Plage Vision states:

By 2035, the Douala 3 Municipality will be compact, connected, resilient, healthy, in a prosperous and equipped environment.

These keywords will turn on veritable strategy, that have been punctually developed for the Douala 3 Municipality and Ndogpassi Plage, namely



Compact City

Connected City

Resilient and Sustainable City

Prosperous City

Inclusive and Recreative City

By 2035, the Douala 3 Municipality will be compact, connected, resilient, healthy, in a prosperous and equipped environment.

VISION FORMULATION

By 2035, the Douala 3 Municipality and Ndogpassi Plage will be compact, connected, resilient, healthy, in a prosperous and equipped environment.

The UN-Habitat Cameroon team has developed from the five objectives for Douala 3 and Ndogpassi Plage, city models that is better adapted to the local reality and respond to the challenges facing the 3rd Subdivision.

it is important to specify that this vision, the strategies and interventions that result from it are aligned with the Land Use Plan (POS) of the Douala developed by Douala City Council in 2015.

The Visioning for Douala 3 and Ndogpassi Plage is a process by which communities and key stakeholders define the future that they envision for their Subdivision. This future should include the strengths and attractions of the Municipality of Douala 3 that should be promoted while identifying and addressing the existing challenges with innovative sustainable solutions.

The vision aims to define what Douala 3 should look like spatially, socially, economically, and environmentally in ten years, therefore it has been broken down into 5 main thematic strategies.

5 THEMATIC STRATEGIES OF THE VISION:



According to the principles reiterated in the New Urban Agenda (Habitat III, 2016), the compact city consists of controlling urban expansion - which consumes space - through the densification of buildings, the transformation of housing patterns, equity in the face of deficits in urban services and basic services, the application of a mix of uses and the attractiveness of the services it offers through the creation of revitalized centralities. The compact city allows for a high residential density in mixed neighbourhoods.



The connected city promotes mobility and displacements through an efficient transport system. The modes of transport are diversified and financially and spatially accessible to the new comers and host communities. Mobility infrastructures allow people to reach key hubs but also inner part of neighbourhoods through a paved and equipped road network.



A RESILIENT AND SUSTAINABLE CITY



A RECREATIONAL AND INCLUSIVE CITY

A sustainable city offers the enhancement of the conditions of existing natural habitat such as : rivers, forests, mangroves; and their protecion. The waste management systems suggested are ecologically friendly. A sustainable city also promotes citizens' participation in decision-making processes concerning the identification of areas at risks among others. The resilient city relies on endemic strategies, to mitigate, adapt and integrate innovative ways to tackle climate change.

A recreational city would include land designed and built for leisure activities, tourism and community gatherings. It would therefore include playgrounds, cultural venues and other facilities that attract diverse groups: women, youth, seniors and displaced persons. It would be a pioneer in creating interactions between these diversities. At the same time, by creating community synergy, the recreational city with its public spaces would promote innovative neighbourhood design and environmental protection.



PROSPEROUS CITY

This model offers a structured and diversified economy in which economic centralities such as markets and shopping streets, play a major role in the attractiveness and animation of the city. Commercial infrastructures offer job opportunities to internally displaced and vulnerable people.The prosperous city also involves the identification of new economic centres while structuring of the informal economy.

CONTROLLING URBAN SPRAWL

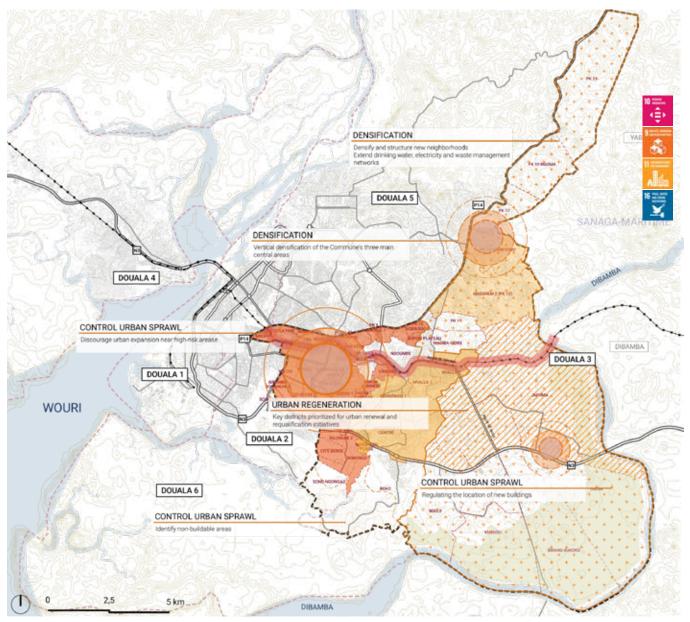
Douala 3

Following the Spatial analyses, urban sprawl was highlighted in the rural areas of the North of CAD 3: PK14, PK17 and PK 21 but also in the marshy areas of the South including the districts of Bwang Bakoko, Yansoki and Yassa. However, this sprawl will be channelled through high-rise densification operations that will be carried out in the first urbanized districts of the commune in the North-West, namely the Logbaba



COMPACT CITY

continuum, the Dibom and the village of Ndogpassi among others. In a second phase, development work will be carried out in the identified extension areas such as PK 14 and PK 17 or Japoma following the installation of new facilities (University, Market or Sports Complex). In addition, an equitable distribution of basic urban services serving new housing will be proposed, while improving existing ones.



LEGEND

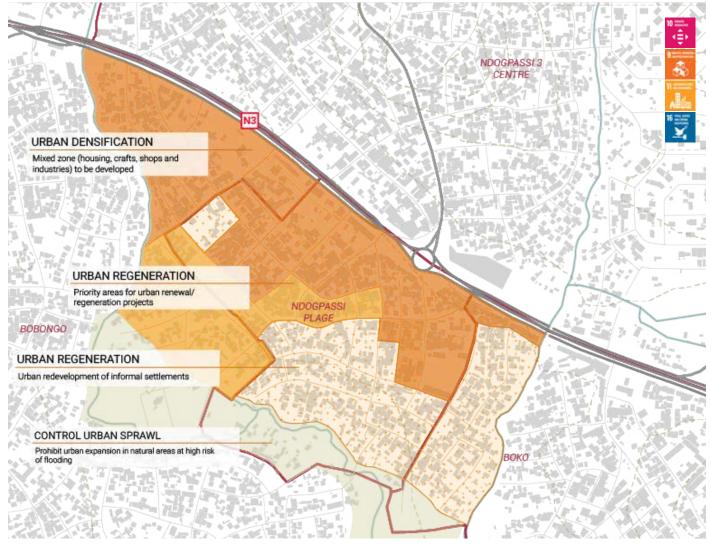
- CONTROLING URBAN DEVELOPMENT
- Discouraging urban sprawl near at-risk areas
- Regulating the location of new buildings
- Identifying non-constructible areas
- Neighbourhoods with high population density

- DISTRIBUTING BASIC URBAN SERVICES
- Neighbourhoods to be developed as a priority with a high concentration
- Prioritised neighbourhoods for the operation of urban renovation/renews
- Densifying and structuring new neighbourhoods Extension of the drinking water, electricity and waste collection networks
- Densification hub

Ndogpassi Plage

The predominant informal housing in the neighbourhood will be addressed through urban requalification actions consisting of high-rise densification operations (blocks 2 and 4) and relocation of populations living in flood zones (blocks 6 and 7). Then, it will be imperative to ensure mixed use characterised of commercial and residential areas, particularly in the blocks close to the RN3 (blocks 1,

3 and 9). **Informal neighborhoods,** particularly in the eastern side near Boko, will be **restructured while maintaining a variable density scale.** This work will be part of a long-term program to restructure precarious housing.



LEGEND

CONTROLING URBAN DEVELOPMENT

Regulating the location of new buildings

DISTRIBUTING BASIC URBAN SERVICES

Mixed zone (housing, crafts, shops and industry) to be developed (high density)

Prioritised zones for the operation of urban renovation/renewal (medium density)

Restructuring of informal settlements (low density)

IMPROVING CONNECTIVITY, MOBILITY AND ACCESSIBILITY

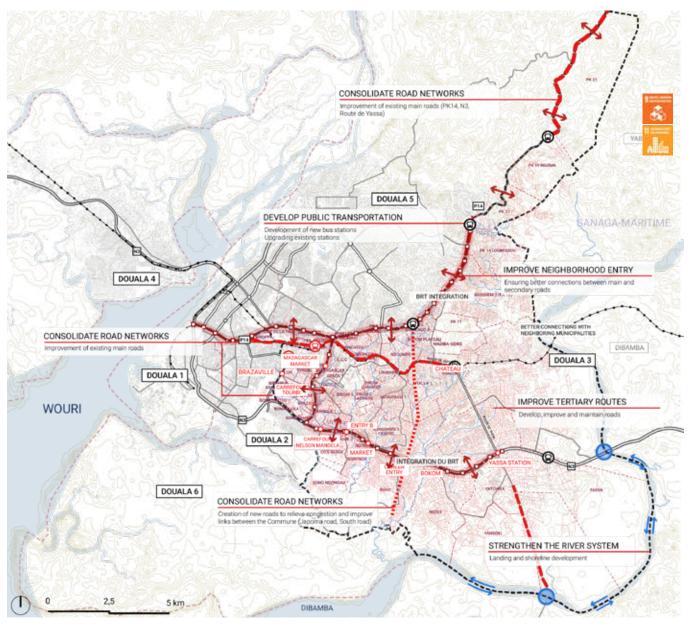
Douala 3

The main objective is to relieve the RN3 of the congestion it is affected by, resulting from the North and East mobility flows by setting up ramps connecting the RN3 to the Logbaba road (parallel to the railway line). It will also involve strengthening the secondary roads of Japoma, Dakar and Yassa which will provide access to the Bwang Bakoko pier.



CONNECTED CITY

The implementation of a high-speed bus transport system (BRT), currently in the finalization phase is a key element. It will serve the entire CAD3 with a view to consolidating the road network. Finally, it will be proposed to improve the quality of traffic by **developing** the primary road of P14 serving the new extension zones to the North.



LEGEND

- CONSOLIDATING THE ROAD NETWORK
- Consolidation of the existing road network
- Construction of new roads
- Improvement of the main entrances to neighbourhoods
- Maintenance and development of the tertiary road network Extension of the drinking water, electricity and drains network
- BRT
- New bus station

Development of a river transport system (landings) River transport flows

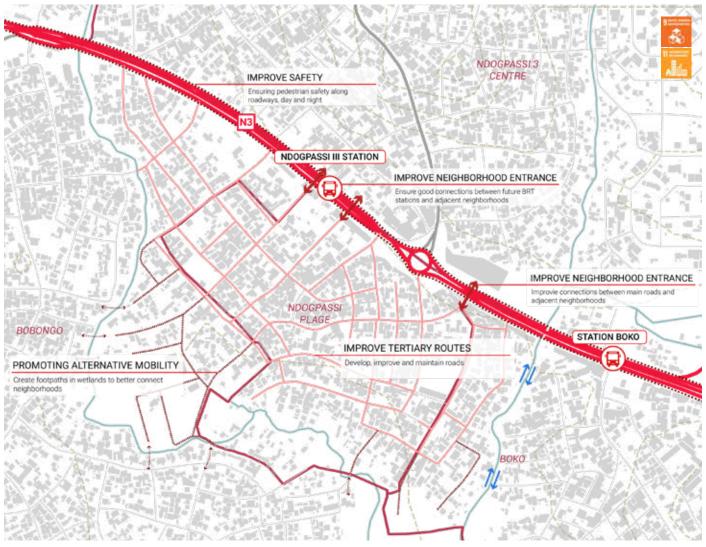
- niver dailsport nons
- Consolidation of the river network for timber transport

STRENGTHENING OF THE RIVER TRANSPORT SYSTEM

Ndogpassi Plage

At this level, the Vision aims to improve the entrances from the main road to the internal areas of the neighbourhood. This it is translated into the improvement of tertiary earthen roads with surfacing operations and installation of rainwater drainage channels. It also promotes soft mobility by creating pedestrian paths and cycle paths.

This improvement of the road network will be done in conjunction with the installation of new electricity poles, the repair of old defective ones and the removal of informal poles. This action should allow a diversification of means of transport mainly carried out by two-wheeled vehicles towards four-wheeled vehicles (private, taxis or buses).



LEGEND

BRT

- CONSOLIDATING THE ROAD NETWORK
- Consolidation of the existing road network
- Improvement of the main entrances to neighbourhoods
- Maintenance and development of the tertiary road network Extension of the drinking water, electricity and drains network ۲
- STRENGTHENING OF THE RIVER TRANSPORT SYSTEM
- River transport flows
- ENHANCING SOFT MOBILITY
 - Developing a network of pedestrian paths

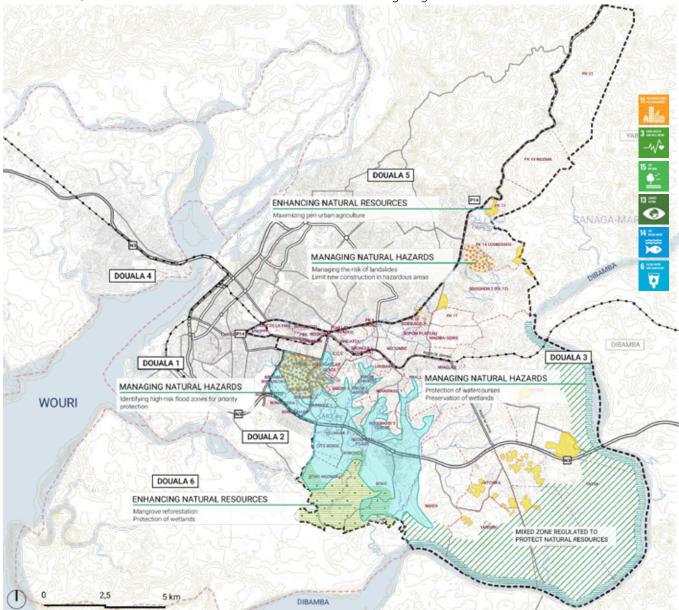
VALUING NATURAL RESOURCES, PREVENTING RISKS

Douala 3

The swamp areas of the d of Bwang Bakoko, Yassa, Ngodi Bakoko, Yansoki neighbourhoods will be the subject of environmental protection operations with a view to protecting these ecosystems. **The Boko mangrove area will benefit from reforestation procedures** in the face of deforestation in response to its rapid destruction. A particular attention will be given to areas at high risk of landslides in the Center West and North of the municipality. These areas should be marked as unbuildable. **To enhance the value of natural resources, a regularization of peri-urban agriculture** (mainly consisting of tomatoes, cabbages, cucumbers, etc.) will be carried out in the areas south of the RN3. In addition to peri-urban agriculture, fishing activities should be maximized at the Bwang Bakoko landing stage.

A RESILIENT AND

SUSTAINABLE CITY



ENHANCING NATURAL RESOURCES

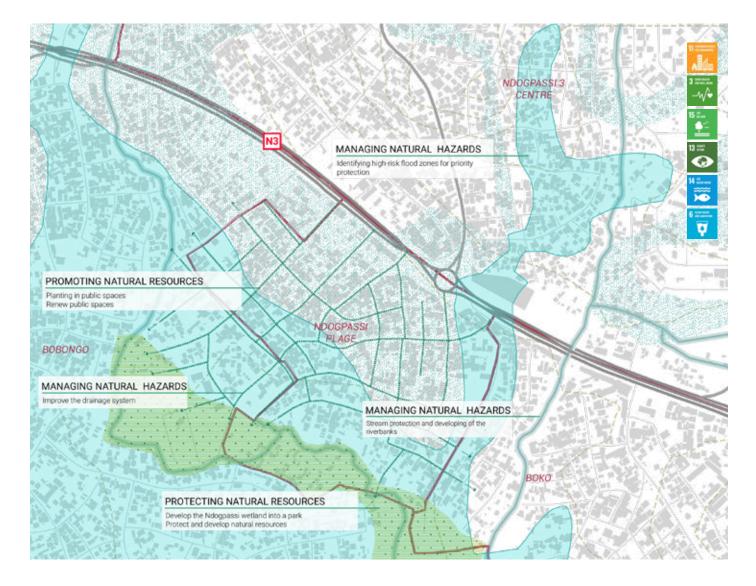
- Reforestation of the mangrove and protection of wetland
- Maximisation of the peri-urban agriculture
- ///// Restricted mixed zone to protect natural resources

MANAGING NATURAL RISKS

- Prevention of risks of landslides / Restriction of new constructions
- Protection of watercourse / Preservation of wetlands
- Identification of high risks flood zones to be protected in priority

Ndogpassi Plage

Vulnerability to natural hazards remains the priority at the neighborhood level. Considering this, the identification of flood risk areas, especially blocks 6 and 7, will be done upstream of the establishment of a rainwater and river drainage system. Following, it will be the case to discourage forest deforestation activities while ensuring the protection of the inner drains. In line with the exploitation of natural resources, attention will also be paid to the cultivation of fruit trees (orange, coconut trees, etc.) at the intersection of internal roads or market gardening (tomatoes, peppers, etc.) present on vacant land.



ENHANCING NATURAL RESOURCES

. Reforestation of the mangrove and protection of wetland

Green grid (tree plantation, peri-urban agriculture)

MANAGING NATURAL RISKS

- Protection of watercourse / Preservation of wetlands
- Identification of high risks flood zones to be protected in priority
- Low risks flood zone

BOOSTING ECONOMY - ACTIVE CITY

Douala 3

The initial strategy consists of creating a triangle of economic centrality with as vertices:

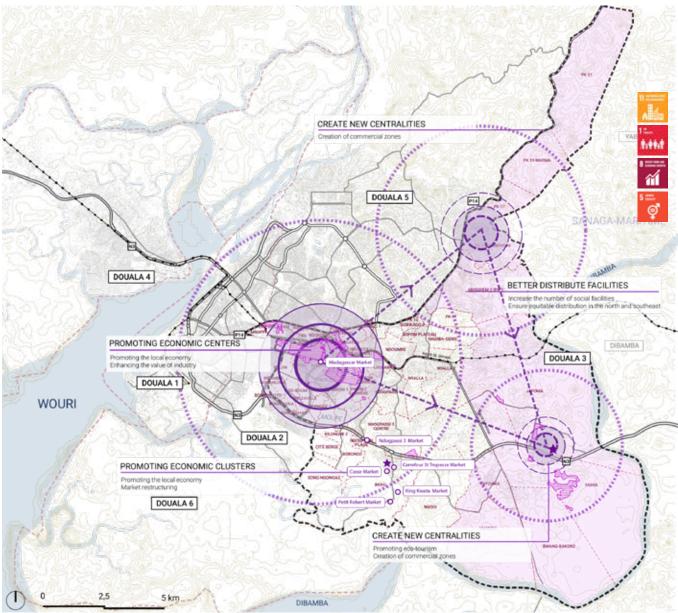
- the first Douala Bassa industrial zone
- the new Yassa industrial zone and
- the new extension area PK14.

Considering this, it will be essential to provide commercial, educational and health facilities at the locations of the two new centralities to consolidate



PROSPEROUS CITY

their roles as hubs. This will ensure a fair distribution of facilities from the North to the South of the 3rd Municipality. **The establishment of new markets and the improvement of existing markets** (PK14, Dakar, Ndokoti) will constitute places for the sale of products from peri-urban agriculture and **permit the development of local economy.**



LEGEND



Restructuration of markets

Valorisation of industrial activities

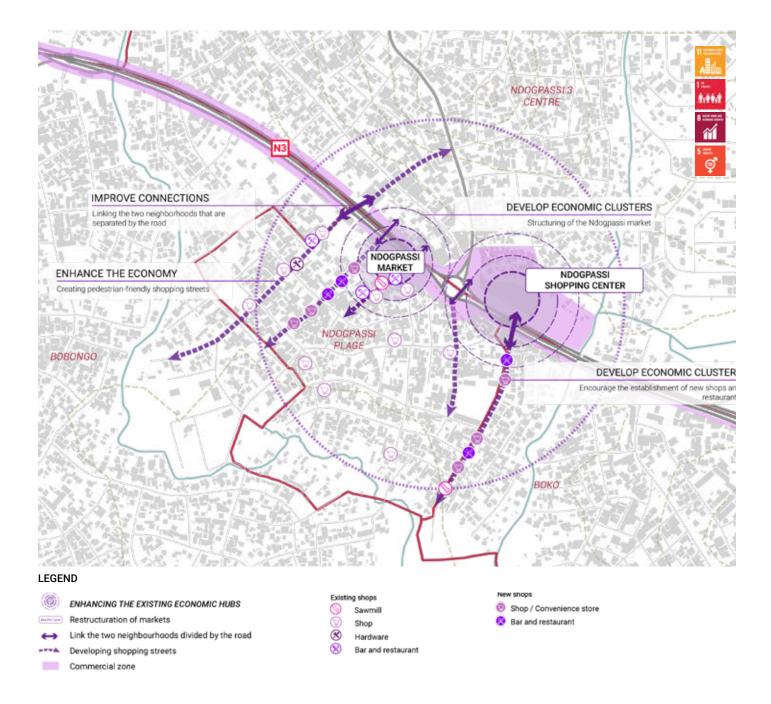
CREATING NEW CENTRALITIES

Promoting eco-tourism Creating commercial activities DISTRIBUTING EQUIPMENTS

Increasing the number of social facilities / Ensuring an equitable distribut in the North and South-East part of the Commune

Ndogpassi Plage

To compensate for the lack of commercial activities, a network of different sales services (shops, minimarkets, bakeries, butchers, stationery stores) will be formally installed along the axes of the arteries connecting the main road RN3 to the blocks (1, 3 and 9). They will constitute extensions of the Ndogpassi market which will facilitate the supply of primary necessities to the populations furthest from the main roads. In addition, the establishment of secondary economic hubs will offer job opportunities to internally displaced persons who work in the sale and production of goods.



IMPROVING THE QUALITY OF LIFE – A RECREATIONAL AND INCLUSIVE CITY

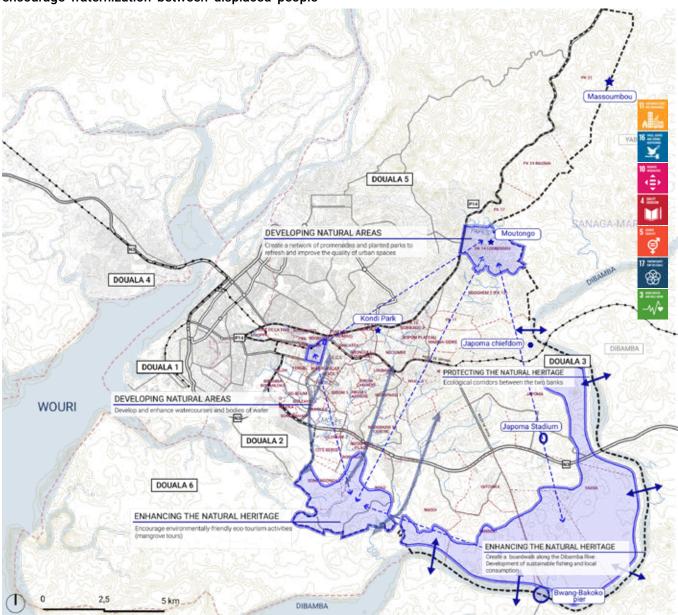
Douala 3

The strategy will **identify areas with tourist potential** with cultural or historical value, with environmental potential (such as the Moutongo estuary) **or places to encourage ecotourism activities** such as the guided tour of the Boko mangrove. This strategy will allow the establishment of a network of developed public spaces such as urban parks or esplanades that will **encourage fraternization between displaced people**



A RECREATIONAL AND INCLUSIVE CITY

and locals. These are the Kondi parks or the freeland around the Japoma stadium. The development of the Bwang Bakoko peer will allow the establishment of a promenade along the Dibamba, the creation of a station for the river transport system and areas for marketing fishery products (consumption and sale).



LEGEND

DEVELOPING NATURAL SPACES

- Creating a pedestrian and planted parks network to refresh and improve the quality of urban spaces
- -----> Developing and enhancing watercourse
- Ecological corridors between the two river banks

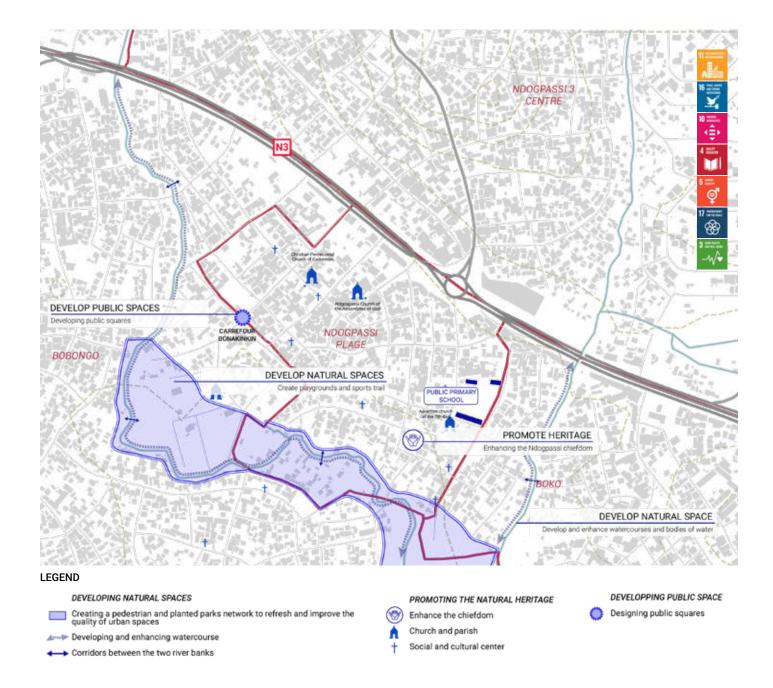
PROMOTING THE NATURAL HERITAGE

Promotion of eco-tourism activities environmentally friendly (e.g. mangrove tours) Walk along the banks of the Dibamba river Development of sustainable fisheries and local consumption

Landing for touristic activities

Ndogpassi Plage

The presence of unequipped meeting places led to the **identification of potential public spaces** for major events in the neighborhood (weddings, baptisms, neighborhood or mourning parties, etc.) such as the Bonakinkin crossroad. In addition, **the wetland of block 6 and 7, will be dedicated to the establishment of an urban park** planned water retention techniques making the space accessible even during flood periods. The plan boosts the promotion of the Ndogpassi and Boko chiefdoms while integrating the history of the neighbourhood into an educational-historical itinerary.



VISION OUTCOMES

Although the strategies were presented at both scales of study, it should be noted that these are not different approaches but rather a single intervention adapted to the scale of the municipality and the district.

The main objective of the entire vision is to:

- Respond to current urban challenges
- Maximize the socio-spatial potential that has not yet been valued.

Therefore, the approach of the Douala 3 and Ndogpassi Plage vision is holistic and embraces different themes

CONTROLLING URBAN SPRAWL- COMPACT CITY

The plan delineates urban development to ensure structured growth. It discourages expansion near risk areas and identifies non-buildable areas to maintain security. Areas suitable to urban expansion are identified by emphasizing an even distribution of density between neighbourhoods, encouraging highrise developments where appropriate. The distribution of basic urban services is a priority, with an extension of the drinking water network, electricity and waste management systems to improve the living conditions of all residents.

IMPROVING CONNECTIVITY, MOBILITY AND ACCESSIBILITY - CONNECTED CITY

The plan focuses on consolidating the road network and improving the existing transport system. It prioritizes the maintenance of main roads and the development of a secondary network in pericentral neighborhoods. In addition, it promotes soft mobility options. Efforts include strengthening the public transport system such as the river through flow regulation measures and the BRT through the installation of bus stations.

VALUING NATURAL RESOURCES, PREVENTING RISKS – RESILIENT AND SUSTAINABLE CITY

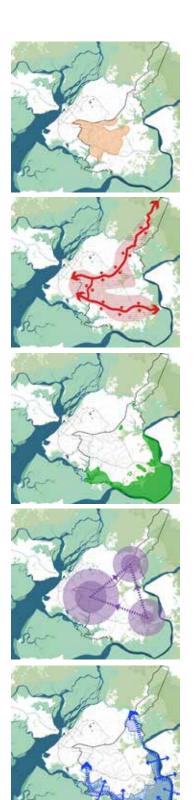
Key actions include the identification of high-risk areas (slides, landslides and notably floods) therefore for the management of natural risks, the plan includes the protection of waterways and the preservation of wetlands to maintain their ecological function. it will promote the development of a green and blue belt. All these actions will be carried out in support of the environmental code and an awareness campaign.

DEVELOPING LOCAL ECONOMY - ACTIVE CITY

The plan aims to maximize the economic potential of the municipality, strengthening existing hubs and creating new centralities and commercial areas. New commercial points will be developed along the streets while improving walkability and structuring the informal economy. This will increase the level of social services such as schools, health centres and cultural centers. Commercial infrastructure also represents spaces of learning and opportunity for internally displaced people that will enable them to ensure their integration into the city while contributing to the economic development of the community.

IMPROVING QUALITY OF LIFE – RECREATIONAL AND INCLUSIVE CITY

The plan transforms natural areas into dynamic and sustainable spaces. They will turn into a network of public spaces that connect populations. While promoting social interactions, they become hubs of community life. They consist in a network of pedestrian parks, playgrounds and a sports trail, creating green corridors that promote outdoor activities and improve urban life. However, natural heritage sites are revitalized, highlighting the environmental assets of the territory by stimulating the local economy through ecotourism. Historic sites are also identified and preserved, adding cultural depth to the landscape. CITY SCALE: DOUALA 3 NEIGHBORHOOD SCALE: NDOGPASSI PLAGE



1.

CONTROLLING URBAN SPRAWL

2.

IMPROVING CONNECTIVITY, MOBILITY AND ACCESSIBILITY

3.

VALUING NATURAL RESOURCES, PREVENTING RISKS

4.

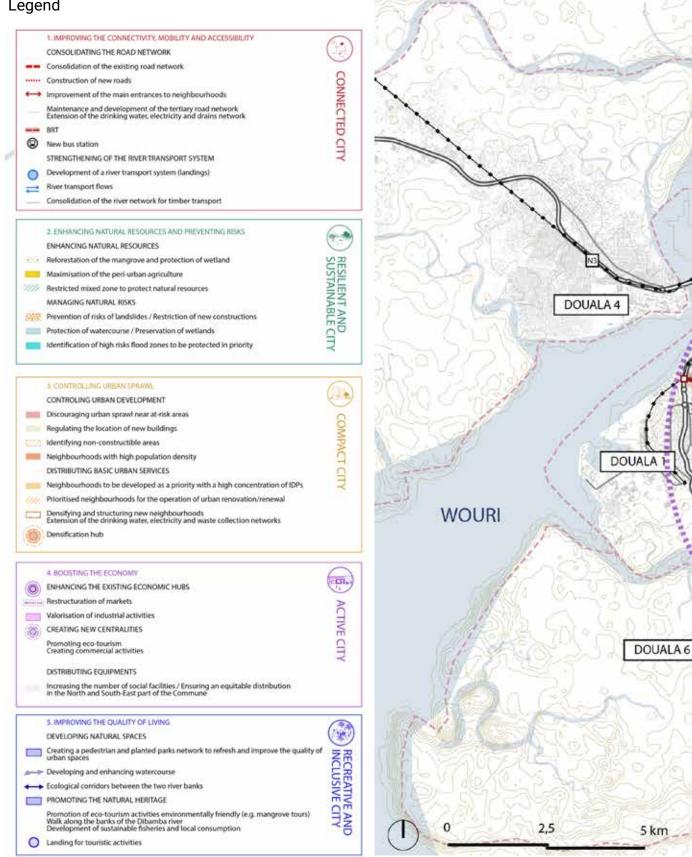
BOOSTING ECONOMY

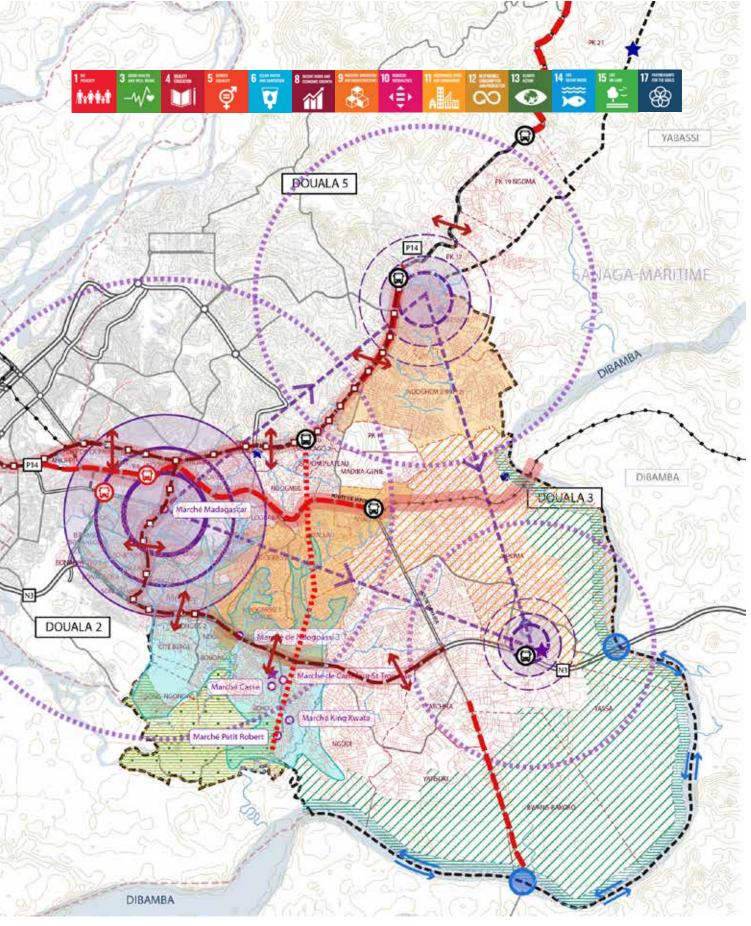
5. IMPROVING THE QUALITY OF LIFE



VISION FOR DOUALA 3

Legend





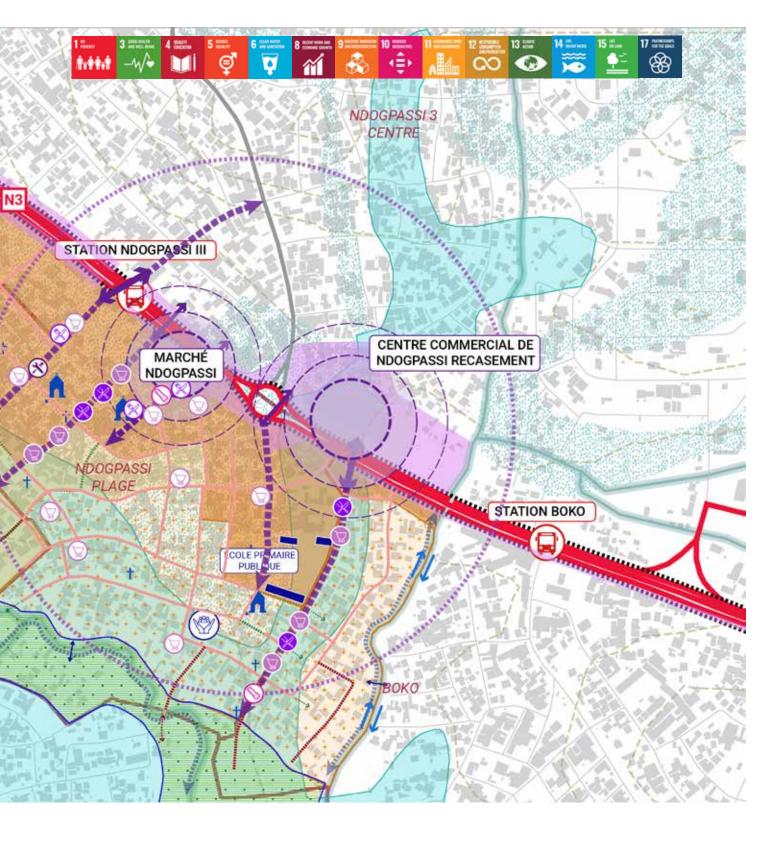
Map 17. Vision strategy of Douala 3 Source: @UN-Habitat 2024

VISION FOR NDOGPASSI PLAGE

Legend

	1. IMPROVING THE CONNECTIVITY, MOBILITY AND ACCESSIBILITY CONSOLIDATING THE ROAD NETWORK Consolidation of the existing road network	(Frieddam) Co
; ©	Improvement of the main entrances to neighbourhoods Maintenance and development of the tertiary road network Extension of the drinking water, electricity and drains network BRT	CONNECTED
#	STRENGTHENING OF THE RIVER TRANSPORT SYSTEM River transport flows ENHANCING SOFT MOBILITY Developing a network of pedestrian paths	D CITY
	2. ENHANCING NATURAL RESOURCES AND PREVENTING RISKS ENHANCING NATURAL RESOURCES Reforestation of the mangrove and protection of wetland Green grid (tree plantation, peri-urban agriculture) MANAGING NATURAL RISKS Protection of watercourse / Preservation of wetlands Identification of high risks flood zones to be protected in priority Low risks flood zone	RESILIENT AND SUSTAINABLE
	3. CONTROLLING URBAN SPRAWL CONTROLING URBAN DEVELOPMENT Regulating the location of new buildings DISTRIBUTING BASIC URBAN SERVICES Mixed zone (housing, crafts, shops and industry) to be developed (high density) Prioritised zones for the operation of urban renovation/renewal (medium density) Restructuring of informal settlements (low density)	COMPACT CITY
Existin Existin S S S S	4. BOOSTING THE ECONOMIV ENHANCING THE EXISTING ECONOMIC HUBS Restructuration of markets Link the two neighbourhoods divided by the road Developing shopping streets Commercial zone g shops New shops Sawmill	ACTIVE CITY
	5. IMPROVING THE QUALITY OF LIVING DEVELOPING NATURAL SPACES Creating a pedestrian and planted parks network to refresh and improve the quality of urban spaces Developing and enhancing watercourse Corridors between the two river banks PROMOTING THE NATURAL HERITAGE Enhance the chiefdom Church and parish Social and cultural center DEVELOPPING PUBLIC SPACE Designing public squares	





72 VISION

DOUALA 3 VISION, AREA PLANNING & ACTION PLAN REPORT 73

O3 AREA PLANNING

AREA PLANNING INTRODUCTION

The challenges, needs, and opportunities identified in the previous section of this report point to certain trends that will affect Douala 3 development trajectory. These trends, or variables, will be used to project possible future scenarios for Douala 3 until 2035.

Why Area Planning?

Scenario building for sustainable development provides an opportunity for participants to make guided assumptions about the future, including, but not limited to, how the built environment may change over time. It is a way to imagine, explore, create, and measure possible future conditions,

both desirable and undesirable and assess the probability and impact of the different scenarios on the area in accordance with past and present trends.

Additionally, scenario building can guide long-term planning, including policies, strategies, and plans, to help align the desired and likely future circumstances, while outlining the important milestones along the way. These scenarios can enable policy and decision makers to grasp the long-term requirements for sustainable development and growth, and to mitigate possible complications with foresight, including through developing adaptive strategies.

Scenario building for urban contexts' will often follow the 'chain of plausibility' approach, which includes a detailed review of all possible events and future developments. Using this approach, scenario building starts with establishing assumptions or minimum conditions that are required for any of the scenarios to develop. Next, variables that are likely to spark a chain of events that will result in a series of potential impacts are identified. Based on the trends identified in the Spatial Profile, the most important variables are selected and the likely directions of these variables are thereafter determined.

What is a Variable?

In this exercise, a variable is a development or an event thathas the potential to cause a change in an urban situation. An assumption is based on the direction that a variable is most likely to proceed (e.g. increases or decreases in specific conditions).

The outcomes of each isolated variable are broadly outlined and then explored in a more composite manner when combined together as part of the potential scenario.

The research questions that were considered in the scenario building process are the following:

- Given the context of Douala 3 and the vision formulated for both CAD3 and the pilot neighborhood Ndogpassi plage, how can both areas be developed to support more inclusive and resilient communities?
- Which events would lead to large changes in the built environment?
- What is the expected impact and likelihood?

The main variables selected are:

- 1) Population Growth;
- 2) Urban Footprint;
- 3) Catalytic Projects;
- 4) Climate Risk & Natural Hazards;
- 5) Local Economic Development.

Photo 3- Participatory exercise during visioning workshop Source: @UN-Habitat 2024

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AREA PLANNING METHODOLOGY

The key variables to consider are informed by the challenges, needs, and opportunities identified in the spatial profiling and analytics phase.

As prementioned the variables considered include: population growth, urban footprint, climate risks, natural hazards, and local economic development and possibly changes in urban governance.

Assumptions are based on the most likely direction for each variable (e.g., increases or decreases in specific conditions). Each isolated variable is analysed to exploreall possible outcomes through calculations and futureprojections, which are then combined to form potential scenarios.

The detailed data collected for Douala 3 and Ndogpassi Plage, those were thoroughly analyzed in relation to the five selected variables.

In order to analyze how the urban situation in both areas might change over the course of the next 10 years in connection to the built environment, this section discusses the scenario-building. As a result, it makes an effort to identify the developments that would cause significant changes in the urban fabric as well as their anticipated effects and probability.

Scenarios typically include the "Business as Usual" scenario which visualises the future if no significant measures are taken, and the "Optimal" Scenario outlining what should be done instead to achieve the aspirational urban vision formulated in the previous step.

The complex interrelationships between variables, priorities, and realities have been simplified to provide two scenarios of how ouala 3 and Ndogpassi Plage could be spatially and functionally configured in 2035.

The first scenario is the "Business As Usual" scenario, which intends to show how the city might look in 2035 if no or minimal measurements are taken into account for the future. The second scenario is the "Optimal" scenario, which will rethink the nature of the CAD 3 in alignment with the Douala 3 Communal Development Plan (PCD). This "Optimal" scenario will aim at achieving the desired vision of a dignified

By 2035, the Douala 3 Municipality will be compact, connected, resilient, healthy, in a prosperous and equipped environment.

This 'Optimal' scenario aims to establish a clear link between what should be done to moveDouala 3 and Ndogpassi Plage, towards the formulated vision and how the different sectors can support this transition.

The optimal scenario map, once validated, becomes the action plan which indicates how various sectors can support this transition, specifies the needed actions, and calls for the implementation of necessary projects in both the short, medium, and long term.

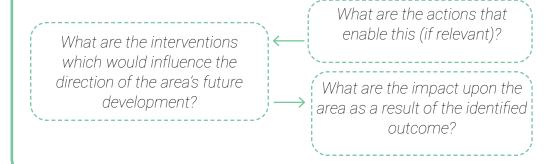
The UPIMC Cameroon team conducted bilateral validation sessions with Municipality of Douala 3, workshops with the groups of internal Displaced People (IDPs) the local community, and with key stakeholders. These participatory activities validated variables and identified preferred project locations.

WHAT ARE THE RESEARCH QUESTIONS?

- Given the context and the vision formulated for Doual 3 subdivision adn Ndogpassi Plage neighbourhood, how can the area be developed will be compact, connected, resilient, healthy, in a prosperous and equipped environment?
 - What is the expected impact and likelihood?

WHAT ARE THE OVERALL ASSUMPTIONS?

WHAT ARE THE KEY VARIABLES THAT AFFECT BOTH SUSTAINABLE DEVELOPMENT AND URBAN PLANNING CONSIDERATIONS IN THE AREA?



WHAT ARE THE SCENARIOS THAT THE COMBINATION OF THE VARIABLES COULD RESULT IN?

- Will they positively, negatively or slightly affect the study area?
- How probable is it that this scenario (or similar) may occur?
- What is the spatial and socio-economic impact of the scenario?

OVERALL ASSUMPTIONS

- There is political stability in Cameroon.
- There is continued support from the Municipality of Douala 3 to work towards durable solutions for IDPs communities in Douala 3.

SELECTED VARIABLES

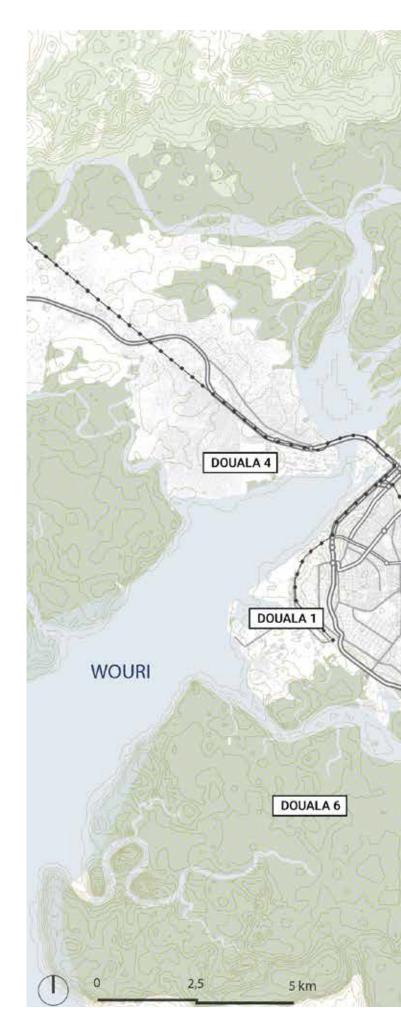
- Population Growth
- Urban footprint
- Catalytic Projects
- Local Economic Development
- Environment and Climate Change

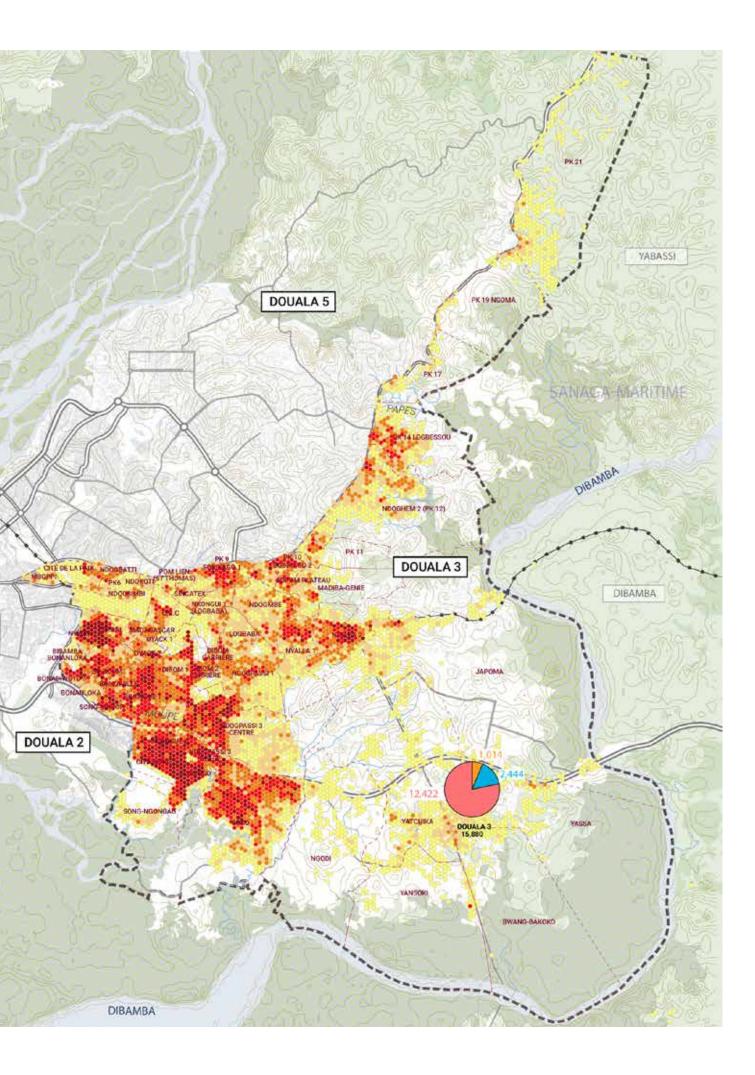
VARIABLE: POPULATION GROWTH

Douala 3 is undergoing rapid population growth, with approximately 1.5 million residents recorded in 2023 (INS projection 2019, world populationreview.com 2023). This surge, driven by both migration and natural growth, makes Douala 3 a key player in the city's overall urbanization trends. The area's strategic location, along with its proximity to major road networks and economic hubs, has accelerated its development, attracting people from both rural areas and other parts of Douala.

The current urban expansion follows a diffuse, linear pattern primarily along major roads, which has resulted in a sprawling landscape. While this has increased connectivity and access to economic opportunities, it also presents several challenges. The dispersed nature of development often stretches infrastructure and services thin, leading to critical gaps in transportation, public amenities, and housing affordability. Without proper planning, these gaps could exacerbate existing socio-economic disparities within the region.

To mitigate these challenges, planning should focus on increasing density between major road networks and fostering mixed-use developments. This would not only reduce the city's dependence on cars but also enhance walkability, public transit access, and opportunities for social interaction within neighborhoods. **Enhancing infrastructure within Douala 3 could help redistribute economic activities more evenly across the area, making services more accessible and affordable for its rapidly growing population.**





VARIABLE: POPULATION GROWTH

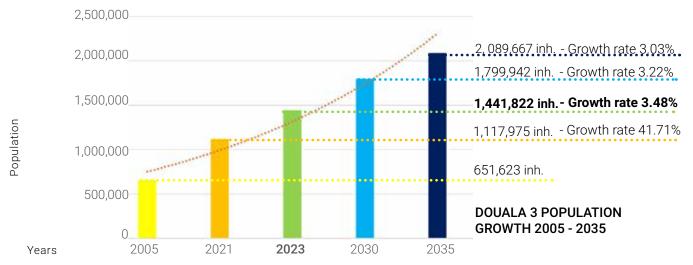
According to the last national census in 2005, the population of Douala 3rd was 651,623 inhabitants.

The population of Douala 3 has seen a steep increase, reaching a total of 1,117,975 inhabitants in 2021 (INS: Statistical Yearbook of the Littoral Region 2019). Based on a growth rate of 3.48%, the population of CAD3 is 1,441,822 inhabitants in 2023 (worldpopulationreview. com). Similarly, based on a growth rate of 3.22%, the population is expected to reach 2 089,667 inhabitants in 2035 (worldpopulationreview.com).

This reflects a substantial growth from previous years, indicating an average of growth rate of about 3% per year. This rate of growth underscores the subdivision's vital role in the urban expansion and population dynamics within Douala.

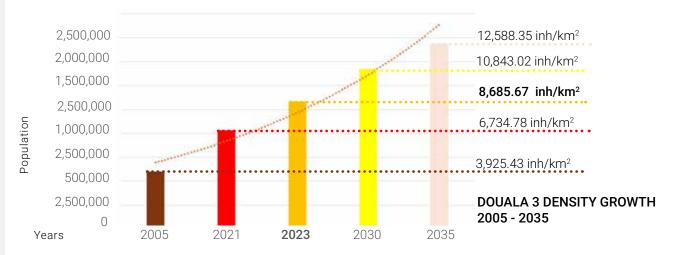
In terms of density, Douala 3 is also witnessing a sharp rise, with population densities of 8,685.67 inh/km² in 2023 estimated to be 12,588.35 inh/km² by 2035. This highlights the need for more focused urban planning to prevent overcrowding and ensure that housing, transportation, and basic services keep pace with the growing number of residents.

Looking ahead, projections suggest that Douala 3's population will continue to increase in the coming years, potentially reaching up to approx.1.8 million by 2030. As the population grows, the strain on existing infrastructure and services will intensify, making it critical for city planners to address these challenges proactively through sustainable urban development strategies.



Graph 11. Population Growth across subdivision of Douala 3 from 2005 - 2035

Source: UN-HABITAT reference to Annuaire Statistique de la Région du littoral, Institut National de la Statistique du Cameroun and worldpopulationreview.com



Graph 12. Density growth across subdivision of Douala 3 from 2005 - 2035

Source: UN-HABITAT reference to Annuaire Statistique de la Région du littoral, Institut National de la Statistique du Cameroun and worldpopulationreview.com

Outcome 1: High Population Growth

The population continues to rise at a consistent rate, following the trend indicated from 2023 onward, where the population reaches approx. over 2 million by 2035 with a growth rate of 3.03%. This outcome represents a 46,5% increase in population from current levels, reflecting sustained migration to the city and a natural increase in birth rates.

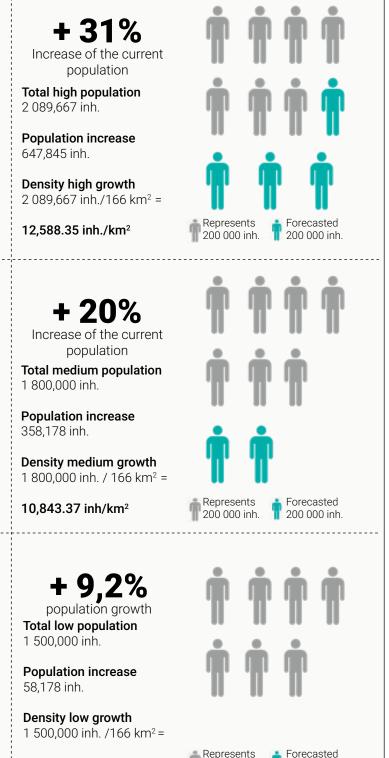
This population growth would place significant pressure on Douala 3's urban infrastructure and services, requiring strategic densification efforts. The city would need to focus on compact growth by optimizing land use to accommodate the expanding population within a constrained urban footprint.

Outcome 2: Medium Population Growth

This scenario assumes moderate population growth, where the population increases at a slower pace, potentially stabilizing around 1.8 million people by 2035. This would reflect an increase at around 20% population, which could be influenced by a reduction in migration rates or economic challenges slowing the rate of urban influx. The pressure on land and services would be less severe compared to the high-growth scenario, allowing for a more measured approach to urban planning, enabling a focus on medium-density developments that preserve some green spaces while expanding housing and service networks gradually.

Outcome 3: Low Population Growth or Stagnation

In this scenario, population growth slows significantly, with the population reaching 1.5 million or less by 2035, representing little to no growth compared to the current population levels. This could be due to economic stagnation, a decrease in migration, or external factors such as regional conflicts or environmental issues. Without sufficient population growth to sustain a robust urban economy, the city may struggle with underutilized infrastructure and reduced public service demand.



200 000 inh.

200 000 inh.

9,036.14 inh/km²

VARIABLE: URBAN FOOTPRINT

The rapid growth of Douala 3 can be attributed to a mix of factors, including natural demographic increases, the ongoing influx of migrants, and the expansion of industrial and commercial activities. Currently, the municipality is characterized by uneven population densities across its neighborhoods. The most densely populated neighborhoods, such as Boko, Dibom and Ndogpassi 3, already exhibit densities exceeding 10,000 inhabitants per square kilometer. This overcrowding puts tremendous strain on public services, housing, and infrastructure.

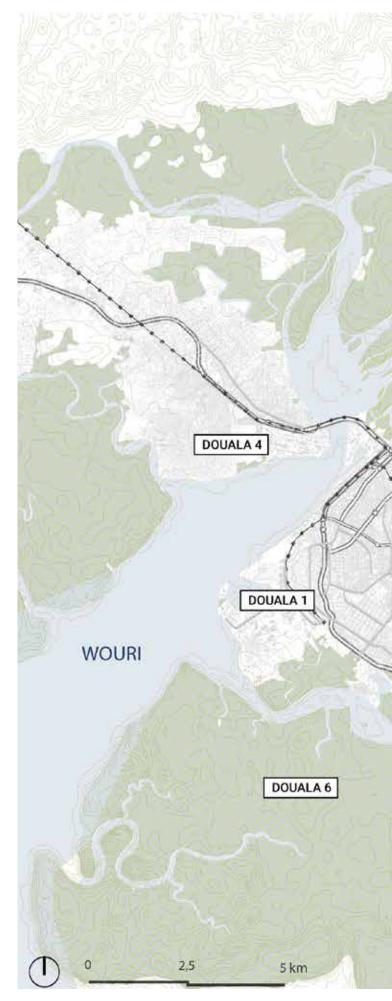
As Douala 3's built-up area continues to grow, now covering 135 square kilometers, the physical expansion is driven primarily by informal and unplanned development. Uncontrolled urban sprawl, fueled by economic activities and land speculation, has led to the encroachment of natural areas and agricultural land. The municipality has witnessed the emergence of informal settlements, particularly along its fringes, where infrastructure and service delivery are critically lacking, these neighborhoods exhibit the lowest urban densities in Douala 3 : PK 17, PK 7, PK 21, Yassa and Yansoki .

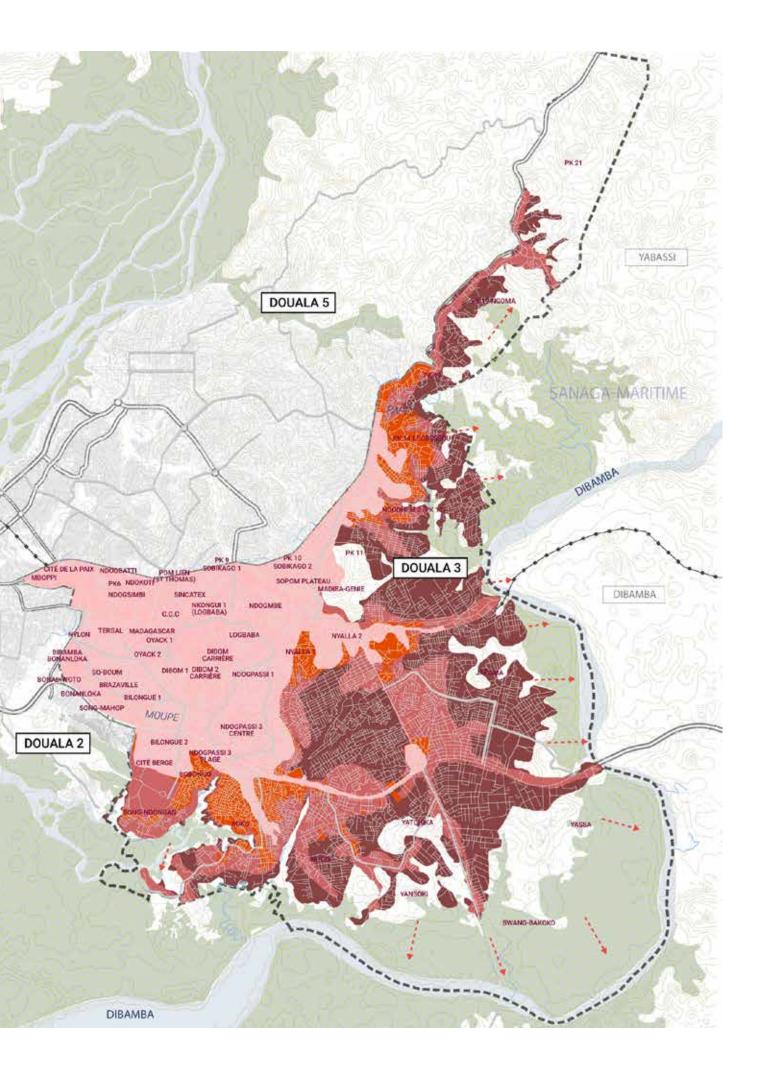
To accommodate this growing population, Douala 3 needs to develop sustainable urban planning strategies that balance densification with service provision and infrastructure development. There are three key priorities for managing this growth:

Densifying the Urban Core: With the urban core already densely populated, Douala 3 must promote vertical growth in its most established neighborhoods to reduce the pressure on undeveloped land.

Planning for Peripheral Expansion: Expanding into the less developed areas of Douala 3 in a controlled and planned manner could help distribute the population more evenly across the municipality.

Mitigating Environmental Impacts: The ongoing urban sprawl has exacerbated environmental challenges, particularly the destruction of green spaces and mangroves, which serve as natural buffers against flooding and environmental hazards. Integrating sustainable practices into urban planning, such as protecting natural areas and promoting eco-friendly infrastructure, will be essential for reducing the ecological footprint of future urban growth.

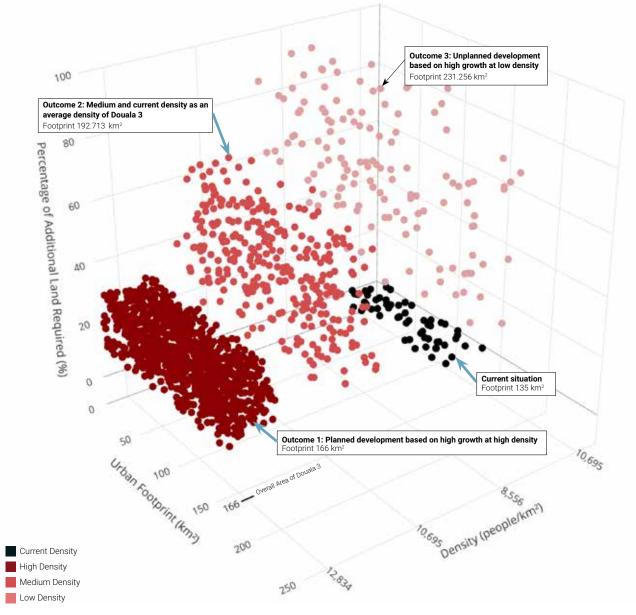




VARIABLE: URBAN FOOTPRINT

Douala 3's urban expansion is influenced by a variety of factors including population growth, spatial density, and land availability. The way the city develops over time is critical in determining its sustainability and resilience to environmental and infrastructural challenges. While Douala 3's growth is inevitable, a critical aspect of this process is the location of expansion, which plays a significant role in determining whether the city can achieve sustainable growth.

The three projected scenarios for urban footprint growth—planned high-density development, maintaining medium density at current levels, and unplanned low-density sprawl—highlight the important trade-offs in land use, population density, and infrastructure. As the population density increases, strategic planning becomes crucial to prevent inefficient, sprawling development that strains resources and reduces livability. The right decisions on where and how Douala 3 expands will determine whether it can accommodate growth while maintaining access to essential services, infrastructure, and ensuring sustainable mobility.

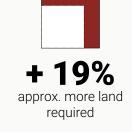


Outcome 1: Planned development based on high growth at high density

This scenario assumes a 14,5% increase in density allowing the population density to rise to **12,588.35 people per km²**. This compact growth requires only an additional 31 km² of built-up land, a relatively modest 19% increase over the current built-up area. This scenario represents a well-organized and sustainable approach, balancing efficient land use with population growth. The higher density ensures that urban services and infrastructure can be optimized without overextending the city's boundaries. Though the density is high, it is appropriate for an urban context where space is scarce, and compact development is critical for long-term sustainability.

Strategies such as vertical densification and infill of vacant land would help prevent the spread of informal settlements and uncontrolled expansion. A balanced approach to spatial planning is necessary to allocate additional land efficiently and guide future growth sustainably.

Total Population 2 089,667 inh. Density high growth 12,588.35 inh/km² Land required 2 089,667 inh. /12,588.35 inh/km² = 166 km² 166 km² - 135 km² = 31km²



Outcome 2: Medium and current density as an average density of Douala 3

The population density remains unchanged at **10,843.37 people per km**². While this density is considered moderate and offers a balance between urban space and livability, the city will require an additional 57,7 km², translating to a 35% increase in the builtup area. This expansion would push the city beyond its current capacity and could result in urban sprawl if not managed properly. While the density here avoids overcrowding, the considerable land expansion needed may put strain on infrastructure, resources, and services. Enhancing public transportation and improving infrastructure within existing urban areas can help accommodate the growing population without needing to consume more land. Implementing policies that limit peripheral development, while encouraging more compact, vertical growth, can further prevent sprawl. Also, affordable housing policies will be crucial to prevent displacement as land and property values increase.

Total Population 2 089,667 inh. Density medium growth 10,843.37 inh/km² Land required 2 089,667 inh./10,843.37 inh/ km² = 192.713 km² 192.713 km² - 135 km² = **57.7 km²**

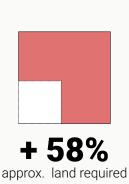
Outcome 3: Unplanned development based on high growth at low density

This scenario represents the least efficient and most challenging outcome. With a 20% reduction in density, the population density drops to 9,036.14 people per km². This lower density results in sprawling urban development, requiring an additional 96.25 km² of land that is 58% increase. While the reduced density might initially seem more comfortable for residents, it poses significant long-term risks. The unsustainable expansion consumes excessive land, potentially leading to inefficient infrastructure, higher costs for services, and environmental degradation.

In this case, the city would face difficulties in managing resources and maintaining cohesion as the urban fabric stretches thin. Public transportation and alternative modes of mobility (such as cycling lanes and pedestrian pathways) is essential to reduce the car dependency that often accompanies low-density development.

Total low population 2 089,667 inh. **Density low growth** 9,036.14 inh./km² **Land required** 2 089,667 inh./9,036.14 inh/km² = 231.256 km²

231.256 km² -135 km² = 96.25 km²



· 35%

approx. more land

required

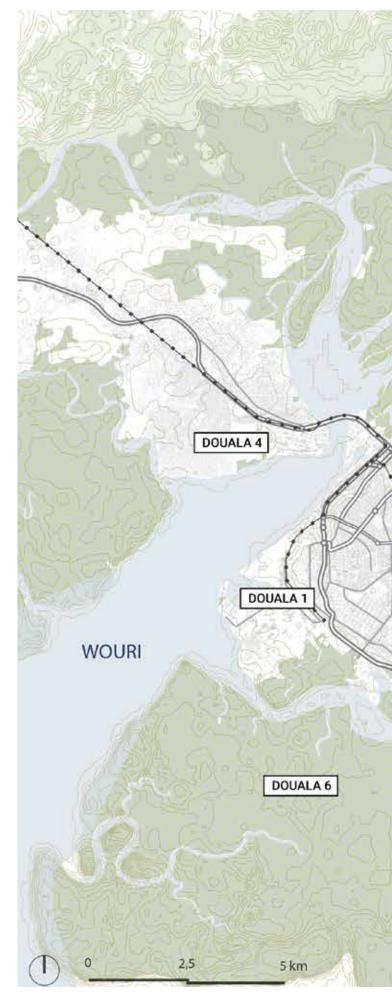
VARIABLE: CATALYTIC PROJECTS

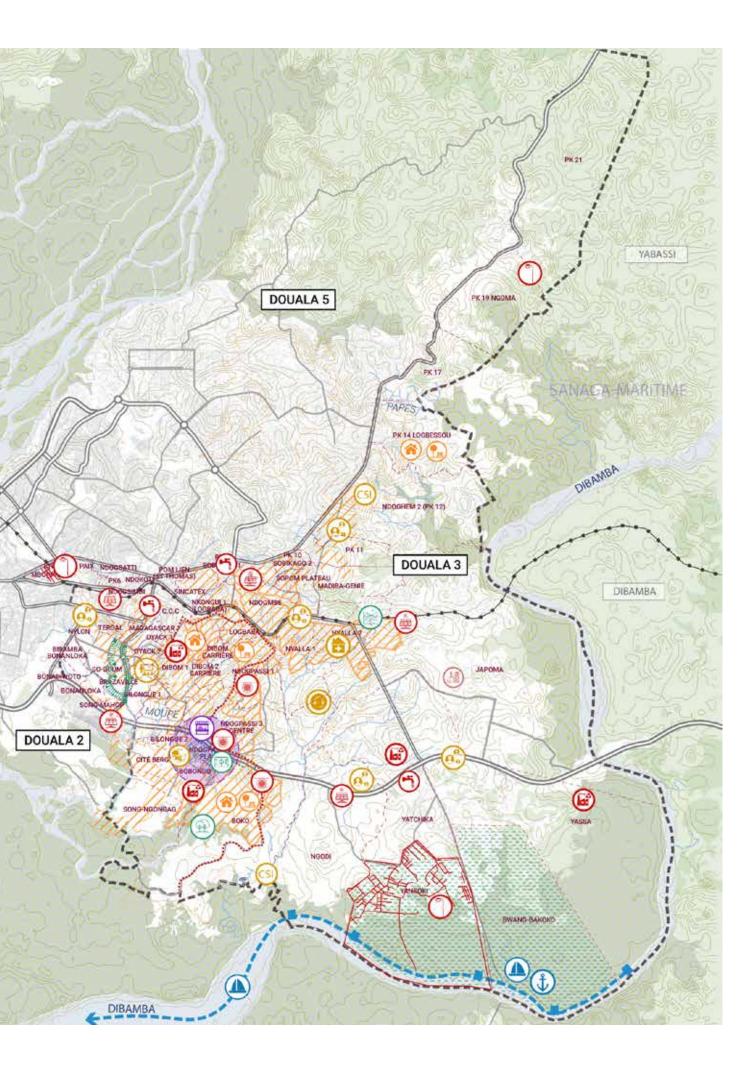
Douala 3 is characterized by significant disparities in access to basic services, with key infrastructure primarily concentrated along major roads, leaving peripheral areas underserved. The electricity network, managed by ENEO, operates through major distribution points along NGJ Road, Japoma Road, and Yassa Road. However, this network fails to comprehensively cover remote areas, resulting in widespread issues such as frequent load shedding and a heavy reliance on illegal connections to access power. Additionally, while power is supplied by nearby plants located in Dibamba, Logbaba, and Bassa, these plants do not address the lack of access in underserved areas, where many households remain disconnected from the grid and public lighting remains insufficient. Street lighting is only available to about 25% of neighborhoods, contributing to insecurity at night.

Similarly, water supply in Douala 3 is managed by CAMWATER, but the existing infrastructure primarily serves areas along main roads. Key water purification plants are located in Massoumbou, Japoma, and Ayato, with ongoing construction of water towers in Nyalla and Logbessou aimed at increasing supply. Despite these efforts, remote neighborhoods still face inadequate access to drinking water, often relying on wells or boreholes, which pose health risks due to contamination.

Waste management presents further challenges. The system, a joint responsibility of HYSACAM and the Douala municipality, has been hindered by a 50% reduction in operational capacity due to financial constraints. Insufficient collection vehicles have led to the accumulation of waste in various parts of Douala 3, exacerbating unsanitary conditions. Although the PK10 landfill in the Nyalla region has been designated as a disposal site, the reduced capacity of HYSACAM has made regular waste collection difficult, particularly in outlying areas, which remain largely neglected.

Addressing these challenges requires a holistic strategy that goes beyond the expansion of existing infrastructure. While ongoing projects like the construction of water towers and the extension of power plants are critical, they must be integrated with broader efforts to improve connectivity.





Expanding transport systems in peripheral areas would facilitate access to central service networks, enabling faster and more effective delivery of essential utilities. Additionally, establishing market centralities can play a pivotal role in attracting infrastructure investment, as economic hubs naturally draw the attention of utility providers and service networks. As markets expand and thrive, so too will the supporting infrastructure, creating opportunities for extending electricity, water, and waste management services to underserved areas.

CATALYTIC PROJECT N°1: A NETWORK OF BASIC SERVICES

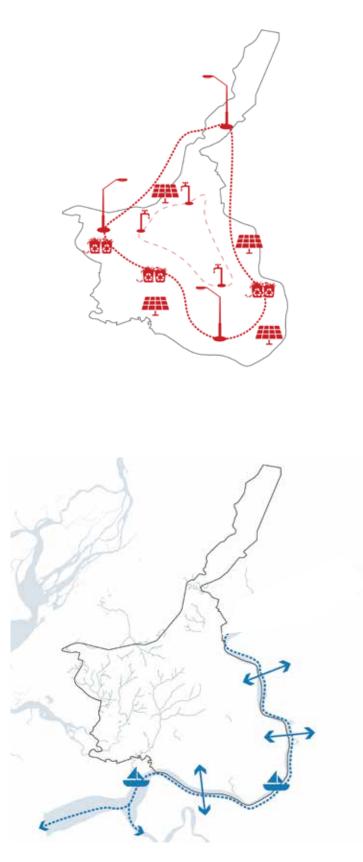
Based on the Douala 3 spatial profile, there is a critical gap in the provision of basic services for residents in marginalized regions, Specifically, 79% of individuals lack access to potable drinking water, 75% do not have public lighting, and 89% have irregular access to electricity. To address these pressing needs, a catalytic urban project is proposed, prioritizing the development of essential services across secondary and tertiary streets and focusing on underserved areas.

This project will distribute public lighting along the tertiary streets of Yansoki, Mboppi, and Nogologo to enhance safety and security. In neighborhoods such as C.C.C., Kondi, and Yatchika, efforts will be made to improve access to drinking water, ensuring that the basic needs of these communities are met. Additionally, the project will build on the existing Nyalla landfill, transforming it into a waste collection and treatment facility. This comprehensive approach aims to mitigate the challenges faced by residents in these marginalized areas, fostering more equitable urban development.

CATALYTIC PROJECT N°2: RIVER TRANSPORT SYSTEM

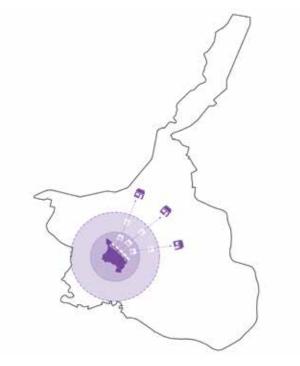
Given that Bwang-Bakoko and Yassa host a significant number of internally displaced persons (IDPs), the proposed project will focus on developing a formalized river transport system along the Dibamba River. This system will facilitate commutes and trade between key neighborhoods such as Ngodi, Yansoki, Bwang-Bakoko, Yassa, and Japoma. By establishing a formalized dock in Bwang-Bakoko, the project aims to create economic opportunities for local residents and provide them with direct access to other regions, reducing isolation and improving mobility.

This initiative will enhance the livelihoods of IDPs and other residents by linking them more effectively to broader economic networks, potentially stimulating local markets and reducing the vulnerability caused by the current reliance on informal, inefficient transportation methods. Additionally, by formalizing and regulating the transport system, the project could mitigate environmental risks associated with unregulated sand mining, contributing to more sustainable land use and reducing the area's susceptibility to flooding.



CATALYTIC PROJECT N°3: NDOGPASSI ECONOMIC HUB

The activation and formalization of the Ndogpassi Plage Market is set to be a catalyst for establishing new economic centralities across CAD3. This project aims to restructure and expand the market influence to key areas such as Madagascar Market, Japoma, and Logbessou, with a strategic focus on locations along main roads. By aligning the development of these markets with the Bus Rapid Transit (BRT) stations, the project will enhance accessibility, ensuring that the markets are easily reachable and integrated into the broader urban transport network. This synchronization between market development and public transport infrastructure will foster increased foot traffic, stimulating local economies and attracting more businesses to these hubs. Furthermore, this initiative will decentralize economic activities, reducing congestion in overburdened areas and distributing economic opportunities more evenly across CAD3.



Outcome 1: Unstructured Development of Douala 3 If only a fraction of the proposed projects are implemented, the lack of comprehensive investment in infrastructure will leave significant gaps in service delivery, particularly in marginalized regions. Residents will continue to face inadequate access to potable water, public lighting, and electricity. Additionally, the river transport system along the Dibamba River will remain underdeveloped, limiting economic opportunities and maintaining the isolation of IDPs in Bwang-Bakoko and Yassa. As a result, the area's vulnerability to flooding and environmental degradation due to unregulated activities will persist. The economic potential of the Ndogpassi Plage Market will not be fully realized, leading to continued congestion and uneven distribution of economic opportunities.	MINIMAL PROJECTS IMPLEMENTED
Outcome 2: Inequal development of Douala 3 In this scenario, basic services will be improved in select neighborhoods enhancing public lighting and access to drinking water in key areas. However, the limited scope of these improvements means that markets cannot operate effectively without the full provision of basic services. The absence of adequate waste treatment facilities for market waste will lead to increased amounts of waste and the emergence of new landfills, exacerbating environmental challenges. The river transport system along the Dibamba River will be partially developed, establishing a dock in Bwang-Bakoko and improving mobility for some residents. However, this limited development will prevent IDP communities residing along the Dibamba River from fully accessing the Ndogpassi market and other economic hubs.	PARTIAL PROJECTS IMPLEMENTED
Outcome 3: Organized and balanced development of Douala 3 If all proposed projects are implemented, living conditions and economic opportunities are significantly improved. the comprehensive development of basic services will ensure that target neighborhoods are well-lit and have reliable access to drinking water and electricity. The formalized river transport system will be fully operational, connecting key neighborhoods and reducing isolation for IDPs. This system will also contribute to sustainable land use and reduce the risk of flooding. The Ndogpassi Plage Market will be fully activated and integrated with the BRT network, decentralizing economic activities.	ALL PROJECTS IDENTIFIED AT THE COMMUNAL AND LOCAL LEVELS ARE IMPLEMENTED

VARIABLE: LOCAL ECONOMIC DEVELOPMENT

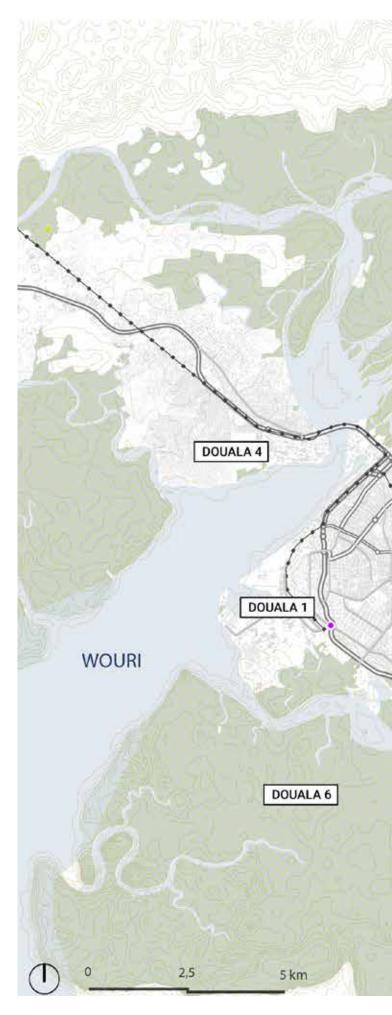
Economic opportunities are concentrated around markets, peri-urban agriculture, and sand mining areas, predominantly located in the northwestern parts for market activity and southeastern parts for sand mining and agricultural activities. These zones are critical for local commerce and employment.

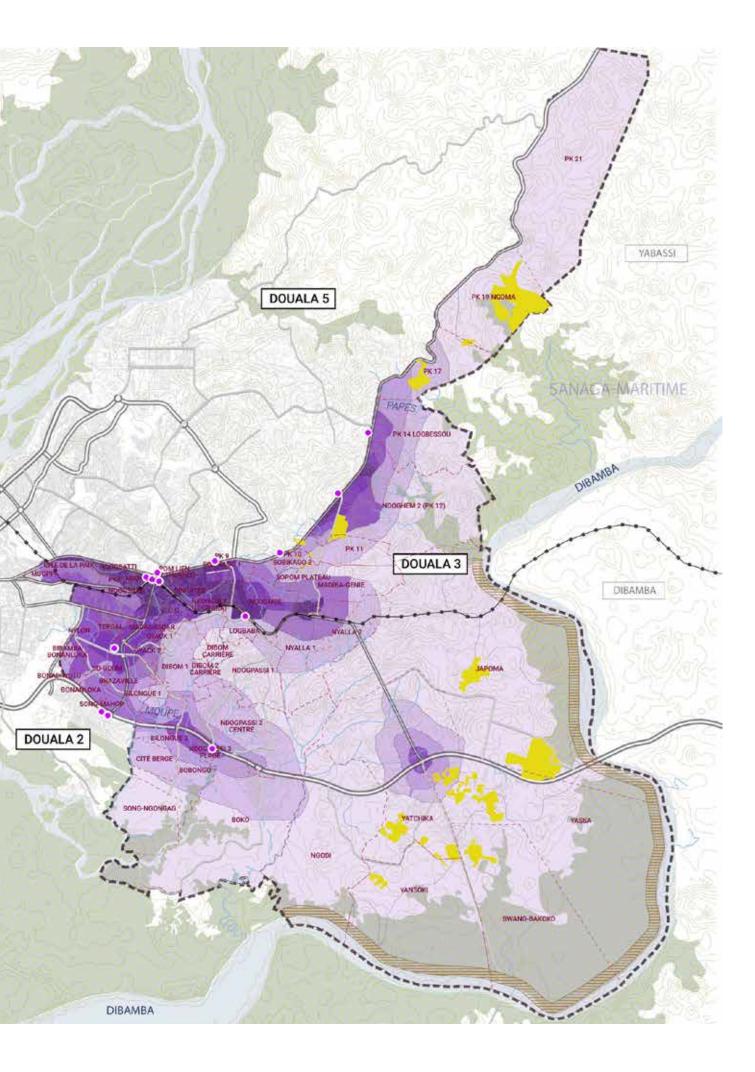
Access to Employment varies significantly across the region, with the highest concentration of opportunities (60%-70%) located in central dense urban areas and gradually decreasing as you move toward the outskirts, where access drops to 10%-20%. This suggests an uneven distribution of economic mobility within the district.

The transportation network, including primary and secondary roads, plays a key role in linking economic hubs and employment opportunities. Areas with better road access tend to have higher economic activity, while more remote zones face challenges in connectivity, underscoring the importance of improving infrastructure to facilitate mobility and economic growth.

There is a significant potential for development in under-served areas, particularly in the southeast, where employment access is lowest. By expanding infrastructure and economic initiatives, these regions could see improvements in both job opportunities and quality of life.

The disparities in access to employment and the clustering of economic activities point to a need for targeted interventions, including infrastructure development and economic diversification, to promote more balanced growth and reduce inequality within Douala 3.





VARIABLE: LOCAL ECONOMIC DEVELOPMENT

The linear relationship between distance and employment accessibility points to a lack of diversified or decentralized economic planning. The absence of multiple, welldistributed economic hubs has created a dependency on a few key zones, which restricts broader economic growth and equitable access to jobs across Douala 3.

The sharp decline in employment accessibility with distance implies insufficient transportation infrastructure, particularly for residents in the outer regions of the city. This limits the ability of these residents to participate fully in the city's economic activities.

Currently, employment opportunities are highly concentrated in central areas. By developing additional economic hubs in underserved regions like Bwang-bakoko and Yassa, it would be possible to spread economic activity more evenly across the city, reducing the pressure on core areas and improving job accessibility for people living further away.

The current concentration of economic activity in central hubs such as Bonaberi, Rond Point Deido, and Bonanjo limits the capacity for those living further away, such as in Japoma, to access these opportunities efficiently.

Stimulating regional economies through incentives such as business development programs, localized industry clusters, or special economic zones can lead to more balanced urban expansion. This would reduce the overreliance on a few central hubs and encourage employment growth in underdeveloped areas.

Bonamoussadi

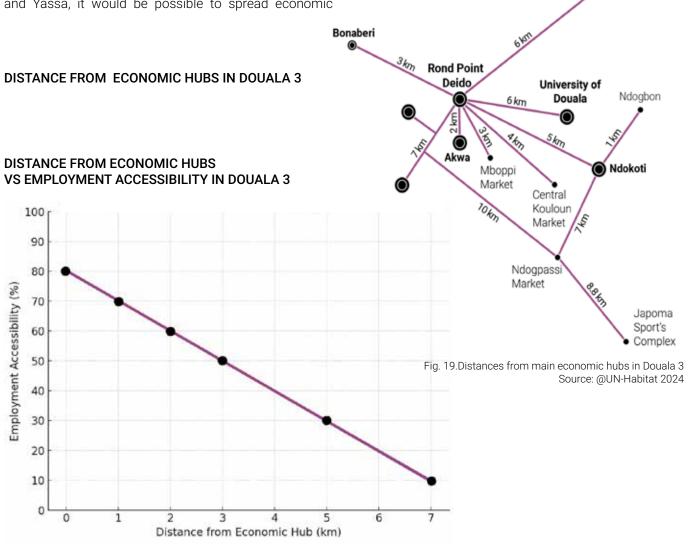


Fig. 10 Distance from economic hubs vs employment accessibility in Douala 3 Source: @UN-Habitat 2024

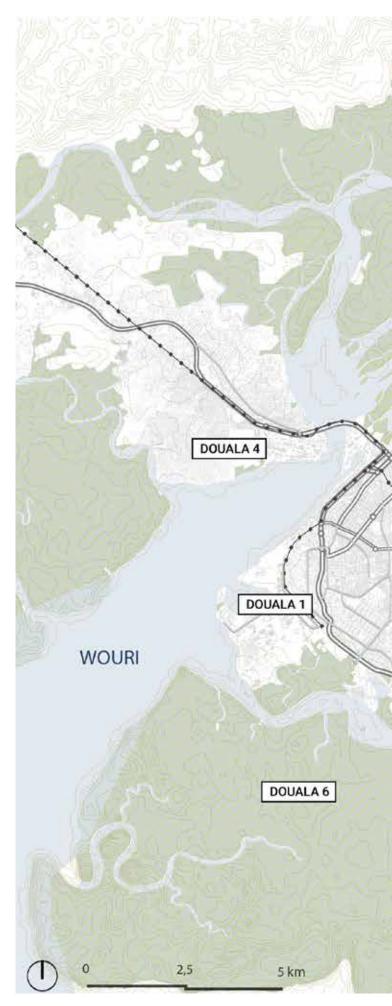
Outcome 1: Lack of the urban develop employment opportunities for all	ment resulting in limited access to	
in a few central zones like Bonaberi, Rond Point Deido, and Bonanjo limits accessibility for residents living further from these areas, especially those in outer regions such as Bwang- Bakoko and Yassa. Without adequate transportation infrastructure or decentralization efforts, many residents face significant barriers to participating in the city's economic activities.	economic hubs results in reduced job availability for outer-lying communities, exacerbating economic disparities and leading to localized economic stagnation. Enhancing transport connectivity and creating more distributed economic centers across the city could reduce these barriers and spread employment opportunities more evenly, mitigating the risk of economic decline.	ECONOMIC DECLINE
The linear decline in employment opportunities relative to distance from		
Outcome 2: : Limited and uncoordinate better but poorly diversified job opport		
While some regions within Douala 3 are seeing improvements in economic opportunities, the reliance on specific industries such as markets, sand mining, and peri-urban agriculture limits the breadth of job options available. Even in areas with better access to central hubs,	industries and promote localized job clusters. Expanding infrastructure and offering targeted support for sectors such as manufacturing, technology, and services could significantly increase job diversity. This will ensure more resilient economic growth while enhancing employment opportunities for a larger portion of the	ECONOMIC STABILITY/SMALL GROWTH
Outcome 3: Sustainable urban develop resulting in substantially improved acc	ment and diversified economic activities cess to job opportunities for all	
A coordinated approach to urban planning, combining infrastructure development with economic diversification, can significantly improve employment outcomes across Douala 3. By upgrading the transportation network, particularly in underserved areas, and reducing the city's reliance on a few economic centers, Douala can stimulate widespread growth that	benefits both core and peripheral areas. Furthermore, investing in renewable energy, technology-driven industries, and sustainable agricultural practices can create long-term, stable employment that supports environmental goals while fostering economic growth. In this scenario, the city becomes more inclusive and resilient, providing opportunities that align with modern urban development trends.	SIGNIFICANT ECONOMIC GROWTH

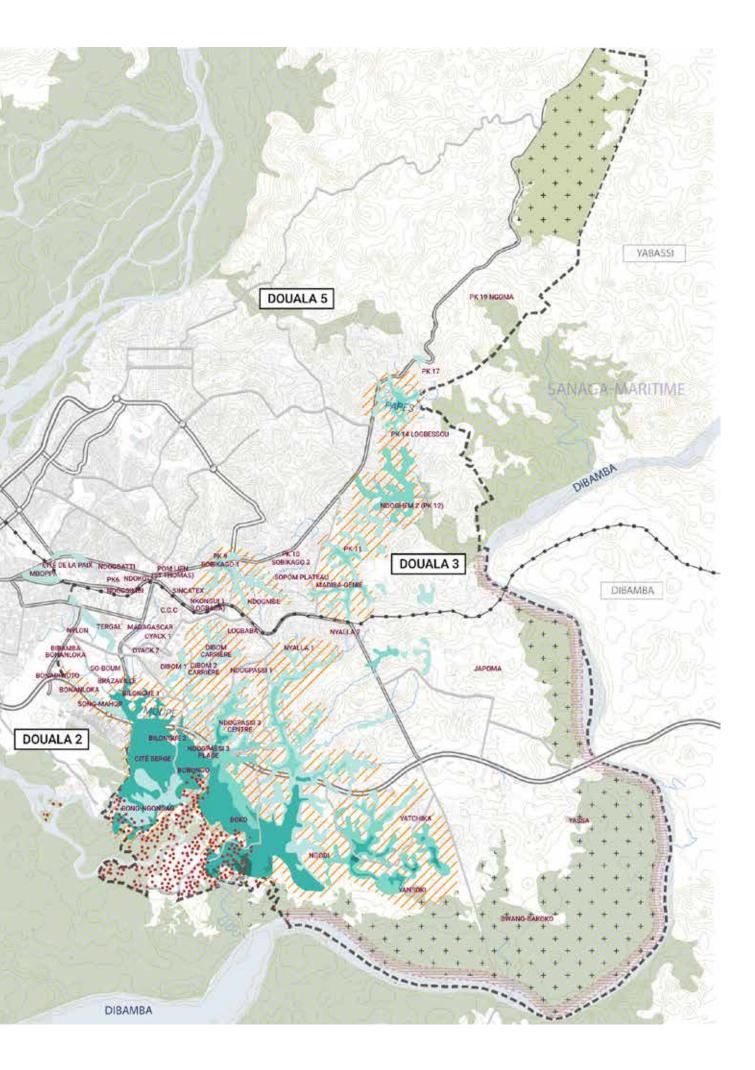
VARIABLE: ENVIRONMENT AND CLIMATE CHANGE

Douala 3's urban profile revealed pressing environmental risks in areas such as Boka, Oyack, Dibamba Basin, and Deïdo Berge, where deforestation, uncontrolled urban sprawl, and destructive activities like sand mining are prevalent. These activities have exacerbated flooding, particularly in vulnerable zones along the Wouri River and the southwestern regions like the Bwang-Bakoko neighborhood. additionaly, The loss of natural vegetation and mangroves in the Boko region has diminished the landscape's ability to protect against coastal erosion and rising water levels, requiring adaptation measures to restore and protect these natural defenses.

Rapid urbanization in neighborhoods such as PK17, PK14, and Logbessou, without adequate infrastructure to manage increased water runoff and soil destabilization, has further intensified the risks of landslides and recurrent flooding, particularly in the Dibamba Basin. To address this, mitigation measures are needed, including better urban planning, improved drainage systems, and the control of sand extraction along the Dibamba River, which has led to the destabilization of riverbanks and increased sediment accumulation.

Overall, adaptation measures are critical for restoring degraded ecosystems like the mangroves in Deïdo Berge and improving resilience against flooding. At the same time, mitigation measures must focus on controlling urban expansion, preventing further deforestation, and regulating harmful industrial activities such as sand mining to reduce long-term environmental risks.





MANGROVE DEFORESTATION

The degradation of mangroves has significantly reduced the natural resilience of Douala 3 against coastal erosion and flooding. Mangrove forests serve as critical barriers that protect the coastline from rising water levels and storm surges. Reforestation initiatives are essential. By restoring mangrove ecosystems, Douala 3 can rebuild its natural defenses, helping reduce the impact of floods while also enhancing biodiversity. Adaptation measures, such as community-led mangrove restoration projects, could further strengthen the local environment's ability to cope with future climate challenges.



Adaptation Mangrove reforestation

URBAN SPRAWL

Uncontrolled urban sprawl has contributed to environmental degradation, including soil erosion and deforestation. One effective solution is the creation of agricultural buffer zones that can help contain urban growth while generating economic benefits. By repurposing deforested land for agriculture, this buffer zone would curb the negative effects of urban expansion and also replace the income generated by deforestation activities. Coupled with urban densification strategies, which focus on maximizing the efficient use of land within the city, this approach can both protect natural resources and sustain economic development.



Adaptation Agricultural buffer zone + urban densification

URBAN FLOODING

Recurrent flooding in low-lying areas such as the Bwang-Bakoko neighborhood and the overflow of rivers and the poor management of water runoff have led to widespread damage to infrastructure and loss of livelihoods. A comprehensive water drainage system is crucial to mitigate these impacts, particularly in lowland areas and around flood-prone zones. Developing stormwater management infrastructure, including underground drainage networks and retention basins, would help channel excess water away from populated areas.



Mitigation Water drainage system

SAND MINING AND RIVER FLOODING

The development of a promenade would prevent illegal sand mining activities along the Dibamba river by providing physical barriers and increased monitoring of riverfront areas. Additionally, equipping the promenade with flood mitigation infrastructure—such as floodwalls, water gates, and elevated walkways—can help manage rising water levels during the rainy season. This solution could transform the riverfront into a sustainable public space.



Mitigation River pier development

Outcome 1: No climate change mitigati resulting in increased vulnerability of p		
Without any interventions, Douala 3 experiences significant environmental degradation. Coastal erosion and flooding become more frequent and severe, particularly as natural defenses like mangroves continue to deteriorate. The lack of action allows sand mining to persist, further destabilizing riverbanks	NO ADAPTATION OR MITIGATION MEASURES TAKEN	
Outcome 2: Partial Climate change ada	ptation and mitigation measures are taken	
In this scenario, some climate adaptation and mitigation measures are introduced, but they are limited in scope and impact. Mangrove reforestation and small-scale flood control projects help reduce some environmental risks. However, urban sprawl continues to put pressure on natural ecosystems, as enforcement of regulations is	inconsistent. Sand mining activities are regulated in certain areas, but illegal mining persists elsewhere. While some urban and rural areas benefit from improved flood defenses and reforested zones, many communities remain vulnerable. The result is a partial reduction in disaster risks, but overall, the region continues to face environmental and economic challenges.	PARTIAL ADAPTATION MITIGATION MEASURES TAKEN
Outcome 3: Climate change adaptation reduce vulnerability to impacts and to s resilience of the population.		
In this scenario, Douala 3 adopts a comprehensive approach to climate change adaptation and mitigation. Widespread reforestation of mangroves restores critical natural barriers, significantly reducing coastal erosion and mitigating the impact of flooding. Urban development is strictly regulated, with agricultural buffer	zones established to manage growth sustainably. Flood control infrastructure, including advanced drainage systems and riverbank stabilization, is implemented across the region, protecting both urban and rural areas from extreme weather events. Sand mining is strictly controlled, with sustainable practices put in place to prevent further environmental damage.	ADAPTATION AND MITIGATION MEASURES

BUSINESS AS USUAL SCENARIO (BAU)

The Business as Usual (BAU) configuration of Douala 3 was analyzed for the horizon 2035 where the population should have a slight increase compared to the current number of inhabitants: from 1,441,822 inhabitants to 2, 089,667 increase of the current population.

This scenario is very likely to have this trend:

Population growth: migratory flows and the increase in the birth rate will cause urban sprawl along the northern neighbourhoods of CAD3 (neighbourhoods of PK14, 17, and 19) and on the southern part on the marshy and swamps areas (neighbourhoods of Yansoki, Bwang-Bakoko and Yassa). As a result, the current population density of 10.680,16 p/km² will increase up to . The attempt to channel this flow will be ineffective because without alignment with the Douala Land Use Plan 2015, the protected areas will be urbanized in a low density and dispersed form leading to the proliferation of informal settlements to accommodate vulnerable populations.

Catalytic projects: Due to the lack of collaboration between planning stakeholders, CAD3 has failed to attract consistent investments from national and international donors. The lack of adequate management has also led to the abandonment of ongoing basic urban services and major infrastructure projects that could have had a strong impact on economic growth.

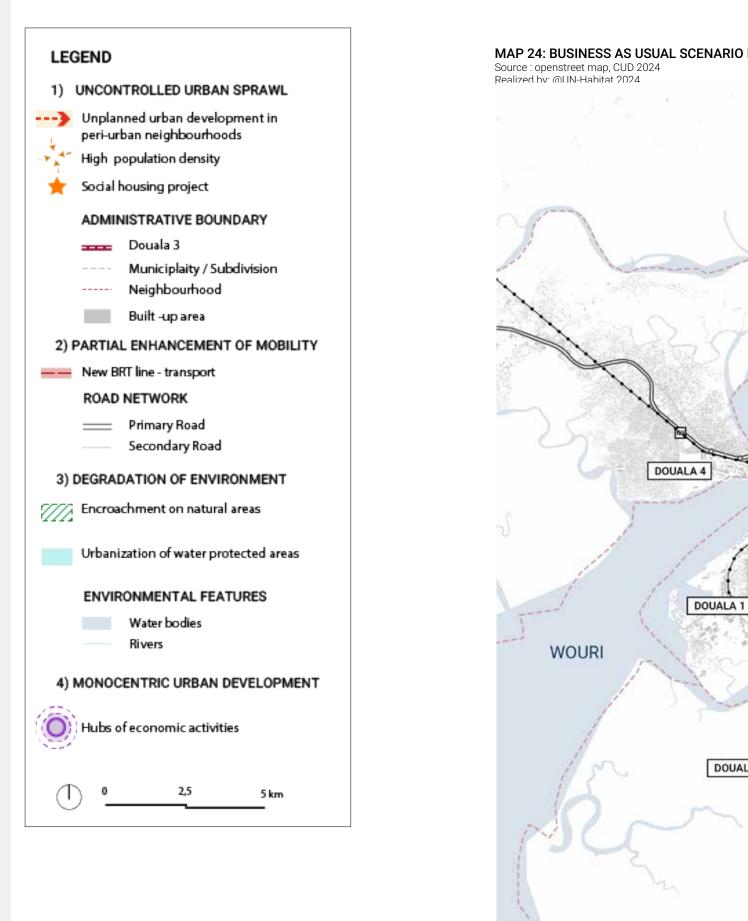
Economic development: The low availability of human resources has led to the absence of employment opportunities. Despite the new demographic wave, newcomers have remained professionally marginalized compared to the host community which is already engaged in the few local economic activities underway in the 3rd commune. **Environment and Climate Change:** Due to the lack of regulation and control of land, informal settlements are likely to proliferate to the detriment of the natural environment. Deforestation towards the South-West will continue, leaving Douala 3 without natural barriers against flooding. Sand extraction and other human activities will continue, damaging the soil, reducing its resistance to fragility.

This BAU configuration will also be reflected on the Ndogpassi Plage pilot area of intervention scale, which will not achieve the formulated participatory Vision. Above all, the population will continue to disperse in the southern areas, above the marshes, which are most exposed to flooding. Urban degradation will discourage investment at the Communal level and the lack of the initiatives of new economic activities, reducing the employment of internally displaced persons who live in high rates in this neighbourhood.

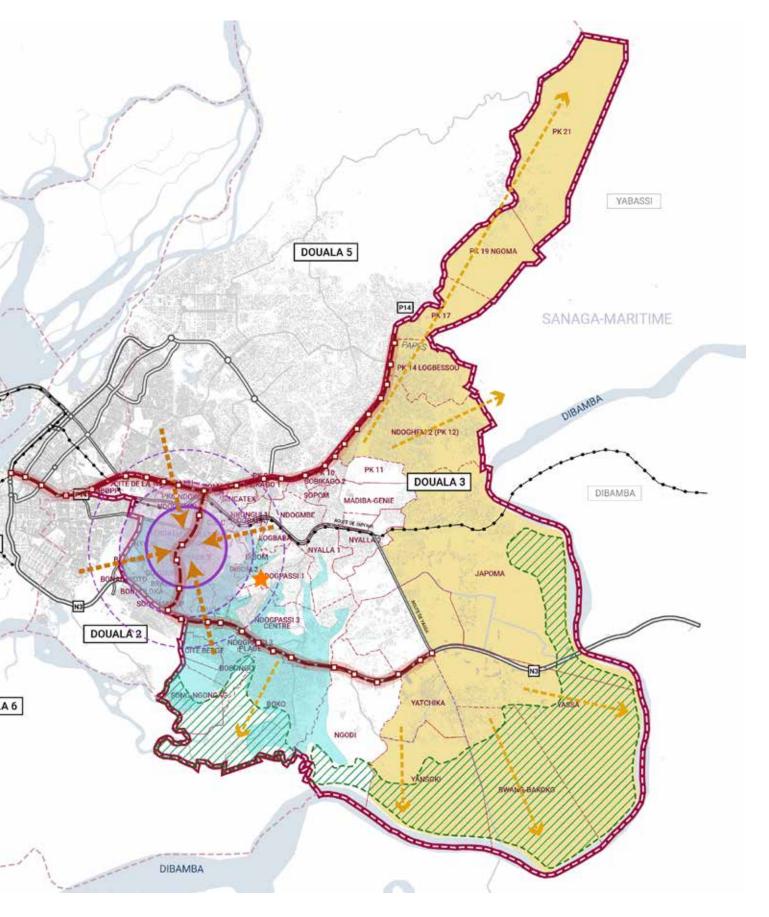
OUTCOMES					VARIABLES			
	Population Growth	Urban F Additional Land - 2a	ootprint Typology o Pattern - 2		Catalytic Infrastructure Projects		al Economic evelopment	Environment & Climate Change
Outcome 1	HIGH GROWTH SCENARIO +31% Increase of the current population	+ 19% more land required	VERTICA DENSIFICA Promotion of vertical grow densification promotion of	TION of the vth and on, for	FULL IMPLEMENTATIO Most of the projects identifie at the Municipal a neighbourhood lev are implemented	DN ECON ed op and incre vels add d.	BIGNIFICANT COMIC GROWTH Business and livelihood portunities are eased, providing itional jobs and local onomic boost.	ADAPTATION AND MITIGATION MEASURES TAKEN INTO ACCOUNT in planning tools, and urban interventions at the municipal and neighbourhood level.
Outcome 2	MEDIUM GROWTH SCENARIO + 20% Increase of the current population	+ 35% more land required	INFILL VERTIC DENSIFIC Increas the dens existi developeor and pron of the exp in vacant	CAL Set of sity of ng d areas notion bansion	PARTIAL PROJEC IMPLEMENTED The investment w allow the construct of planned social facilities and ar improvement of existing. Howew it will be insufficier meet the needs of population growth	will Fe will for a al for a n employed for for ver, IDPs nt to th the host	ALL ECONOMIC STABILITY ew diversified opportunities all.No additional opment initiatives migrants and but maintaining e main role of communities in employment.	PARTIAL IMPLEMENTATION OF MITIGATION AND ADAPTATION STRATEGIES
Outcome 3	LOW GROWTH SCENARIO + 9,2% Population growth	+ 58% more land required	UNCONTRO AND UNPLAN Expansion by inforr developm Urban sprav land specu	NED driven mal nent. wl, and	MINIMAL PROJECTS ARE IMPLEMENT No major investme are put in place f the development Douala 3.	TED Lack ents for of ents dev spre	ECONOMIC DECLINE of initiatives and I to boost local economic velopment and ead of informal nomic activities.	NO ADAPTATION OR MITIGATION MEASURES IMPLEMENTED Increasing the exposure to hazards and risks for vulnerable poplutaion.
Outcome 4	UNPRE- DICTABLE INFLUX consistent demographic growth	not determinable required land						
Outcome 5	UNPRE- DICTABLE TREND demographic decline	not determinable required land						
PROBA	ABILITY	HIGHLY UNL	IKELY	HIGH	HLY UNLIKELY	L	.IKELY	HIGHLY LIKELY
IMP	ACT	SIGNIFICAN DETERIORAT		SLIGHT	DETERIORATION		LIGHT OVEMENT	SIGNIFICANT IMPROVEMENT

DETERIORATION

BUSINESS AS USUAL SCENARIO (BAU)



DOUALA 3



OPTIMAL SCENARIO

The Optimal scenario is a socio-spatial configuration which aims to realize the strategy enounced in the Vision, toward the achievements of a prosperous urban development.

By 2035, the Douala 3 Municipality and Ndogpassi Plage will be compact, connected, resilient, healthy, in a prosperous and equipped environment.

The Optimal scenario for Douala 3, has been developed considering a consistent demographic growth which influences the current spatial trends. This increase raises the number of residents from 1 441 822 inhabitants to 2 089 667 inhabitants. Hence, this scenario is high likely:

Population growth: With an increase of the 31% compared to the current population, 600 000 thousandmore people will live in the CAD3, underlining its score to be the most populated municipality of the city. However, the new wave will homogenously urbanize the areas identified suitable for human development ensuring a compact density in the North (PK14, 17, 21) keeping on densifying the core of the Subdivision and ensuring compact vertical densification and mix-use along the main axes.

Investment projects: Good urban governance, dissemination of urban potential of the Municipality, such as green areas, position, existent activities human resources, and the impact it can have on the city of Douala, effective investments have been implemented. The focus of these interventions are the restructuring of infrastructures to improve the mobility towards and from the CAD3 such as roads conditions, transports, modality of displacement or enhancing and providing basic services in the main axes and inner neighbourhoods: electricity, waste management, drinking water among others.

Local economic activities: the establishment of new markets, training for career building, and newly regulated small economic activities made possible the engagement of IDPs in formal jobs, that permitted both to respond for the financial needs of support and to promote economic growth in CAD3. While new commercial hubs are newly built, activities of urban agriculture and fishery enrich the local economic activities based on selling and trade of local products. **Climate change:** the application of national policies environmentally focused will lead to the implementation of buffer zones in proximity of areas, to interrupt the proliferation of human settlements on areas at risk or protected. Efforts will be in the adaption strategies to flooding such as the constructions of drains and green belts of urban parks with water retention installations.

AREA OF INTERVENTION

Ndogpassi Plage was selected as a pilot area to be further detailed for the development of the identification of priority infrastructure investments, which will likely lead to a more transformative impact. The neighbourhood was selected based on the results of the spatial analysis and because of its location where interventions can be replicated in areas across the CAD3 based on their similarities.

Mixed uses and vertical densification will be at the heart of the project to control urban sprawl, urbanization of marshlands and informal settlements. These projects will include commercial centers, public spaces and social amenities to meet the needs of the growing population. Commercial lines and the new market will be created along internal roads and will represent the opportunity for displaced people to engage in formal employment.

The marshy areas to the south will be transformed into an urban park and will constitute a natural barrier to combat flooding, as the entire district is at risk of flooding by 2035 in the worst-case scenario. Infrastructure investment projects will include the extension of basic service networks. Waste collection points will be set up.

The Municipality of Douala 3 has planned an improvement of the water network and public lighting that will be extended to all the blocks in Ndogpassi Plage.

OUTCOMES				VARIABLES		
	Population Growth	Urban F Additional Land - 2a	ootprint Typology of Pattern - 2b	Catalytic Infrastructure Projects	Local Economic Development	Environment & Climate Change
Outcome 1	HIGH GROWTH SCENARIO + 31 % Increase of the current population	+ 19% more land required	VERTICAL DENSIFICATION Promotion of the vertical growth and densification, for promotion of mix use	FULL IMPLEMENTATION Most of the projects identifie at the Municipal a neighbourhood lev are implemented	Business and livelihood d opportunities are nd increased, providing els additional jobs and	ADAPTATION AND MITIGATION MEASURES TAKEN INTO ACCOUNT in planning tools, and urban interventions at the municipal and neighbourhood level.
Outcome 2	MEDIUM GROWTH SCENARIO + 20% Increase of the current population	+ 35% more land required	INFILL AND VERTICAL DENSIFICATION Increase of the density of existing developed areas and promotion of the expansion in vacant land.	PARTIAL PROJEC IMPLEMENTED The investment w allow the construct of planned socia facilities and an improvement of existing. Howev it will be insufficien meet the needs of population growt	rill Few diversified tion job opportunities of or all.No additional employment initiatives for migrants and IDPs but maintaining t to the main role of host communities in	PARTIAL IMPLEMENTATION OF MITIGATION AND ADAPTATION STRATEGIES
Outcome 3	LOW GROWTH SCENARIO + 9,2% Population growth	+ 58% more land required	UNCONTROLLED AND UNPLANNED Expansion driven by informal and unplanned development.	MINIMAL PROJECTS ARE IMPLEMENT No major investments are put in plave the development Douala 3.	Lack of initiatives and will to boost local economic development and for spread of informal	NO ADAPTATION OR MITIGATION MEASURES IMPLEMENTED Increasing the exposure to hazards and risks for vulnerable poplutaion.
Outcome 4	UNPRE- DICTABLE INFLUX consistent demographic growth	not determinable required land				
Outcome 5	UNPRE- DICTABLE TREND demographic decline	not determinable required land				
PROBA	ABILITY	HIGHLY UNL	IKELY HIG	HLY UNLIKELY	LIKELY	HIGHLY LIKELY
IMP	ACT	SIGNIFICAN		T DETERIORATION	SLIGHT IMPROVEMENT	SIGNIFICANT IMPROVEMENT

DETERIORATION

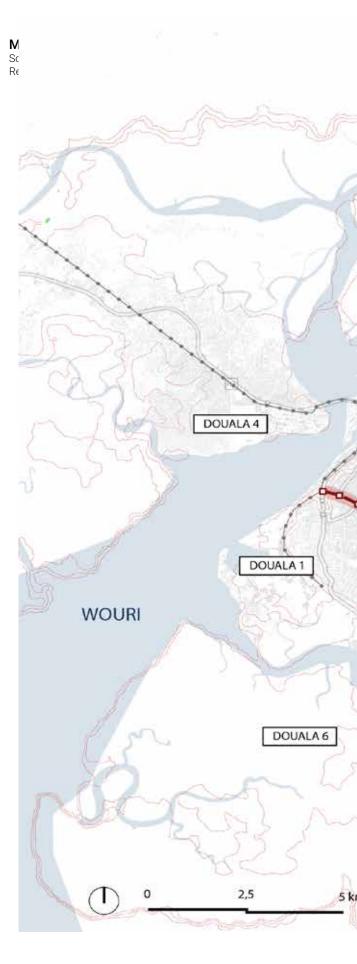
IMPROVEMENT

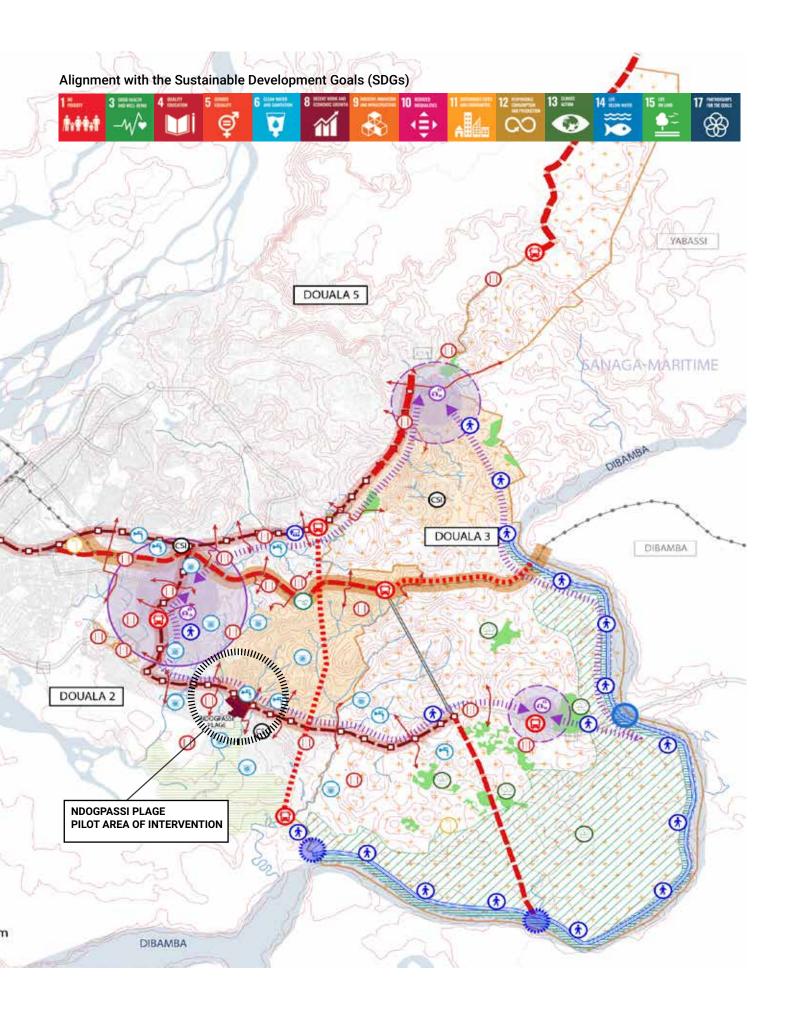
IMPROVEMENT

OPTIMAL SCENARIO - DOUALA 3

LEGEND

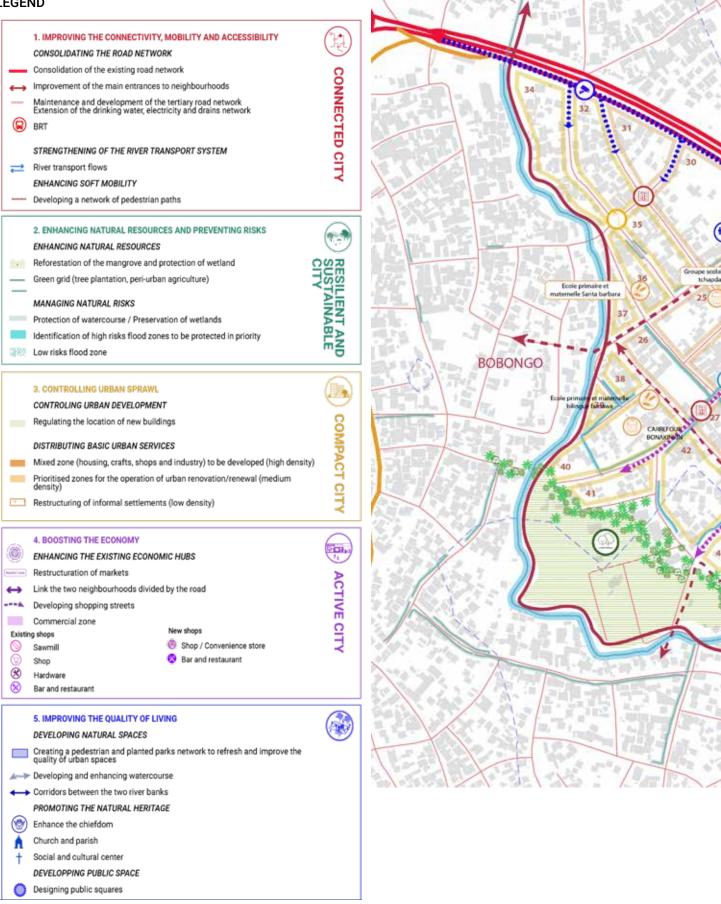
LUL	
	1. IMPROVE CONNECTIVITY, MOBILITY AND ACCESSIBILITY
	CONSOLIDATION OF THE ROAD NETWORK
	Consolidation of existing major roads
	Construction of new roads
\leftrightarrow	Improvement of main entrances to neighborhoods
—	Maintenance and development of the secondary and tertiary road network
	BRT
\bigcirc	New bus station
	Strengthening the river transport system
0	Development of a landing stage
	Consolidation of the river network for the transport of wood
	2. VALUE NATURAL RESOURCES AND PREVENT NATURAL RISKS
	ENHANCE NATURAL RESOURCES
	Mangrove reforestation and protection of wetlands
	Protection and creation of peri-urban agricultural plots
1111	Regulated mixed zone to protect natural resources
	Drainage of the Kondi River
\sim	Managing natural risks
	Protection of watercourses / Preservation of marshy areas
	Identification of areas at high risk of flooding to be protected as a priority
\bigcirc	Development of drains that can be used by pedestrians
	3. CONTROL URBAN SPRAWL
	CONTROL URBAN SPRANE
-	Regulations near risk areas
_	Distribute basic urban services
-	Priority neighborhoods for urban renovation/regualification operations
_	Densify and structure new neighborhoods
	extend the network with drinking water, electricity and waste management
Q	Development of public lighting
(*)	Extension of the CAMWATER network
-	4. BOOST THE ECONOMY
\odot	ENHANCE EXISTING ECONOMIC CENTERS
(\bigcirc)	CREATE NEW CENTRALITIES
	PROMOTION OF ECO-TOURISM CREATION OF COMMERCIAL ZONES
	DISTRIBUTE EQUIPMENT
3	Creation of CSI or CMA
ä	Creation of a social center
	5. IMPROVE QUALITY OF LIFE
	DEVELOP NATURAL SPACES
t	Creation of a training center
(F)	Development of public places
-	
_	ENHANCE NATURAL HERITAGE
	Walks on the banks of the Dibamba
\mathbf{O}	Landing stage for tourist activities

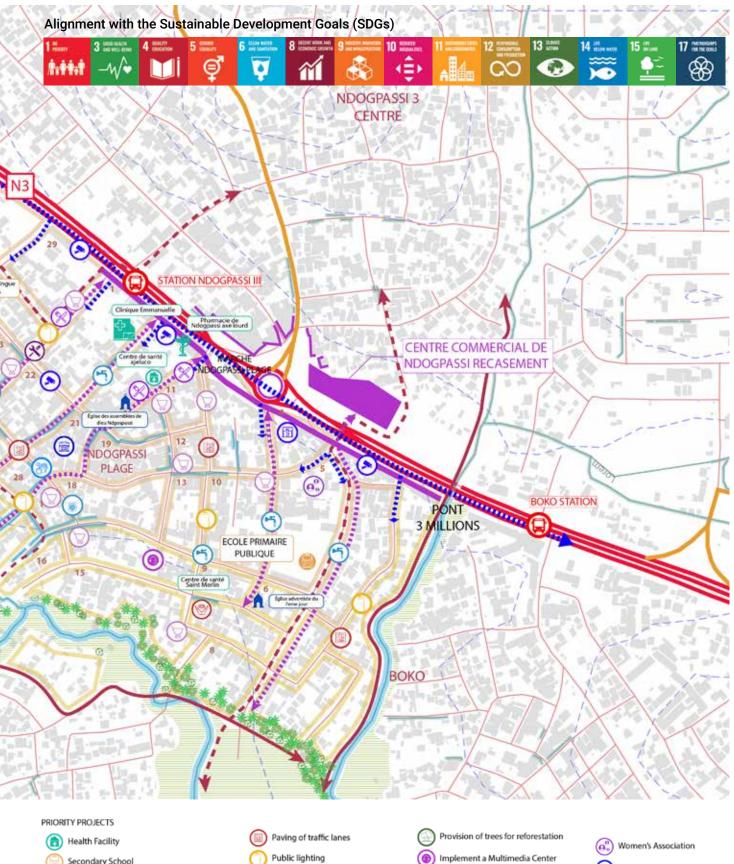




OPTIMAL SCENARIO - NDOGPASSI PLAGE

LEGEND





- Secondary School
- (4) Drinking water CAMWATER extension
- Provision of Security
- Construction of public toilets Distribution of drains
- Implement a Multimedia Center
- ۵ Youth Training Center Implement a Sports Center

- Cultural Center
- CAM Water Extension

STAKEHOLDER ENGAGEMENT

04

COLLABORATION WITH THE UNIVERSITY OF DOUALA

65

A collaboration between UN-Habitat and the Department of Geography of the University of Douala was conducted to support two of the components of the UPIMC Cameroon programme:

 (1) Spatial analysis and urban profiling; and
 (4) Knowledge exchange and capacity sharing, through data collection and support for workshop facilitation.

This cooperation is based on a Memorandum of Understanding signed on 30 November 2023. At first, the UPIMC-Cameroon team and students from the University of Douala collaborated jointly to implement the spatial analysis at the Municipality and pilot neighborhood scales focused on Douala 3.

This partnership involved several key activities, such as:

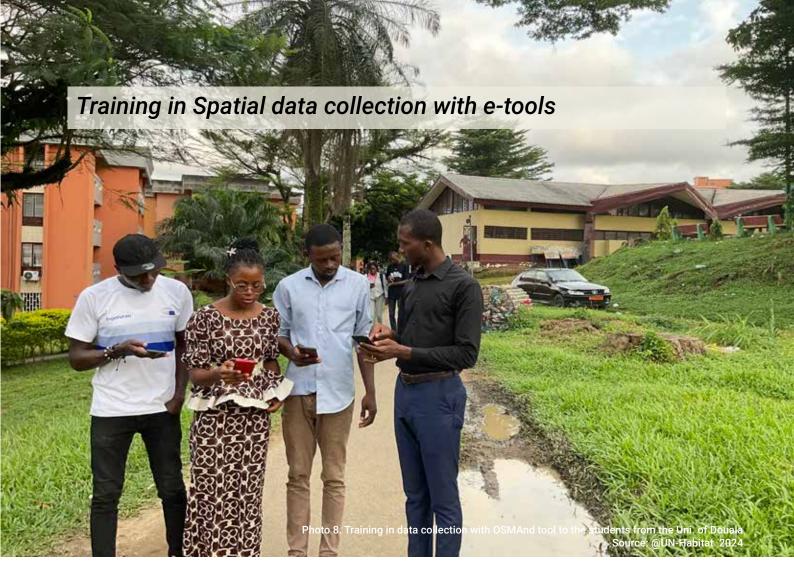
 Capacity building of students in urban planning analysis through the facilitation of theoretical sessions on UN-Habitat planning methodologies and project case studies.

Detailed explanations on different spatial data collection methodologies, including the use of free online tools such as KoboToolbox, OSMAnd and QField;

 Strategic field visits for data collection on the ground.

In addition, the collaboration included facilitating participatory workshops to share data collection results and disseminate lessons learned and best practices while maintaining follow-up with the UN-Habitat UPIMC Programme team in Cameroon.

Training in UN-Habitat urban planning methodologies



UN-Habitat's UPIMC Cameroon team was mainly responsible for enabling data collection in the field and completing the spatial analysis phase with the support of the academic community. Parallely, UN-Habitat expanded the stakeholder network within the framework of the UPIMC Cameroon Programme by collaborating with experts from universities and research institutes.

As part of monitoring and evaluation, all those involved in the collaboration maintained regular close consultations to review the progress of activities and share all relevant information and documents, including research, reports and any other information related to the outputs embedded in component 1.

The University of Douala's Department of Geography was mainly responsible for identifying challenges and strengths in the urban context of Douala 3, which were then used to develop strategies for upgrading basic urban services and socioeconomic opportunities for internally displaced populations in the municipality. Additionally, with support from the UN-Habitat UPIMC Cameroon Team, the department reviewed key national policies, legislation, territorial guidelines, and best practices related to neighborhood planning.



Photo 9. Data collection in Ndogpassi Plage with the University of Douala Source: @UN-Habitat 2024



They also conducted interviews and meetings with locals during site visits to better understand the context for applying the framework and its application in spatial analysis at the site-specific scale. Moreover, the department organized catch-up meetings regarding the progress of the work, as needed, and contributed to facilitating workshops planned with the UN-Habitat UPIMC Cameroon Team.

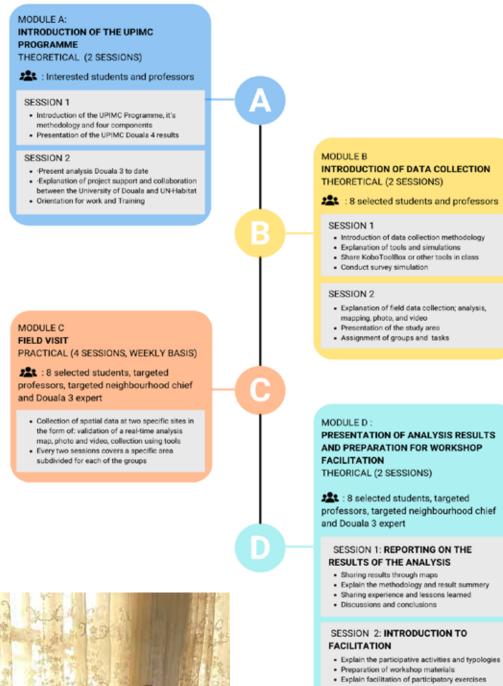
STRUCTURE OF THE COLLABORATION

The collaboration included four modules divided into 10 sessions, and covered both theory and practice as presented in table x.

- The theoretical models mainly consisted of inperson informative presentation at the University of Douala.
- The practical models included field visits for data collection and surveys, as well as the implementation of specific tools and phone applications, and on-ground support in facilitating workshops with the local stakeholders.



Photo 11. Students from the University of Douala supporting workshops Source : @UN-Habitat 2024



- · Explanation of work group moderation

Fig Structure of the collaboration programme with the University of Douala Source: @UN-Habitat 2024

The various models were carried out in sync with the project timeline where the spatial analysis was carried out in June and July of 2023, while the support of the workshops continued into 2024.

The different models also included specif students based on a carefully designed selection criteria which encompassed a good understanding of the subdivision of Douala 3, ownership of IT instruments, proficiency in internet usage, expertise in cartography software, knowledge of urban planning principles, and basic experience in field data collection.

Photo 12. Students from the University of Douala supporting workshops Source : @UN-Habitat 2024

COTECH AND VISION WORKSHOP

Prior to the vision workshop, a meeting with the Technical Committee (CoTech) was conducted on the 22 February, 2024 as an internal pre-validation. During the meeting with CoTech, the UPIMC team provided a recap of the spatial analysis, highlighting the key challenges identified which contributed to the development of three possible development scenarios;

- the "Business as Usual" scenario, projecting future outcomes based on current trends;
- the "Mono-directional" scenario, focusing on linear development; and
- the "Optimal" scenario, advocating for integrated and multi-nodal growth.

The variables of the three scenarios were discussed and validated by the technical committee. The UPIMC team also presented the proposed vision and the 5 strategies it is based on to be validated prior to the workshop.

Following the meeting with a technical committee, and having reflected their input and validation, a workshop was organized on 06 March 2024. This workshop focused on the presentation of the "business as usual" scenario and was followed by a group exercise to cobuild the optimal scenario.

The participatory workshop was attended by the Mayor of Douala 3 and his team, representatives of the ministries (MINHDU / MINEE / MINTP / MINTRANS/ DGSN), the city of Douala, Douala 3, the private sector, UN agencies, civil society associations, representatives of the of Ndogpassi Plage neighborhood and internally displaced person representatives – **75 people participated in this workshop, including 18 IDPs (08 women, 05 men and 05 young).**

The workshop aimed to validate the vision previously endorsed by CoTech and to present the three development scenarios, with a focus on coconstructing the optimal scenario.

The ultimate objective was to realize a vision through the optimal scenario, and identify the different projects it is composed of.



The workshop was structured in two main parts:

Theoretical

Following the opening remarks by the Mayor of Douala 3, the workshop commenced with a presentation on the spatial analysis of Ndogpassi Plage, followed by a validation of the urban vision and strategies. Key variables for scenario construction were then shared, along with proposed projects outlined in the Communal Development Plan of Douala 3 for 2023-2027. The session continued with a comparative analysis of two scenarios—business as usual and linear development—against the proposed optimal scenario, emphasizing the need for change and the advantages of an integrated, multi-nodal development approach.

Participatory

The second part of the workshop focused on the codevelopment of the optimal scenarios for the next five to ten years following the identified variables, as well as defining the priority actions for Douala 3 and the pilot neighborhood of Ndogpassi Plage.

ONSITE VISIT: MANGROVE OF BOKO

In collaboration with the Chief of the Douala 3, Environment and Waste Management Technical Service, the UPIMC Cameroon team conducted a field visit to Bassa canton, in the Boko neighborhood, specifically in the Nsong Ngongang-Mboh Nkon area, on May 3, 2024, to assess the mangrove forests.

The main objective was to better understand the current situation of mangroves, as it has a high importance as a priority project. Hence, it was crucial to better understand the situation of the ongoing urbanization on the mangroves to identify and design the priority projects proposed by UPIMC-Cameroon. The photos and videos taken in the field helped to develop a multimedia database to compare it with other protected areas in neighborhoods municipalities occurring the same threats.

During the field visit it was possible to engage with the local community of Boko and to meet the village chief who shared internal information that allowed a better understanding of the challenges of the urbanization of mangroves and the social dynamics of Boko.

Challenges Identified

- Informal constructions encroaching on mangrove areas
- About 70% of mangroves are urbanized, with defined road traces
- Semi-planned areas; areas not yet built on, have already been sold with clearly marked plots
- Expansion of construction and increasing water pollution between Douala 3 and Douala 2
- Expansion attempts towards Douala 6 across the river
- Occurring autonomous solid waste management
- Beyond the control of local authorities (incapable of stopping the growing urbanization)

The steps forward agreed with the chief were focused on the elaboration of an environmental vulnerability map, to give a visual to the residents about the areas exposed to risks and unsuitable constructions for shelters. Then, the UPIMC emphasized the elaboration of a project investment card focused on the reforestation of the Mangrove of Boko and the preservation of swamps Areas in Douala 3.





Photo 15. Meeting with the chief of Boko - Nsong Ngongang-Mboh Kon area Source: @UN-Habitat 2024

"...Our community needs to understand that the mangrove is our habitat and it needs to be protected and not damaged...

We have other places where we can settle forever... but cutting down our trees also harms our environment forever..."

Chief of the Boko neighbourhood

Photo 16. Mangrove visit on the 03.05.2024 Source: @UN-Habitat 2024



On May 6, 2024, a COTECH was held at the Douala 3 City Hall as part of Component 3.

It was a pre-validation meeting with representatives of the sectoral technical services: environment, roads and mobility infrastructure, migration and cooperation among others. The objective was to identify of priority projects that have become the heart of the Action Plan, to be validated during the next planning workshop. To this end, the UPIMC Cameroon team presented the prioritization matrix and the rating criteria. This was followed by a participatory exercise conducted with representatives of CoTech, civil society and the IDP group to prioritize and validate the projects, focusing on those falling within the competence of the Douala 3 Municipality. At the end of this process, the projects that obtained a score of 60/100 or more were selected, then prioritized again during additional discussions, resulting in a final selection of 30 necessary projects, and 15 priority projects for the Action Plan. This exercise also allowed the CAD3 technical services to benefit from a new decision-making tool.

On May 28, 2024, the UPIMC Cameroon team, in collaboration with the Douala 3 City Council and the UN-Habitat Cameroon country office hosted the Action Plan workshop in Douala.

The meeting brought together 40 participants including 8 women from development banks, international organizations, national governments, private sector, and IDP representatives and representative of sectoral ministries: Environment, Transport, Health and Education among others.

The objective of the workshop was

- to present to stakeholders the entire planning process of UPIMC Cameroon
- to validate the Action Plan and the 15 priority projects
- to launch discussions for future investments built on the 7 project briefs

Thus, the session was divided into 2 parts

- 1. Presentation and recall of the UPIMC Programme
- 2. Participatory session round tables for discussion and validation



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Photo 19. Action Plan workshop – participatory exercise in Douala on the 28.05.24 Source: @UN-Habitat 2024

COLLOQUIUM ON THE ACTION PLAN, YAOUNDÉ



Following the Action Plan workshop, a Colloquium was held on June 18, 2024 in Yaoundé.

A total of 30 participants attended, including 10 women. These round tables offered a valuable opportunity to connect stakeholders interested in the projects, facilitating collaboration among them based on their areas of expertise and interests.

The purpose of the Colloquium was twofold: (1) to present the priority projects and project briefs to the donors, and

(2) to validate the official implementation process.

This was reflected in the session's structure, which comprised two stages. The first stage presented the process and methodology of the UPIMC Cameroon program, with a focus on key aspects of stakeholder engagement. The second stage involved exchanges and discussions around the 7 priority projects through roundtable conversations.

During the second stage of the session, the 7 investment cards and project briefs were presented to key stakeholders and potential donors.

The seven projects presented fall into the following categories:

- 1. Environment Reforestation of the Boko Mangrove and preservation of swamps
- 2. Facilities Construction of a health centre
- 3. Equipment Development of a local market
- 4. Sanitation Construction of an organic waste sorting, and treatment plant
- 5. Equipment Development of a social centre
- 6. Equipment Creation of public spaces: Urban Parks,
- **Squares, and Touristic Attractions**
- 7. Transport Development of a pier

Each card outlined the project description, problem identification, objectives, expected impact, partners involved, cost estimates, and the action plan. This presentation effectively summarized the challenges and opportunities associated with each project, providing a comprehensive overview of the proposed interventions.



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The purpose of the Colloquium was twofold:

- 1. to present the priority projects and project briefs to the donors, and
- 2. to validate the official implementation process

This was reflected in the session's structure, which comprised two stages.

The first part, was focused on sharing the entire planning process and the main results of the 4 components of UPIMC Cameroon Douala 3 to make the public understand the rationale of the action plan and the investment projects developed. Hence particular attention was given to the key aspects of stakeholder engagement.

The second stage involved exchanges and discussions around the 7 priority projects through roundtable conversations, hence during the second stage of the session, the 7 investment cards were presented to key stakeholders and potential donors. Each card outlined the project description, problem identification, objectives, expected impact, partners involved, cost estimates, and the action plan. This presentation effectively summarized the challenges and opportunities associated with each project, providing a comprehensive overview of the proposed interventions.

The seven projects presented were:

1. Environment - Reforestation of the Boko Mangrove and preservation of swamps

2. Health - Construction and equipment of a health centre

3. Equipment - Development of a local markets

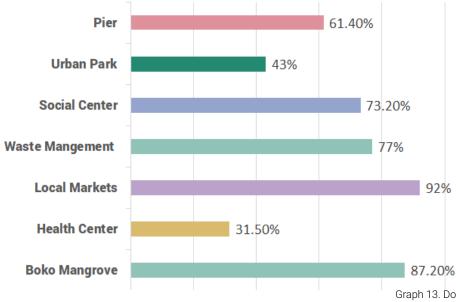
4. Sanitation - Construction of an organic waste sorting, and treatment plant

5. Equipment - Social centre - Development of an integration/social centre for displaced persons

6. Equipment - Creation of public spaces: Urban Parks, Squares, and Touristic Attractions-

7. Transport - development of a pier

Round tables were organized with key potential donors and stakeholders to present the action plan, along with the phased maps and tables that outline the implementation order of the priority projects considering their technical feasibility. During this participatory part of one-on-one discussion with potential donors, heads of technical services of Douala 3 and representatives of UN-Habitat were engaged around the project briefs to maximize the interest of potential donors, validate the shared technical details and the implementation process according to their methodology and in case agree on a way forward to consolidate the first steps on financing and implementation.



Graph 13. Donors' intrests based on conducted workshops Source : @UN-Habitat 2024

BILATERAL MEETINGS WITH DONORS

Following the CoTech of the Action plan, 15 priority projects were identified in collaboration with the Chiefs of Technical Services of Douala 3. This led the development of a fundraising process for seven priority infrastructure projects, which were further detailed in project briefs mainly located in the pilot neighbourhood of Ndogpassi Plage as well as areas of the Douala 3 Subdivision.

The UPIMC-Cameroon team then started a series of bilateral meetings with different potential donors to establish a mutual understanding of the UPIMC Cameroon Programme and initiate discussions to enable synergies to obtain investments and funds towards the project implementation.

The bilateral meetings were held between April and November 2024 with approximately 25 potential donors. This included; financial institutions and development banks, private sector, humanitarian donors, UN organizations and Local actors.

Goals

- Present the key findings of the UPIMC Cameroon programme and the projects briefs of the 7 priority project to obtain funds for implementation.
- Confirm the relevance of identified projects and validate their alignment with donor priorities.
- Explore opportunities for partnerships.

Results obtained and way forward

- The series of meetings allowed to develop a clear roadmap of potential donors divided by work theme, scale of intervention and implementation typology: feasibility studies, construction and similar.
- Despite the share of the pilot projects impacts and benefits, the CAD3 still needs to widen the network to potential donors to obtain financial support for the projects. For this, the online dissemination of the CAD3 reports: spatial profiling, vision, action plan and overview of project projects, allows to continue to reach a wider audience and raise awareness of the 3rd Municipality's opportunities.



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ACTION PLAN

05

PRIORITIES AREAS OF FUTURE INVESTMENTS

The urban visioning of the municipality of Douala 3 outlines the strategic areas that require focused investments to achieve sustainable and inclusive development by 2035. Also, the optimal scenario highlights five major urban intervention Programmes that will foster sustainable development, build resilient and thriving urban communities and enhance the wellbeing of the residents of Douala 3 and the Ndogpassi Plage neighbourhood.

The development of these programmes, led to the identification of projects that would be implemented in the next 10 years and beyond to ensure the achievement of the urban vision and optimal scenario of Douala 3.

These projects have been grouped together across five priorities areas for future investments:

- 1. Equipment economic, social and recreational
- 2. Environment
- 3. Basic Urban Services
- 4. Facilities health and education
- 5. Transport and Mobility

URBAN DEVELOPMENT PROGRAM	OBJECTIVES	FUTURE INVESTMENTS AREAS
Compact Urban Development	 a. Efficient Land Use: Promote higher density development to optimize land use and reduce urban sprawl. b. Mixed-Use Zoning: Encourage the integration of residential, commercial, and recreational spaces to create vibrant neighborhoods. 	 Urban Planning: Development and implementation of detailed master plans to guide sustainable land use. Infrastructure Upgrades: Investment in high-rise residential buildings and multi-purpose complexes. Smart Growth Initiatives: Supporting policies and projects that focus on smart growth principles, such as transit- oriented development.
Connected Infrastructure	a. Transportation Networks: Enhance connectivity through efficient and reliable transportation systems.	 Public Transit Systems: Invest in buses, light rail, and other mass transit options to reduce traffic congestion and pollution. Road Improvements: Upgrade and expand road networks to improve mobility.
Healthy and Preserved Environment	 a. Environmental Conservation: Protect and enhance natural ecosystems and biodiversity. b. Public Health: Promote a healthy living environment for all residents. 	 Green Spaces: Create and maintain parks, gardens, and green belts to improve air quality and provide recreational spaces. Sustainable Practices: Implement waste management systems and promote recycling and composting initiatives. Healthcare Facilities: Upgrade and expand healthcare infrastructure to ensure access to quality medical services.
Prosperous Economic Development	 a. Economic Growth: Foster a dynamic and diversified economy with ample job opportunities. b. Innovation and Entrepreneurship: Support the growth of startups and innovative enterprises. 	 Economic Poles (hubs): Establish hubs for startups and small businesses to encourage entrepreneurship. Skill Development: Invest in education and training programs to equip the workforce with relevant skills. Industry Diversification: Promote industries such as tourism, manufacturing, and technology to reduce dependency on any single sector.
Equipped Urban Services	 a. Basic Services: Ensure access to essential services such as water, electricity, and sanitation. b. Resilient Infrastructure: Develop infrastructure that can withstand environmental and economic shocks. 	 Utility Networks: Expand and upgrade water supply, sewage systems, and power grids to meet growing demands. Disaster Preparedness: Invest in infrastructure and systems to enhance resilience to natural disasters such as floods and storms. Public Amenities: Provide community centers, libraries, sports facilities, and other public amenities to enhance the quality of life.

Table 4. Vision, objectives and future investment areas Source: Vision Statement of the Municipality of Douala 3, developed by @UN-Habitat 2024

IDENTIFICATION OF NEEDED PROJECTS

The needed projects to achieve the urban vision of the CAD3 were at first identified based on existing urban planning documents, in this case the Communal Development Plan of Douala 3 (PCD).

The list of projects for the PCD were compiled based on specific areas from the three operating programs:

- The "Improvement of the provision of basic social services" program. These encompass projects within the "Social" domain or sub-program, such as those focused on basic education, secondary education, health, and more. Within this specific "domain" or "sub-program", 05 projects have been identified for each village, and in some cases, there may be even more projects in urban areas without any specific quantitative restriction.
- The "Promotion of economic development and environmental protection" program. Here we find two sub-programs (domains) which considers the sectors of economic development (agriculture, livestock, Commerce, etc.) through the "Economic" sub-program on the one hand and those relating to the environment, and particularly the "Ecological" sub-program. Four (04) "Economic" and two (02) "Ecological" projects have been identified in each village. These quantities could be exceeded when it came to urban spaces which have no limitation in terms of the number of projects identified in this program.
- The "Promotion of Culture, Sports and support for youth" program. It makes it possible to identify projects in three (03) sectors through three subprograms: Sports, Culture and Youth. Two (02) projects were therefore identified per village and more (if applicable) in urban areas for the "Support for Youth" sub-program. On the other hand, one (01) project was identified per village and more (if applicable) in urban spaces in each of the two "Cultural" and "Sports" sub-programs.

On this basis, at least 15 priority projects were identified per village and urban area. Considering the 105 villages and neighbourhoods in the municipality of Douala 3, a total of 1,575 projects were listed in the CAD3 PCD. Given the large number of projects, one (01) priority project of priorities was also identified for each neighbourhood/ village, reducing the number of projects required to 83.

In addition, the construction of the optimal scenario followed a participatory process that identified 13 additional projects highlighted by the various stakeholders, including the IDPs.

To sum up, the 83 projects drawn from the PCD added to the 13 projects from the participatory exercise bring to 96 the number of projects needed to achieve the CAD3 urban vision.

IDENTIFICATION OF NEEDED PROJECTS

Due to the constraints of the municipal budget in Douala 3 and the limited external resources offered by the financing bodies involved (FEICOM, Ministries and development partners -the donor community), it is not possible to fund all infrastructure projects that have been proposed to achieve the urban vision. Because the total investment value of the municipal pipeline of infrastructure projects vastly surpasses the resources available.

Consequently, reducing the number of projects to be carried out is a possible option for CAD3.

To assess the projects that need to be implemented as a priority in the next 10 years, a scoring matrix was developed (Annex A). The objective of the scoring matrix is three fold:

- Assess likely impacts of the projects proposed by UN-Habitat vis-à-vis the sustainable urban development of Douala 3 and Ndogpassi Plage.
- Prioritize the projects according to their transformative impact on the social, environment, economic, and spatial aspects, their urgency, as well as the alignments with the existing governmental plans. The final scoring of each project considers the assessments of the local community representatives and key local stakeholders of the subdivision of Douala 3.
- Assess the capacities (spatial planning, institutional, funding, implementation) of the municipality for UN-Habitat to better tailor interventions and provide targeted recommendations.

For the Municipality of Douala 3, the projects were prioritized based on a multi-sectoral, **multi-criteria quantitative assessment (MCA)** of common project characteristics relying on five key criteria which were weighted for a total of 100 points. That is:

- i. Project scale and status
- ii. Project objective and service improvements
- iii. Project risks and sustainability
- iv. Project financial and economic aspects
- v. Feasibility of implementation.

Using the developed methodology, the matrix exercise enabled the UN-HABITAT team to prioritise 30 development projects, out of the 96 needed projects initially identified, that scored above 50/100.

Using the same methodology, these 30 projects were prioritised a second time, with the UPIMC methodology, during a participatory exercise with the CAD3's technical departments, reducing the number of priority projects to 15 spanned in the five priority

future investments areas (Equipment, Environment, Basic Urban Services, Facilities Transport and Mobility).

This exercise also made it possible to determine the feasibility for implementation of each project once the main orientations were established. This made it possible to retain the projects that were most mature projects and could be legally implemented at city and subdivision level.

The UN HABITAT team then proceeded to phase each project based on the technical capacities of the Municipality and the related projects that are presently being implemented within CAD3.

EXISTING ACTIVITIES

Despite Douala's strategic location as Cameroon's economic hub, it faces challenges of poverty, unemployment, crime, and inadequate infrastructure, all worsened by rapid urbanization and slum growth. The city's limited financial resources hinder its ability to address these issues. However, the Municipality of Douala 3 looks forward to benefiting from ongoing national projects and new initiatives led by the city to improve its situation. This includes the following ongoing activities and projects:

- The construction of the Douala BRT network which includes 28 km of dedicated bus lanes with interchanges, 44 stations, four terminals, drainage systems, a water supply system, street lighting, and the purchase of buses or the implementation of a traffic management system. The BRT is expected to provide the economic capital of Cameroon with a modern transportation system for improved mobility with significant impacts on the transportation network of the municipality of Douala 3.
- In response to the actual hazard demonstrated by specific instances of heavy rainfall in the city, the Urban Community of Douala has initiated a sanitation project in accordance with the Sanitation Master Plan (SDA). Construction of storm drainage canals. Based on a technical analysis conducted by the local design firm ECTA-BTP, priority targeted interventions were recommended to remediate the drainage system and mitigate the occurrence of floods in the city of Douala. As detailed in the following table.

Drains	Sectors concerned in the city	Municipality	Linear Meter	
Kondi	General Hospital, City of Palms, Nyala, Logbaba	Douala 3 and 5	2 620	
Mgoua	Nkolmintag, Brazza- ville, Bassa industrial zone	Douala 2 and 3	12 060	

- The NR3 road rehabilitation from the centre of Douala to the Dibamba River bridge, titled the "Eastern Entrance of Douala" project. Widening the NR3 will facilitate development the of Yassa industrial area and improve access of inhabitants of the Douala 3rd district. MINTP has facilitated various studies to inform the planning and design of the NR3.The main aims of the NR3 project are to:
 - Decongest the NR3 road course, to allow the crossing of the city without traffic jams.
 - Considerably improve the functioning of the storm water systems along the road.
 - Facilitate trade between neighbourhoods intersecting the NR3.
 - Encourage safe movement of persons and goods.
 - Improve access to markets, ports, Yassa industrial areas, 3rd district inhabitants and to public utilities such as hospitals and schools.
 - Enable the populations living along the road and all the inhabitants of Douala to see their living and transport conditions change and thus improve their living environment.
 - Meet the needs of accessibility on days of sporting events at the Japoma stadium in Douala; and improve road safety by providing pedestrian crossing areas and adequate parking.

Phase 2 components of this project include: a 9 km of road widening, construction of five new roundabout interchanges, the construction of an overpass at Japoma and underpass at Yassa; storm water management infrastructure, including nine hydraulic structures; and other related road infrastructure (i.e., landscaping, lighting, bus stops, parking areas, etc.).

- Road network upgrading. Starting from Billes, the entrance to the Village neighbourhood, and proceeding to the Bassa Industrial Zone, both located in the Municipality of Douala 3. (80 percent of the 4,340-meter motorable road connecting both locations has been finished, while 800 meters remain unfinished). The building of a 7,000-meter drainage canal connecting Douala 3 to Douala 4 Subdivision.

All these projects are anchored in the priority intervention sectors identified during the participatory workshops.

Table 5. onstruction of storm drainage canals

Source: @UN-Habitat 2024, based on the Scoring Matrix Douala IV; Pacific Region Infrastructure Investment Facility; Infrastructure Prioritization Matrix: A Decision Framework -World Bank

THE NEEDED PROJECTS - DOUALA 3

The Optimal scenario building exercise resulted in seven strategic areas of intervention to achieve the **urban vision of the municipality of Douala 3 by 2035.** As pre-mentioned, 30 needed projects with a score above 65/100 were selected for the CAD3 following consultations with the various stakeholders.

These interventions were translated into a plan to be carried out over time in the 3rd Municipality and Ndogpassi Plage. On this basis, the plan of the needed projects was drawn up, according to three timeframes:

- Short term timeframe: This category encompasses critical and high urgency projects, such as basic services (water, electricity, waste collection and ICT), the improvement of the mobility networks, the construction of social facilities (education and health), and the development of economic infrastructure (local markets). These projects must be implemented within a timeframe of zero to three years (included). What's more, some projects can start from now because the municipality has the necessary experience to manage these projects, in addition to having the elements of maturity (availability of land, preliminary studies, etc.).
- Medium term timeframe: This category includes projects that require first the improvement of basic infrastructure and accessibility. It also includes less urgent projects for which the municipality has limited powers to ensure proper implementation. These actions must be undertaken within three to five years.
- Long term timeframe: Long-term timelines: This category includes low-priority projects since their implementation consists of a long coordination process between different stakeholders and their presence is not mandatory to ensure the development of CAD3. Therefore, these projects will take off after five years of implementation.

Following, the most relevant projects will be integrated in an Action Plan focused on the area of the intervention: Ndogpassi Plage.

To ensure an inclusive and sustainable development approach for the improvement of CAD3 the projects are aligned with international mandates, and their respective Sustainable Development Goals. Furthermore, their involvement also includes a participatory approach of vulnerable groups, such as women, young people, elderly people and people with reduced mobility, as direct beneficiaries of the planned actions and, sometimes, responsible for the management of the project itself.

These Goals are:

SDG 1 - NO POVERTY SDG 3 - GOOD HEALTH AND WELL-BEING SDG 4 - QUALITY EDUCATION SDG 5 - GENDER EQUALITY SDG 6 - CLEAN WATER AND SANITATION SDG 7 - AFFORDABLE AND CLEAN ENERGY SDG 8 - DECENT WORK AND ECONOMIC GROWTH SDG 9 - INDUSTRY, INNOVATION AND **INFRASTRUCTURE** SDG 10 - REDUCED INEQUALITY SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES SDG 12 - RESPONSIBLE CONSUMPTION AND PRODUCTION SDG 13 - CLIMATE ACTION SDG 14 - LIFE BELOW WATER SDG 15 - LIFE ON LAND SDG 17 - PARTNERSHIPS FOR THE GOALS

Alignment with the Sustainable Development Goals (SDGs)



30	NEEDED PR	OJECTS - DOL	JALA 3			
#	SECTOR	NEIGHBOURHOOD	PROJECT	YEARS	0 - 3	3 - 5 / >5
1		Brazzaville	Development and equipment of a square - esplanade			
2		Ndogpassi Plage	Development of local markets			
3	Equipment	Ndogpassi Plage	Development of a social center for IDPs and vulnerable population			
4		Douala 3 and Ndogpassi Plage	Creation of urban parks and public spaces			
5		Douala 3 and Ndogpassi Plage	Creation of sports infrastructure: football camps, playgrounds			
6		Ndogpassi Plage	Multimedia Training Center			
7		Oyack Ndogpassi Plage	Creation of drains to avoid flooding			
8	-	Dibom 3 Boko Kambo 1 and 2	Construction of the drain on the Kambo River			
9		Boko	Reforestation of the Boko Mangrove			
10	Environment	Douala 3 and Ndogpassi Plage	Protection and enhancement of swamps			
11	Littlionnent	C.C.C	Development and creation of pipes			
12		Ndogpassi Plage Dibom 3	Opening of drains			
13		Nyalla	Clogging of the ravine			
14		Ndogpassi Plage	Capacitiy building trainig in the practice of urban - agricolture			
15	Social Housing	Douala 3	Construction of social housing (sale and/or rental)			
16		Mboppy Sychar	Public lighting and solar panels			
17	Basic Services -	Yansoki	Road lighting with solar panels			
18	Public Lighting	Ngologo I	Public lighting			
19		Douala 3	Creation of solar power plants			
20	Basic Services - Water Network	Kondi Douala 3	Construction water points			
21		Yatchika	Provision of a drinking water supply system			
22	Basic Services - Waste mng.	Douala 3 and Ndogpassi Plage	Construction of a sorting, and treatment plant for organic waste			
23		Lombe Mission Ndogpassi Plage	Creation, construction and equipment of a health center			
24	Facilities - Health	Boko Carrière	Creation and construction of a CMA			
25		Ndoghem 2	Creation and construction of a CSI and CMA			
26	Transport and	Bwang-Bakoko	Development of river transport: development of pier			
27	Mobility	Ndogpassi Plage	Development of alternative modes of travel _ cycle paths			
28			Raising awareness about risks of urbanization of protected areas			
29	Governanace	Douala 3	Raising awareness about protection of the mangrove			
30			Raising awareness about maintenance of drains			

This phase focuses on projects that need to be implemented over the next three years to achieve the optimal scenario for the CAD 3. These are projects that score 3 out of 3 for the "project implementation timeframe" criterion in the prioritization matrix.

In particular, these are projects for which the structure is available, but the service is not optimal and therefore requires improvement. In addition, these projects are likely to have an immediate impact on the development of the municipality by improving the living environment and living conditions of the IDPs. These projects also have a high potential for generating income through the creation of local jobs for around 30 to 60% of the local population.

These are therefore projects whose postponement would have major negative consequences. Also, the municipality has sufficient capacity to implement and operate projects of this scale. The aim is to identify the critical areas in Douala 3 to guarantee the effectiveness and an equitable distribution of the interventions to be carried out in the short term.

The total amount of short-term projects is 19.

These projects have been divided into the five thematic areas as follows:

- 1. Equipment economic, social and recreational
- 2. Environment
- 3. Basic Urban Services
- 4. Facilities health and education
- 5. Transport and Mobility

Governance is an ever-present topic that should be transversal to all 5 sectors.

Three sectors are considered to be of greatest importance for Douala 3, namely : the Environment, Basic Urban Services and Equipment.

This is because environmental issues are felt at the level of the entire municipality: there is an urgent need to operate in the natural habitat where the lack of interventions leads to disasters such as floods, landslides or urbanization onf green spaces. Therefore, different interventions will be proposed in areas of CAD3 where it is possible to introduce actions filling to adapt and mitigate the effects of climate change. It is also possible to note the need to provide systems of basic urban services, such as drinking water, electricity both public and in homes and waste disposal, continuously in CAD3. Finally, equipped public spaces respond to the need for community gathering places that allow for the creation of synergies between residents and to generate economic income, while ensuring leisure and entertainment.

The table that follows shows the projects selected for the short-term phase.

- 1. Development and equipment of a square esplanade
- 2. Development of a local market
- 3. Development of a social center for IDPs and vulnerable population
- 4. Creation of urban parks and public spaces
- 5. Creation of drains to avoid flooding
- 6. Construction of the drain on the Kambo River
- 7. Reforestation of the Boko Mangrove
- 8. Protection and enhancement of swamps
- 9. Development and creation of pipes
- 10. Opening of drains
- 11. Public lighting
- 12. Implementation of solar panels
- 13. Construction of water points
- 14. Provision of a drinking water supply system
- 15. Construction of a sorting, and treatment plant for organic waste
- 16. Construction and equipment of a health center
- 17. Creation and construction of a CSI
- 18. Development of river transport: development of pier
- 19. Raising awareness about risks of urbanization of protected areas

Alignment with the Sustainable Development Goals (SDGs)



#	SECTOR	NEIGHBOURHOOD	PROJECT	YEARS	0 - 3	
1		Brazzaville	Development and equipment of a square - esplanade			
2	Faultaneent	Ndogpassi Plage	Development of a local market			
3	Equipment	Ndogpassi Plage	Development of a social center for IDPs and vulnerable population			
4		Douala 3 and Ndogpassi Plage	Creation of urban parks and public spaces			
5		Oyack Ndogpassi Plage	Creation of drains to avoid flooding			
6		Dibom 3 Boko Kambo 1 and 2	Construction of the drain on the Kambo River			
7		Boko	Reforestation of the Boko Mangrove			
8	Environment	Douala 3 and Ndogpassi Plage	Protection and enhancement of swamps			
9		C.C.C	Development and creation of pipes			
10		Dibom 3 Boko Kambo 1 and 2	Opening of drains			
11	Basic Services -	Mboppy Sychar	Public lighting			
12	Public Lighting	Yansoki	Implementation of solar panels			
13	Basic Services -	Kondi Douala 3	Construction of water points			
14	Water Network	Yatchika	Provision of a drinking water supply system			
15	Basic Services - Waste mng.	Douala 3 and Ndogpassi Plage	Construction of a sorting, and treatment plant for organic waste			
16	Facilities - Health	Lombe Mission Ndogpassi Plage	Construction and equipment of a health center			
17		Boko Carrière	Creation and construction of a CSI			
18	Transport and Mobility	Bwang-Bakoko	Development of river transport: development of pier			
19	Governance	Douala 3	Raising awareness about risks of urbanization of protected areas			

The spatial distribution of projects needed in the short term allows to localize the priority areas for interventions.

Most of the projects are focused on environment matters (protection of mangroves, swamps or existing drainage) because the impact of environmental hazards is extremely felt in CAD3 and is the main cause of the malfunctioning of the municipality because it spills over to other factors such as damage to informal housing, threats to natural habitat, roads and transport infrastructure.

These are mainly located in the southern areas of CAD3, characterized by lowlands and mangroves.

The interventions on wetlands in the areas of Bwang-Bakoko, Yassa, Yansoki and Ngodi, aim to protect the natural habitat from urbanization and the profiling of informal settlements through the application of environmental policies and the creation of natural buffer zones. Other proposals are reforestation strategies, creation of green corridors and of drainage from the Kambo River, to mitigate floods that worsen soil solidity. The implementation of these projects considers at first an environmental impact assessment before the design and construction phases, namely the feasibility study.

Attention is also paid to the distribution of basic services that are the indicator of good living conditions: distribution of drinking water, electricity and waste management.

Strong attention is given to the public lighting, which permits to ensure safety and security in vulnerable neighbourhoods.

However, the upgrading and extension of basic services (water, electricity, waste management, and ICTs) in critical areas should go hand in hand with the extension and improvement of the road network.

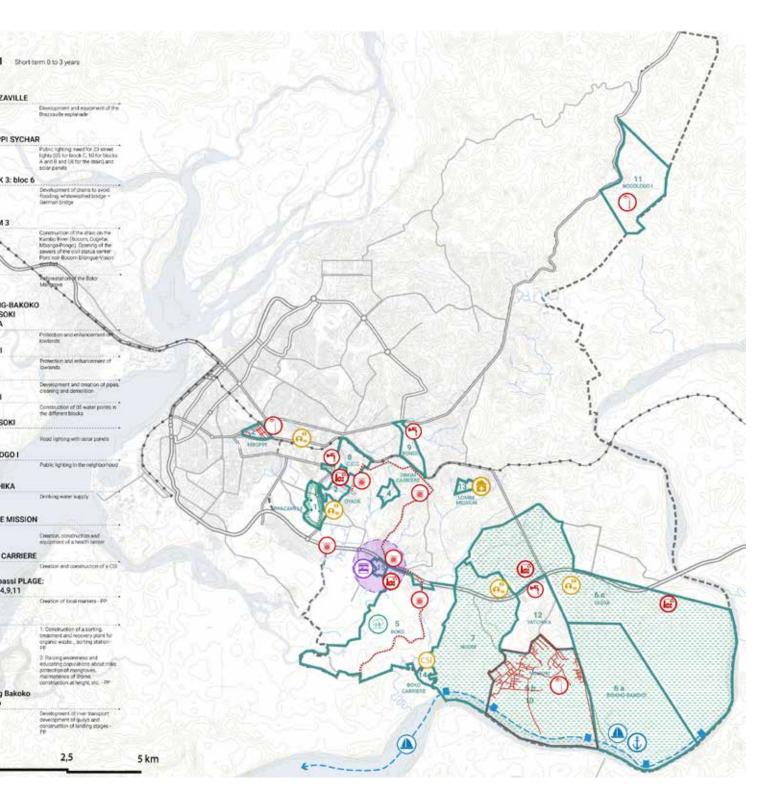
It should be noted that awareness campaigns on the issues of climate change adaptation measures have been validated by stakeholders, especially vulnerable communities, as actions that should be applied throughout the implementation period of the projects, from the short to the long term.

LEGEND



Alignment with the Sustainable Development Goals (SDGs)





This phase concerns priority projects that cannot be launched immediately. These are projects that scored 2 out of 3 for the "project implementation timetable" criterion.

Actions for mid-term

Following the prioritization process, three projects were selected as priority actions to be carried out over the medium term.

- 1. Environment Creation of sports infrastructure: football camps, playgrounds
- 2. Environment Capacity building training in the practice of urban agriculture.
- 3. Facilities Creation and construction of a CMA.

As CAD 3 has very few recreational facilities, these projects will contribute to efforts to develop attractions, culture and natural resources.

These projects have similarities with the short-term projects, however their implementation would require more time to mobilise adequate human and financial resources.

Actions for long term

This phase concerns development projects that have obtained a score of 1 out of 3 for the "project implementation timetable" criterion. Most of these projects are at the ideation stage and therefore do not have enough maturity to trigger discussions with potential donors for immediate implementation.

The main characteristics of these projects are a lack of detail on the population affected, the potential socioeconomic impact, the costs involved, and the fact that there is no existing service.

- 1. Equipment Multimedia Training Center
- 2. Environment Clogging of the ravine
- 3. Housing Construction of social housing.
- **4.** Transport and Mobility Development of alternative modes of travel _ cycle paths.
- 5. Basic urban services creation of solar power stations.
- 6. Governance raising awareness on environmental issues

The main characteristic of these projects is that they are presented as the completion of short-term projects, to ensure full service coverage in all locations in need of CAD3. It is noteworthy that, in parallel a continuous series of awareness campaigns on risks, environmental protection and the like will be carried out to strengthen the implementation of the actions and ensure the assimilation of the concepts of sustainability to the citizens of CAD3 who will be responsible for the follow-up and maintenance of these interventions.

Alignment with the Sustainable Development Goals (SDGs)

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#	SECTOR	NEIGHBOURHOOD	PROJECT	YEARS	3 - 5 / >5
1	Equipment	Creation of urban parks and public spaces	Creation of sports infrastructure: football camps, playgrounds		
2	Equipment	Ndogpassi Plage	Multimedia Training Center		
3	Environment	Ndogpassi Plage	Capacitiy building trainig in the praction of urban - agricolture	e	
4		Nyalla	Clogging of the ravine		
5	Social Housing	Douala 3	Construction of social housing (sale and/or rental)		
6	Basic Services - Public Lighting	Douala 3	Creation of solar power plants		
7	Facilities - Health	Ndoghem 2	Creation and construction of a CMA		
8	Transport and Mobility	Ndogpassi Plage	Development of alternative modes of travel _ cycle paths		
9		Douala 3	Raising awareness about risks of urbanization of protected areas		
10	Governance	Douala 3	Raising awareness about protection of the mangrove		
11		Douala 3	Raising awareness about maintenance of drains		

In contrast to short-term projects, medium and longterm projects are concentrated in the core of CAD3.

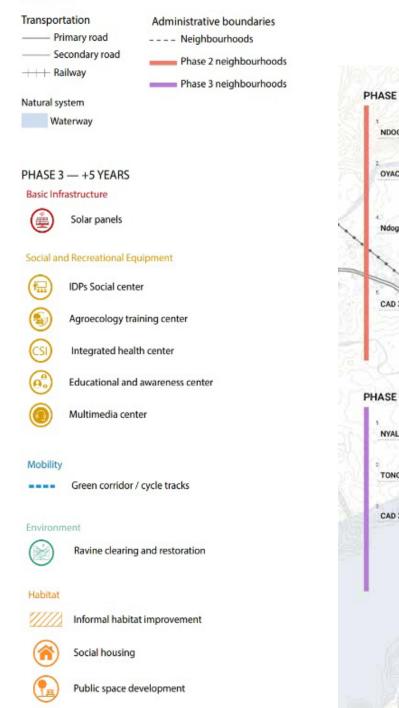
This is because these areas are currently almost fully equipped and therefore it is more a question of completing or improving interventions than of providing new services.

The role given to the environment in this phase is significant, especially urban agriculture regularly planted by displaced people and host communities. This is seen as a potential to improve living conditions at an economic level, but also environmental.

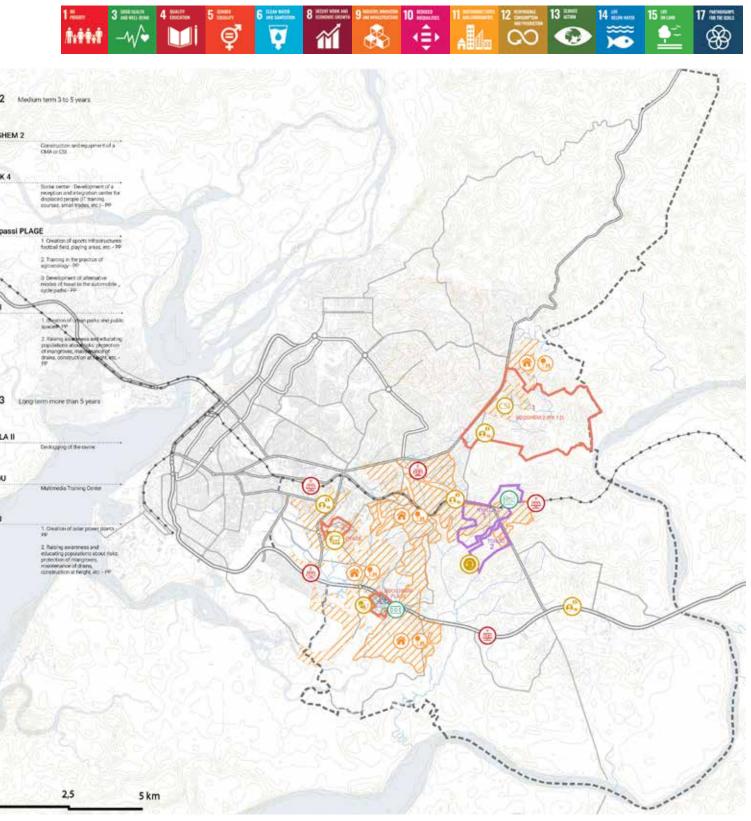
In Ndogpassi Plage, the presence of urban gardens has been noted as areas to produce goods for subsistence or sale in the markets. This is translated into training facilitated to vulnerable population and on cultivation and agricultural activities for the exploitation of rural resources.

In the long term, the social housing programme to be implemented in CAD3 is relevant to respond to the growth of the displaced population and the host population. This project falls under the responsibility of the Douala 3 Council and the Douala City Council and related ministries, which is beyond the role of the UPIMC Cameroon Programme. However, it is a mandatory intervention that must be ensured for the development of the 3rd Municipality.

LEGEND



Alignment with the Sustainable Development Goals (SDGs)



The Action Plan is a planning tool that serves as a clear and concise roadmap to facilitate the implementation of targeted interventions. It considers the needs of host and displaced communities. These interventions are organized by project, sector of activity, area of intervention and timeframe. It is a decision-making tool that enables the municipality to direct investments to achieve the highest possible impact.

The validated intervention area is Ndopassi Plage neighbourhood, however there are some projects that, for their relevance and impact on the neighborhood itself and the CAD3, had to be integrated although outside the limits of Ndogpassi Plage.

These are mainly those related to the protection and enhancement of environmental habitat such as the Boko Mangrove, the large extension of lowlands in the southern part of the CAD3 and the specific drains that run in the Commune and which are the main source of flooding among others.

Furthermore, it should be noted that the Governance theme is transversal. It will last several years and will spread over more than one period (See table of 15 projects).

The Action Plan of Ndogpassi Plage presents :

- 10 short-term projects
- 02 medium-term projects and
- 03 long-term projects

classified into thematic areas

- 1. Equipment
- 2. Environment
- 3. Basic Services
- 4. Fcailities Health
- 5. Transport and Mobility
- 6. Governance

Short term (0 - 3 years)

- 1. Development of a local market
- 2. Development of a social center for IDPs and vulnerable population
- 3. Creation of urban parks and public spaces
- 4. Reforestation of the Boko Mangrove
- 5. Protection and enhancement of swamps
- 6. Construction of the drain on the Kambo Riversewers
- 7. Construction of a sorting, and treatment plant for organic waste
- 8. Construction water points
- 9. Creation and equipment of a health center
- 10. Development of a pier

Mid term (3 - 5 years)

11. Creation of sports infrastructure: football camps and playgrounds

12. Capacitiy building trainig in the practice of urban - agricolture

Long term (Beyond 5 years)

- 13. Creation of solar power plants
- 14. Clogging of the ravine

15. Raising awareness about risks: protection of mangroves, maintenance of drains, construction at height, etc.

Alignment with the Sustainable Development Goals (SDGs)

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#	SECTOR	NEIGHBOURHOOD	PROJECT	YEARS	0 - 3	3-5/>5
1		Ndogpassi Plage	Development of a local market			
2	Equipment	Ndogpassi Plage	Development of a social center for IDPs and vulnerable population			
3		Douala 3 and Ndogpassi Plage	Creation of urban parks and public spaces			
4		Douala 3 and Ndogpassi Plage	Creation of sports infrastructure: football camps and playgrounds			
5	_	Boko	Reforestation of the Boko Mangrove			
6	- Environment	Douala 3 and Ndogpassi Plage	Protection and enhancement of swamps			
7		Dibom 3 Boko Kambo 1 and 2	Construction of the drain on the Kambo River-sewers			
8		Ndogpassi Plage	Capacitiy building trainig in the practice of urban - agricolture			
9		Nyalla	Clogging of the ravine			
10	Basic Services - Waste mng.	Douala 3 and Ndogpassi Plage	Construction of a sorting, and treatment plant for organic waste			
11	Basic Services - Public Lighting	Douala 3	Creation of solar power plants			
12	Basic Services - Water Network	Douala 3	Construction of water points			
13	Facilities - Health	Ndogpassi Plage	Creation and equipment of a health center			
14	Transport and Mobility	Bwang-Bakoko	Development of a pier			
15	Governance	Douala 3	Raising awareness about risks of urbanization of protected areas			

To ensure detailed follow-up for the implementation of the priority projects, seven projects were detailed in the form of investment fiches. In this regard, priority was given first to projects raised by displaced people during the participatory exercises, secondly to projects that have a domino effect of benefits and finally to those with a high potential for the creation of incomegenerating activities.

1. Development odf a local market - This refers to a retail activity that primarily serves the needs of the population of the neighborhood. It typically offers a wide range of goods including groceries, clothing, electronics, household items and more. Overall, the local market plays an important role in providing essential services to communities while supporting local economic development.

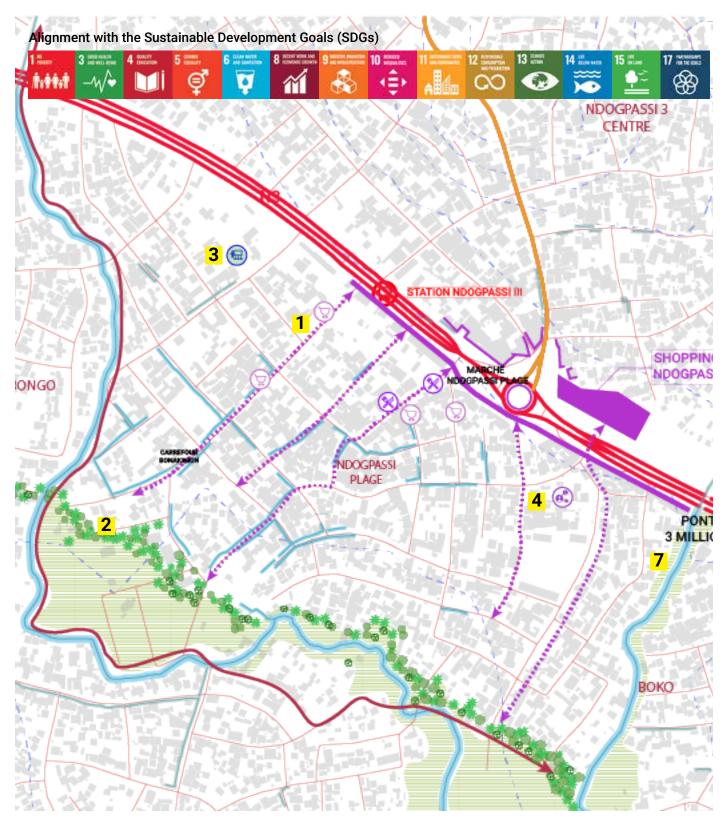
2. Reforestation of the Boko Mangrove and protection of the swamps - Nature-based solutions will be at the heart of these projects. Feasibility studies will assess environmental risks: these studies will be supported by the legal delimitation of the buffer zone.

3. Construction of a sorting and treatment center for organic waste - The project aims to improve the SWM system of Ndogpassi Plage to provide a hygienic and healthy environment for all residents, protect natural areas and change the culture of waste management. The project will ensure self-sufficiency in solid waste management. In fact, it will prevent water contamination, the spread of diseases and reduce flood risks. This will directly participate in environmental protection and promote urban health. **4. Development of a social center** - These centers serve as hubs for the provision of humanitarian aid, offering services such as psychosocial support, socioeconomic development programs, social cohesion activities and protection services for vulnerable populations, including refugees and migrants.

5. Construction and equipment of a health center -Following the analysis of urban structures and population growth, this project envisions the construction of additional health centers to anticipate future needs. The current centers will be upgraded in terms of equipment and new centers will be established at key locations within the neighborhood to bridge the long distance gap to the hospital.

6. Development of a pier - The current pier Bwang-Bakoko has served local fisheries and local transportation (goods and people). The demographic growth has driven te focus on the needs of local carpenters, fishermen but also communities. The pier has the potential to be transformative, not only for Bwang-Bakoko, but for the entire CAD3. It will create a well-equipped public space that will allow for employment opportunities, restaurants and leisure attractions among other community gathering services.

7. Public Spaces - Urban Parks - The construction of parks complements the flood control system. The project is based on an adapted permeable biodiversity (selection of plants, trees) combined with the construction of retention basins that also have a landscape function. In this way the project ensures different uses of the new public recreational green spaces and flood protection.



Development of a local market - 2. Reforestation of the Boko Mangrove and protection of the swamps
 Construction of a sorting and treatment center for organic waste - 4. Development of a social center
 Construction and equipment of a health center - 6. Development of a pier - 7. Public Spaces - Urban Parks

ACTION PLAN SHORT - TERM PROJECTS (0 - 3 YEARS)

GENERAL INFORMATION

PROJECT TITLE	Development of a Local Market	
TYPE OF PROJECT	Equipment - Economic development	AN ARCHINE
LOCATION	Ndogpassi Plage	
BENEFICIARIES	• Direct beneficiaries: The population of Douala 3. As of 2023 of Douala 3 is 1,441,822 (worldpopulationreview 2023), includinternally displaced (OCHA 2019). With a growth rate of 3.22 expected to reach 1,799,942 inhabitants by 2030 (worldpopu	ding 12,422 who are %, the population is

· Indirect beneficiaries: Population of the city of Douala

ALIGNMENT WITH SDGS	1 Monterre 3 Martinelle 5 Martine 8 Michael and Schwarz 1 Martine
PARTNERS	 Role of UN-Habitat: Facilitate and coordinate between the different stakeholders, ensuring liaison between the CAD3 and potential project partners Owner and implementation: CAD3 Project management: CAD3 / CUD / Technical partners Donors/Funding: Sectoral ministerial departments / International NGOs Public and Private Financial Institutions / Development Banks / Private Sector Municipality of Douala 3 (CAD3)

PROJECT OBJECTIVE AND MAIN CHALLENGES

The project aims to stimulate the local economy of Douala 3 and to generate income, as well as diversify and promote job creation, particularly for IDPs.

Socio-demographic challenges

Rapid population growth putting pressure on existing infrastructure coupled with the arrival of IDPs; Anarchic occupation of spaces with a proliferation of informal markets.

Infrastructural challenges

IMPLEMENTATION PLAN

Road infrastructure in poor condition limiting access to existing facilities;

Existing obsolete inadequate market facilities, lacking basic services such as toilets, waste management.

Financial challenges

CAD3 investment budget is insufficient to maintain existing infrastructure and create new market facilities.

• Installation of public toilets and drinking water point Enhancement of the local economic appeal of CAD3

VESTMENT CARD DEVELOPMENT OF LOCAL MARKETS PROJECT

- Employment growth opportunities
- Construction of market stalls and retail shops Development of accessible pathways (sidewalks)

#	ACTIONS	Year 0	Year 1	Year 2	Year 3
01	Develop an organizational structure and sign operating agreement with the Municipality of Douala 3				
02	Arrange capital Funding and Develop / Implement a Capital campaign Plan				
03	Complete site analysis - Continue conversation with stall/shop owners; Market Design development				
04	Continue vendor outreach and support - one on one outreach potential vendors to target population				
05	Marketing and Public Engagement of community/neighbourhoods on events and publicity activities				
06	Engage A/E Firm (team) for the construction; Acquisistion of all necessary approvals/bidding				
07	Commissioning Grand opening				
08	Operations and Maintenance				
09	Evaluation of KPIs				

Ndogpassi Market - current configuration

Photo 23. Ndogpassi market in Douala 3, Cameroon Source: @UN-Habitat 2024

Ndogpassi Market project - future configuration proposal

GENERAL INFORMATION

PROJECT TITLE	Reforestation of the Boko Mangrove and protection of the swamps in Ndogpassi Plage
TYPE OF PROJECT	Environment
LOCATION	Boko Mangrove an Ndogpassi Plage
BENEFICIARIES	 Direct beneficiaries: The population of Douala 3. As of 2023 the total population of Douala 3 is 1,441,822 (worldpopulationreview 2023), including 12,422 who are internally displaced (OCHA 2019). With a growth rate of 3.22%, the population is expected to reach 1,799,942 inhabitants by 2030 (worldpopulationreview 2023). Indirect beneficiaries: Population of the city of Douala

ALIGNMENT WITH SDGS	3		13 km 2000	14 III III III III IIII III IIII IIII IIII IIII IIIIII	15 tit.
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PARTNERS	 Role of UN-Habitat: Facilitate and coordinate between the different stakeholders, ensuring liaison between the CAD3 and potential project partners Owner and implementation: CAD3
	 Project management: CAD3 / CUD / Technical partners
	 Donors/Funding: Sectoral ministerial departments / International NGOs
	Public and Private Financial Institutions / Development Banks / Private Sector
CONTACT	Municipality of Douala 3 (CAD3)

PROJECT OBJECTIVE, MAIN CHALLENGES AND IMPACTS

The project aims to actively protect and restore the mangroves of Douala 3 to address environmental challenges, including climate risk mitigation (flooding), global warming and biodiversity conservation.

• Environmental challenges :

Increased degradation of identified sites and Impacts of climate change (rising sea levels, coastline erosion, etc).

· Infrastructure challenges :

Inaccessibility to sites for restoration or protection.

· Institutional and social challenges :

Conflicting interests among stakeholders (fishermen, farmers, real estate developers, etc.);

Lack of respect and alignement with relevant environemental legal equilatory framework;

Profliferation of the contruction of innformal shelters on the site.

IMPACT

Involving local communities in the reforestation process, and raising awareness

STORATION OF MANGROVE AND ESERVATION OF SWAMPS PROJECT

- Cooling urban heat islands through mangrove swamps
- Improvement on urban health
- Development of natural resources
- - Regulating human activities in protected areas

#	ACTIONS
01	Project Initiation (Site Identification, Site Assessment, stakeholders engagement).
02	Feasibility Studies
03	Initiating a Preservation/Rehabilitation Programme and Partnerships
04	Develop a restoration plan for active restoration including hydrological rehabilitation and Budget
05	Procurement (invitation to bid -ITB, Pre-qualification; RFP, bid submission, contract award)
06	Construction Implementation, Site preparation; Project closeout and handing over
07	Operations and Maintenance
08	Evaluation of Key Performance Indicators

Mangrove of Boko - past configuration

Photo 24. Mangrove in Douala 3; Bobongo Boko. Source: Google satellite, 2009

Mangrove of Boko - current configuration

GENERAL INFORMATION

PROJECT TITLE	Construction of an organic waste sorting - treatment center	
TYPE OF PROJECT	Environment	
LOCATION	Ndogpassi Plage	
BENEFICIARIES	 Direct beneficiaries: The population of Douala 3. As of 2023 th of Douala 3 is 1,441,822 (worldpopulationreview 2023), includir internally displaced (OCHA 2019).With a growth rate of 3.22%, expected to reach 1,799,942 inhabitants by 2030 (worldpopulation) Indirect beneficiaries: Population of the city of Douala 	ng 12,422 who are , the population is

ALIGNMENT WITH SDGS	
PARTNERS	 Role of UN-Habitat: Facilitate and coordinate between the different stakeholders, ensuring liaison between the CAD3 and potential project partners Owner and implementation: CAD3 Project management: CAD3 / CUD / Technical partners Donors/Funding: Sectoral ministerial departments / International NGOs Public and Private Financial Institutions / Development Banks / Private Sector Municipality of Douala 3 (CAD3)

PROJECT OBJECTIVE, MAIN CHALLENGES AND IMPACTS

The project aims to provide CAD3 with an operational, well-equipped and well-managed sorting and processing plant. Specifically, it will contribute to developing an integrated organic waste mng system within CAD3.

Environmental challenges:

Vulnerability of CAD3 to environmental risks (water, soil and air pollution);

Proliferation of unregulated waste deposits in inappropriate areas.

Socio-demographic challenges:

Increase of annual waste production as a result of the arrival of IDPs.

Governance challenges:

Difficulty of CAD3 in providing effective pre-collection activities that meet the needs of the population.

IMPACT

- Development of systems for pre-collection and sorting of organic waste near homes and public spaces.
- Creating new jobs in the waste services sector will promote community inclusion for IDPs

NSTRUCTION OF ORGANIC WASTE RTING AND TREATMENT PROJECT

- Improvement on urban health.
- Creation of road access for transporting waste.

#	ACTIONS	Year 0	Year 1	Year 2	Year 3
01	Management Plan - Waste Collection and Transportation Plan				
02	Waste Minimization Plan - Recovery, Reuse and Recycling. Implementation of 3R activities.				
03	Intermediate Treatment Plant: Formulation of implementation Plan - Organic Waste Treatment Plan				
04	Waste Disposal Plan - Coordination with other Municipalities; Site identification and procurement				
05	Institutional Capacity Development Plan: Formulation and Approval of ISWM Plan				
06	Financial Strengthening Plan: Evaluation of KPIs of the Financial management Strengthening Plan				

Ndogpassi waste dump site - current configuration

Photo 27. Informal waste deposit in Ndogpassi, Douala 3, Cameroon Source: @UN-Habitat 2024

Ndogpassi waste sorting center project - future proposal

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Centre de tri

GENERAL INFORMATION

PROJECT TITLE	Development of a social center	inthe ext
TYPE OF PROJECT	Inclusive and social development	
LOCATION	Ndogpassi Plage and Oyack	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
BENEFICIARIES	• Direct beneficiaries: The population of Douala 3. As of 2023 t of Douala 3 is 1,441,822 (worldpopulationreview 2023), includi internally displaced (OCHA 2019).With a growth rate of 3.22%	ng 12,422 who are



ALIGNMENT WITH SDGS	1 :: Ř:††:Ť	4 dealer tocation	5 📰 @	10 MIDICES MICOLATHES		17 THE REAL	
PARTNERS	ensuring Owner Project Donors 	liaison b and impl t manage s/Funding nd Private	etween th lementat ement: CA g: Sectora e Financia	ne CAD3 a ion: CAD3 AD3 / CUE al minister al Institutio	and poten 3 D / Techni rial depart	tial projec cal partne tments / I	the different stakeholders, et partners ers nternational NGOs Banks / Private Sector

· Indirect beneficiaries: Population of the city of Douala

expected to reach 1,799,942 inhabitants by 2030 (worldpopulationreview 2023).

PROJECT OBJECTIVE, MAIN CHALLENGES AND IMPACTS

This project will provide local communities, particularly IDPs, with a place for social and cultural activities accessible to all, offering a variety of training for career job learning and social support.

· Socio-cultural challenges:

Cultural and linguistic diversity between the host community and IDPs;

Lack of listening support for youth, women and families;

Abscence of training for job learning or of IT classes.

· Governance challenges:

Coordination issues among social assistance actors (Government, Municipality, NGO); Low management capacity of existing infrastructure due to insufficient.

IMPACT

- Humanitarian assistance: reception, accommodation, food, medical care, and protection against violence
- Educational and professional support: small trade knowledge exchange and language courses
- Psychosocial and mental support: counseling

#	ACTIONS	Year 0	Year 1	Year 2	Year 3
01	Needs Assessment: needs, capacities, and vulnerabilities of the target population				
02	Partnership Development				
03	Resource Mobilization: Seek funding to ensure the sustainable implementation of the project.				
04	Construction / Renovation				
05	Program Implementation in line with the proposed objectives, through participatory based approach.				
06	Monitoring and Evaluation: Regularly assess the progress of the project				
07	Raising Public Awareness Plan: Formulation of Implementation Plan for Raising Public Awareness				

Social center - current configuration

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Photo 28. Oyack social center, Douala 3, Cameroon Source: @UN-Habitat 2024

Social center development project - future proposal

Fig 16. Proposal for the development of a social center in Oyack, Douala 3, Cameroon Source: @UN-Habitat 2024

GENERAL INFORMATION

PROJECT TITLE TYPE OF PROJECT	Construction and equipment of a health center Health	
LOCATION	Ndogpassi Plage	99 I NO
BENEFICIARIES	 Direct beneficiaries: The population of Douala 3. As of 2023 to of Douala 3 is 1,441,822 (worldpopulationreview 2023), included internally displaced (OCHA 2019). With a growth rate of 3.22% expected to reach 1,799,942 inhabitants by 2030 (worldpopulation). Indirect beneficiaries: Population of the city of Douala 	ing 12,422 who are %, the population is

ALIGNMENT WITH SDGS	



PARTNERS

• **Role of UN-Habitat:** Facilitate and coordinate between the different stakeholders, ensuring liaison between the CAD3 and potential project partners

- Owner and implementation: CAD3
- Project management: CAD3 / CUD / Technical partners

• **Donors/Funding:** Sectoral ministerial departments / International NGOs Public and Private Financial Institutions / Development Banks / Private Sector

CONTACT

Municipality of Douala 3 (CAD3)

PROJECT OBJECTIVE, MAIN CHALLENGES AND IMPACTS

The project aims to ensure equitable access to quality healthcare across CAD3, as well as to improve healthcare coverage within CAD3.

Socio-demographic challenges:

IDPs settling in high-risk areas, increasing disease and risk exposure

Infrastructural challenges:

Uneven distribution of health structures and unconventional medical products offered/sold Poor road conditions hindering access to existing health structures

Financial challenges:

IDPs' limited financial capacity compared to the costs of formal services

IMPACT

- Reduction of inequalities through access to quality care
 - Creation of partnerships with key sanitarian entities

- Improvement of living conditions
- Integration of IDPs, including young people and women,

#	ACTIONS	Year 0	Year 1	Year 2	Year 3
01	Conception phase (Assessment phase, Vision, Activation, Feasibility phase).				
02	Planning and Design phase and cost-benefit analysis				
03	Tender phase and procurement (Public notice, invitation to bid - ITB; Prepare RFP, bid submission),				
04	Implementation Phase (Construction phase, and build process and legal claims and proceedings)				
05	Project closeout and handing over. Commission phase.				
06	Operations and Maintenance				
07	Evaluation of KPIs				

Health center in Ndogpassi Plage - current configuration



Health center in Ndogpassi Plage project - future proposal



Fig 17. Proposal for the development of a health center in Ndogpassi Plage, Douala 3, Cameroon Source: @UN-Habitat 2024

GENERAL INFORMATION

PROJECT TITLE	Development of a pier	
TYPE OF PROJECT	Transport and mobility	
LOCATION	Bwang - Bakoko river bank	
BENEFICIARIES	 Direct beneficiaries: The population of Douala 3. As of 2023 to f Douala 3 is 1,441,822 (worldpopulationreview 2023), includ internally displaced (OCHA 2019). With a growth rate of 3.229 expected to reach 1,799,942 inhabitants by 2030 (worldpopulation). Indirect beneficiaries: Population of the city of Douala 	ing 12,422 who are 6, the population is

ALIGNMENT WITH SDGS	1 Source 6 State and the second data is 9 State instance 11 State instance 12 State instance 13 Active 14 Minute second 15 State 1 Source 1 Source <td< th=""></td<>
PARTNERS	 Role of UN-Habitat: Facilitate and coordinate between the different stakeholders, ensuring liaison between the CAD3 and potential project partners Owner and implementation: CAD3 Project management: CAD3 / CUD / Technical partners Donors/Funding: Sectoral ministerial departments / International NGOs Public and Private Financial Institutions / Development Banks / Private Sector Municipality of Douala 3 (CAD3)

PROJECT OBJECTIVE, MAIN CHALLENGES AND IMPACTS

The project aims to develop a peer to support river transport of people and goods on the Wouri River within CAD3. It will provide a public space equipped and points to dveelop formal local market of fishery products.

Infrastructural challenges

Outdated and unstable facilities;

Poor road conditions hindering access to existing river transport structures.

Environmental challenges

Erosion of riverbanks and increased flood risk for local communities.

Governance Challenges

Proliferation of unregulated activities (e.g., sand extraction).

IMPACT

- New economic opportunities in the river transport sector for IDPs thereby reducing poverty and inequalities
- Enhancement of CAD3's commercial appeal by promoting fishing and fishery products

EVELOPMENT OF A PIER ROJECT

- Development of environment friendly mobility
- Development of spaces for communities integration

#	ACTIONS	Year 0	Year 1	Year 2	Year 3
01	Development: configuration and embarkment locations; Geotechnical, hydrographic assesment.				
02	Demand Estimates: Determine, effective terminal catchments, household demand surveys				
03	Concept Design: Infrastructure and vessels; Environmental impact analysis				
04	Infrastructure Contract Procurement and Construction: Vessels				
05	Management and Maintenance Contracts; Tendering Contract procurement				
06	Operations and Maintenance				
07	Evaluation of KPIs				

Bwang-Bakoko landing stage - current configuration



Bwang-Bakoko pier project - future proposal

Fig 18. Proposal for the development of a pier stage in Bwang Bakoko, Douala 3, Cameroon Source: @UN-Habitat 2024

ACTION PLAN MEDIUM - TERM PROJECTS (3 - 5 YEARS)

GENERAL INFORMATION

PROJECT TITLE	Public Spaces - Urban Parks, squares and touristic attractions
TYPE OF PROJECT	Equipment
LOCATION	Ndogpassi Plage and other locations in Douala 3
BENEFICIARIES	 Direct beneficiaries: The population of Douala 3. As of 2023 the total population of Douala 3 is 1,441,822 (worldpopulationreview 2023), including 12,422 who are internally displaced (OCHA 2019). With a growth rate of 3.22%, the population is expected to reach 1,799,942 inhabitants by 2030 (worldpopulationreview 2023). Indirect beneficiaries: Population of the city of Douala

ALIGNMENT WITH SDGS



PARTNERS	• Role of UN-Habitat: Facilitate and coordinate between the different stakeholders, ensuring liaison between the CAD3 and potential project partners
	Owner and implementation: CAD3
	 Project management: CAD3 / CUD / Technical partners
	• Donors/Funding: Sectoral ministerial departments / International NGOs
	Public and Private Financial Institutions / Development Banks / Private Sector
CONTACT	 Municipality of Douala 3 (CAD3)

PROJECT OBJECTIVE, MAIN CHALLENGES AND IMPACTS

The project aims to develop parks with retention basins to mitigate the risks of flooding while improving the natural resources of Douala 3 and creating public spaces for the population.

Environmental challenges:

High vulnerability to river and pluvial flooding due to proximity to the Wouri River and climate change.

Infrastructural challenges:

Absence of sanitation and stormwater drainage network.

Socioeconomic challenges:

Public reluctance stemming from a lack of understanding of the project's benefits.

Governance challenges:

Limited capacity to control unregulated development and protect green spaces.

IMPACT

Construction of public amenities

- Education and awareness campaigns for local populations about adaptation to climate change.
- Promotion of climate innovation through partnerships.
- Installation of water management infrastructure

	ACTIONS	Year 0/1	Year 2/3 Y	′ear 4	Year 5
01	Environemental impact assesment.				
02	Needs assesment; Partnership Development				
03	Resource Mobilization				
04	Detailed planning including a needs and facility assessment; site selection process				
05	Development of Design options and concept plans				
06	Community engagement on the project and design				
07	Construction and commissioning Plan the construction of the urban park, based on the Facilities Plar				
08	Monitoring and Evaluation: Adapt the strategies and activities based on feedback and identified gaps				
09	Evaluation of KPIs				



Ndogpassi Plage open green spaces - current configuration



Ndogpassi Plage Urban Park - future proposal



INTERLINKAGES BETWEEN PRIORITY PROJECTS

An indicator of the efficiency of the projects mentioned is also their interconnectedness in their implementation. This relationship between projects could also be the driver of a domino effect of positive consequences. For example:

Reforestation of mangroves and protection and improvement of wetlands will help improve the management of natural resources and reduce the risk of flooding. These actions should also be accompanied by the alignment of environmental policies and compliance with regulations and governance.

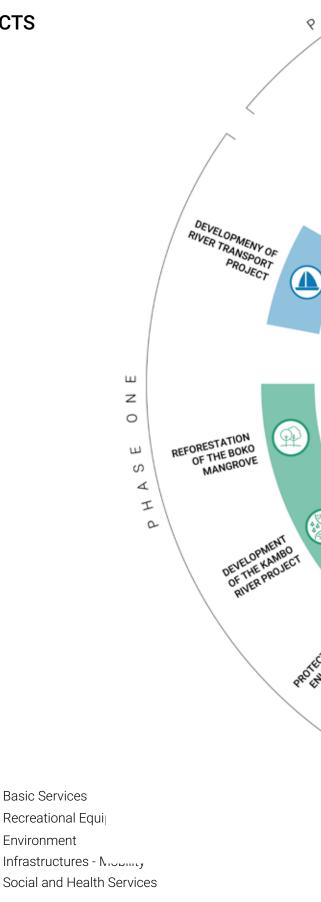
The development of waste management networks and systems will improve the quality of life by protecting natural areas from pollution and reducing the spread of diseases caused by soil and water contamination. This could create income-generating activities from the recycling of organic or plastic waste.

Good implementation of basic infrastructure will improve social housing projects in the long-term phase, as they will already be connected to key services such as electricity and water. This will stimulate planned urbanization and mixed use, along with services that respond to population growth.

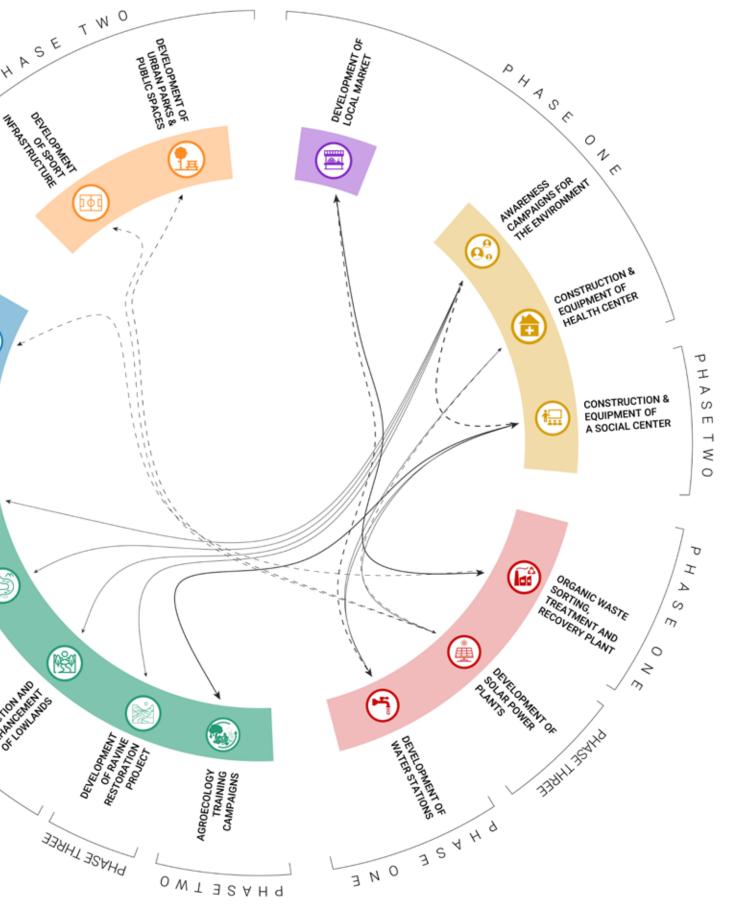
The development of a social center will strengthen the integration of IDPs within CAD3. It will provide a reception center, a place for social and cultural activities where people can benefit from ICT, trade, crafts, small vocational training, etc. Likewise, the construction of local markets will encourage the creation of new economic centers and community meeting places. These projects are highly valued by IDPs themselves as they aim to encourage the development of incomegenerating activities while improving their basic livelihood needs.

At the same time, the development of a landing site will strengthen the management of newcomers flows while promoting the creation of new activities such as ecotourism.

All these interventions will contribute to improving the quality of life of the populations of Douala 3 and making it a resilient and sustainable municipality.



Equipment - Economic Development



Alignment with the Sustainable Development Goals (SDGs)



CONCLUSIONS

NEXT STEPS

The UPIMC methodology concludes with the development of action plans for the targeted urban areas and the prioritisation of projects. The action plan and the project briefs documents are then passed to local governments, to further advance through the life cycle towards on-the-ground implementation.

The downstream stages of a project involve transforming the planning into reality.

This typically includes developing a business case, covering key aspects such as project costs, potential revenue generation, funding sources, and associated risks. Then, detailed design, financing, and construction follow. After implementation, the focus shifts to its operation, maintenance, and continuous monitoring, to ensure the intervention remains functional, sustainable, and beneficial to the community.

Local government entities typically manage this phase, overseeing detailed design, procurement, and construction, and ensuring the project aligns with local regulations, standards, and community needs. While local governments take the lead, international partners like UN-Habitat may continue to provide technical assistance.

Considering this, the Technical Committee of the Douala 3 Municipality received the 7 investment cards and the projects booklet to be able to continue discussions and bilateral meetings with potential donors.

Currently, discussions are underway to obtain funding to cover the different stages of the life cycle of priority projects. Projects aimed at protecting the environment involve other partners, such as the World Bank, which included the Douala 3 mangrove in a restructuring program launched in August 2024. This partner was involved in the UPIMC process where the importance of this ecosystem was highlighted. Douala 3 also continues to make efforts to improve urban conditions. In October 2024, it won the award for the cleanest municipality in the city of Douala, thanks to the efforts made by residents to undertake the collection of waste from green spaces, rivers and streets and the establishment of a car-free day. Other projects such as the Ndogpassi Plage market and the development of a jetty are currently being discussed with various partners, mainly for feasibility studies. If interested, the contact entity for the projects is the Secretariat of the Commune of Douala 3 and the Focal Point of the UPIMC Cameroon Programme (please mention the priority projects of UPIMC Cameroon).

PUBLICATIONS FROM THE UPIMC PROGRAMME









Irbid

Spatial

Profile,

Jordan







Douala 3 Spatial Profile, Cameroon



Kafr El-Battikh Spatial Profile, Egypt

LEVERAGING THE VISION AND ACTION PLAN TO DRIVE TRANSFORMATIVE CHANGE

- The Vision and Action Plan publication builds upon the foundational insights of the spatial profile, serving as a strategic guide for urban transformation. Beyond offering a comprehensive understanding of the pilot neighborhood, the vision and action plan outline tangible pathways for addressing critical challenges while harnessing opportunities identified through participatory workshops and multiscale analyses.
 - The vision articulates a shared roadmap for redefining the urban landscape, bridging the aspirations of government actors, host and refugee communities, and other stakeholders. The accompanying action plan translates these aspirations into concrete steps, identifying targeted areas for strategic intervention to achieve the outlined objectives. The project prioritization process focuses on identifying projects that address both pressing needs and long-term aspirations, aligning them with the formulated vision. Community engagement and stakeholder collaboration ensure that these projects go beyond infrastructure improvements, they become transformative initiatives that embody the neighborhood's potential and aspirations.



Al Hashmi Al Janoubi Neighborhood,

Building

and Action



DOUALA



New Damietta City: Vision, Scenario Building and Action Plan

Plan

Project Briefs & Link to Finance

The Project briefs developed as the third component, following the action plan and project prioritization, bridge ideas with implementation. They aim at facilitating partnerships with private sector actors, donors, and other stakeholders to secure the necessary funding for execution. These projects serve as building blocks for an inclusive, resilient, and sustainable neighborhood, reflecting the collective vision of its residents.



Investment Cards for Al Afrah Neighborhood in Irbid, Jordan



Projects Briefs for Douala 4. Cameroon



Investment Cards for New Damietta and Kafr El Battikh in Damietta Governorate, Egypt

Knowledge Exchange

To amplify impact and foster replication, UPIMC emphasizes knowledge exchange across cities and countries. The Migration-Informed Urban Planning: A 3-Step Guidebook encapsulates best practices, normative principles, and lessons learned from the planning processes implemented in Cameroon, Egypt, and Jordan. This guidebook provides actionable recommendations for replicating the three-phased planning methodology in similar urban migration and displacement contexts. By sharing these experiences, UPIMC enhances municipal capacities and strengthens engagement with national and international platforms, contributing to a global discourse on sustainable and inclusive urban development.





Normative Guidebook, Urban Planning & Infrastructure in -Migration Contexts (UPIMC)

REFERENCES

A Nsegbe, G Tchiadeu, J Mbaha, G Dzalla, J Olinga (2014) Douala : une ville d'occupation et d'immigration Douala: Histoire et Patrimoine

AFD (2010) : l'AFD et la méthodologie PEFA appliquée aux collectivités locales : Améliorer la gestion des finances publiques locales © AFD, Yaoundé

Arcadis - Shelter & UN-Habitat (2022), Rapport plan stratégique de gestion des ressources du fleuve Dibamba Synthèse

Arcadis - Shelter & UN-Habitat (2022), Rapport Strategic River Management Plan for the Dibamba River Shelter Program Mission Douala, Cameroon

BA'ANA ETOUNDI M. L. (2017), Dynamiques urbaines et transformations socio spatiales dans les villes du Cameroun

BUCREP (2005), "Répertoire actualisé des villages du Cameroun Troisième Recensement Général de la Population et de l'Habitat du Cameroun.

BUCREP (2011) : Rapport national sur l'état de la population : Enjeux et défis d'une population de 20 millions au Cameroun en 2011

Bruckmann, L.; Amanejieu, A.; Moffo, M.O.Z.; Ozer, P. Analyse géohistorique de l'évolution spatio-temporelle du risque d'inondation et de sa gestion dans la zone urbaine de Douala (Cameroun). Physio-Géo Géogr. Phys. Environ. 2019

Cabinet Green Tropic d'Ingénierie et de Conseil en Management QHSE (2023), Rapport final

CAD 3 (2023) - Communal Development Plan

CAD 3 (2024), Budget Programme – Exercice 2024

CLAVAL P. (2014), Manuel de Géographie Urbaine

Dzalla Ngangue Guy Charly & Chrétien Ngouanet (2006), Conquête des zones à risque et dégradation de la qualité de la vie dans une ville d'estuaire tropical : cas des zones de mangrove autour de Douala au Cameroun

CONTEC (2014), Elaboration d'une monographie de la ville de douala ville de Douala, arrondissements de Douala 3è et Douala 5è Volume 2 : profil historique et élaboration des profils historique et élaboration des fiches des quartiers fiches des quartiers

CUD (2021), Rapport d'avancement 24/07/2021: Cartographie de l'impact des inondations d'Aout 2020 à Douala. «

CUD (2021), Rapport provisoire: Etudes d'impact environnemental et social (EIES) en vue de la mise en œuvre d'un corridor pilote de bus « Bus Rapid Transit » dans la ville de Douala.

CUD (2022), Gestion des déchets à Douala: Enjeux et perspectives

CUD (2023), Actualisation du Schéma Directeur de Douala – Plan d'indemnisation et de réinstallation Réf. : CMSP00506E.

CUD (2023), Gestion des déchets municipaux dans la ville de douala : enjeux et perspectives

CUD (2023), Projet de mobilité urbaine de Douala

CUD (2023), TTypologie et évolution de la production des déchets par arrondissements

CUD (2023), Actualisation du Schéma Directeur de Douala – Tranche Conditionnelle. Rapport Mission 2 - Cadre de Gestion Environnemental et Social - Réf.: CMSP00506E - Etude d'Impact EnviRONNEMENTALE ET SOCIALE

DJUIDJE TOGUE B., (2022) Logiques d'action et réalisations des producteurs publics de logements à Yaoundé. In De la croissance urbaine à l'aménagement du territoire

FIJALKOW Y. (2002), Sociologie de la ville, La Découverte

GOORE L. & AL., (2022) Urbanisation et aménagement de la ville de Sinfra en Côte d'Ivoire. In De la croissance urbaine à l'aménagement du territoire

Groupement AGORA - AUGEA AFRIQUE - NTFS (2023), Rapport diagnostic version provisoire – avril 2023 élaboration d'un plan de secteur (PS) à Douala III (Ndogpassi).

Groupement GTAH Ingénieurs Conseil / CAEM / MBT International (2021), Rapport: réalisation des travaux de voirie et d'équipements à Douala 3 et Douala 5 phase APD - Rapport de synthèse d'avant-projet détaillé de Douala 3 - rapport APD: rapport technique de synthèse de l' APD CAD III

INS (2019), Annuaire statistique de la région du Littoral

KAMGA D. E. (2022) Accès au foncier et évolution du bâti dans le quartier Simbock situé à la périphérie sud-ouest de la ville de Yaoundé. In De la croissance urbaine à l'aménagement du territoire

Laurent BRUCKMANN, Amélie AMANEJIEU, Maurice Olivier ZOGNING MOFFO & Pierre OZER (2019), Analyse géohistorique de l'évolution spatiotemporelle du risque d'inondation et de sa gestion dans la zone urbaine de Douala (Cameroun) - Geohistorical analysis of flood risk spatio-temporal evolution and its management in the urban area of Douala (Cameroon) / Physio-Géo Géographie physique et environnement Volume 13 | 2019 Varia. "

MAETUR (2018), Rapport diagnostic participatif: Contrat d'assistance technique n°02348 / MINDHU / MAETUR du 02 aout 2017 pour la réalisation de l'étude en vue de la restructuration / rénovation de certains quartiers sousstructures dans la Communauté Urbaine de Douala (CAD 3).

MEDIEBOU C. & AL. (2022), Périurbanisation et conflits fonciers dans la Commune de Yaoundé V. In De la croissance urbaine à l'aménagement du territoire

MINEPAT (2022), Stratégie Nationale de développement 2020-2030 SND

OCHA (2019), Rapport Multi-Sector Rapid Assessment in the West and Littoral Regions Cameroon

OCHA (2023), Humanitarian Situation NWSW

OCHA (2023), Lit_West_Analysis_For_Sharing_MSNA_R2_140922

OECD/UCLG (2022), Country Profiles of the World Observatory on Subnational Government Finance and Investment

Olinga J. M.& Nkafu (2021), La gouvernance urbaine au Cameroun : entre laisser-faire et faire laisser, analyse sous le prisme de la vulnérabilité aux risques

Olivier Sardou ESSOUMAN ESSOUMAN (2021), Evaluation de la vulnérabilité sociale aux mouvements de masse: Cas des populations de la Commune de Douala 3e (Cameroun).

REFERENCES

PETNGA N. & AL. (2022), Politiques publiques et extensions spatiales spontanées de la ville de Garoua. In De la croissance urbaine à l'aménagement du territoire

Port Autonome de Douala PAD (2022), Banque des projets du Port Autonome de Douala (PAD)

PVDIR & Groupement AGORA - AUGEA AFRIQUE - NTFS (2023), Rapport diagnostic version provisoire: élaboration d'un plan de secteur (PS) à Douala III (Ndogpassi)

SEURECA VEOLIA (2022) « Actualisation du Schéma Directeur Assainissement de Douala - Rapport Mission 6 Réf.: CMSP00506E. «

SEURECA VEOLIA (2023) « Actualisation du Schéma Directeur Assainissement de Douala - Rapport Mission 2 – APD Eaux Usées Réf. : CMSP00506E. «

SEURECA VEOLIA (2023) « Actualisation du Schéma Directeur Assainissement de Douala - Rapport Mission 6 – Choix du scénario préférentiel et programme pluriannuel de travaux Réf. : CMSP00506E. «

TENDE Renz T. & Al., (2022), Métamorphose et incidence de l'étalement urbain sur le 7ème arrondissement de Bangui en Afrique centrale. In De la croissance urbaine à l'aménagement du territoire

UN-Habitat (2021), Projet de sauvegarde et de valorisation de la rivière Dibamba à Douala : Diagnostic du bassin versant de la rivière Dibamba

GRAPHIC SOURCES

- CAD 3 2024 Douala 3 City Council identification of Vision Strategies
- CAD 3 Communal Development Plan 2023 identification of needed projects planned
- CUD 2024 Douala City Council validation of Vision Strategies
- Geofabrik Mapping
- Google Earth Engine 2023 Satellite imaginary
- Open Street Map 2021 Mapping
- RGPH3 National census 2005 Douala 3 population data
- UN-Habitat 2024 ARCGis Analysis Flood risk analysis
- UN-Habitat 2024 Analysis from onsite visists in Ndogpassi Plage
- World Population Review 2023 Douala 3 population projections

ANNEX

ANNEX A: METHODOLOGY: DEVELOPMENT OF THE SCORING MATRIX FOR THE UPIMC PRIORITY PROJECTS

MULTI-CRITERIA ANALYSIS

A multi-criteria quantitative assessment (MCA) is the infrastructure project prioritization methodology adopted by the UPIMC. It provides a rapid appraisal technique to rank project concepts based on how well they align with established program objectives. MCA involves scoring projects against a set of criteria linked to CAD 3's development objectives and economic outcomes. The key steps in setting up the MCA framework are:

- Step 1: Agree on the process for the initial screening of priority projects (on a pass/fail basis) to verify their readiness, ensure that they are consistent with CAD 3's development objectives, required in the next 5 to 10 years, and that consultation has commenced in relation to relevant regulatory processes, including environmental impact, physical planning requirements, and building codes.
- Step 2: Establish the prioritization criteria to facilitate a qualitative evaluation of the environmental, social, economic, and performance impacts.
- Step 3: Develop a method for evaluating and distributing each criterion. For instance, a scale from 0 (no conformance with the criterion) to 3 (a high level of compliance with the criterion) could be employed to score. In a base case, criteria could be equally weighted, with the option to modify the weights if necessary, during a sensitivity assessment.
- Step 4: Determine how scoring is to be undertaken and how scores are to be processed.
- Step 5: Document the MCA approach and seek endorsement. This is particularly relevant to the development and implementation of a multi-sector MCA framework that employs qualitative data rather than quantitative data to inform decision-making. It is advisable to endorse the MCA framework.

METHODOLOGY AND DEVELOPMENT OF THE SCORING MATRIX

Allocating limited resources to a select few projects is a challenging undertaking for decision-makers. To deploy scarce resources efficiently, it is imperative to have quantifiable information that can be compared across all the projects in the pipeline. Political factors might influence the selection process, leading to inefficient distribution of funds. Consequently, the Municipality of Douala 3 may be deprived of a project that would enhance the community's well-being.

Utilizing a prioritizing methodology can assist policy makers in making informed decisions on infrastructure investments. This methodology involves evaluating projects in the pipeline based on objective characteristics that can be quantitatively scored. Furthermore, this approach can be used to several types of public infrastructure projects.

Subsequently, decision makers can be provided with an impartial and objective assessment of projects, which ranks them based on a well-balanced evaluation of their economic, environmental, and social merits. This assessment can serve as an extra tool to aid decision makers in making final financing decisions, free from political bias.

Prioritization methodology

For the Municipality of Douala 3, a multi-sectoral, multicriteria quantitative assessment of common project characteristics is the suggested methodology for prioritizing public infrastructure projects.

- i. Every project should be recorded in a concise onepage spreadsheet that accurately represents the essential features across many categories.
- ii. The user selects these attributes from a set of menus in the spreadsheet, which has a list of qualities or quantities related to the infrastructure project being analysed and evaluated.
- iii. Subsequently, an algorithm is utilized to assign scores to these attributes.
- iv. The project scores range from 0 to 100.
- v. Projects that have been assigned scores can be subsequently sorted and prioritized, with a higher score indicating that the project is of greater importance for investment.

This technique has several benefits:

- Characteristics are scored fairly and reflect the "triple bottom line" dimensions of a project (economic, social, and environmental values).
- Objective quantitative project data is available for each project allowing scoring across sectors.
- The weighting of indicator scores allows fine tune rankings based on evolving national strategic interest.
- Retaining existing new project proposal template for project data submission allows to avoid excessive disruption of procedures.
- Enriching new project proposal submission with the help of an add-on simple spreadsheet.

Project characteristics and indicators

The following data was used in the add-on project profile spreadsheet used for the prioritization:

- Project identifiers: Sector; Contact person; Project name; Type of Project; Project number; Project location. SDGs Alignment, Beneficiaries, partners
- Project scale and status: Project stage of development; Brief project description; Linkage or synergy with other projects; Alignment with objectives; Alignment with sector strategy; Rationale for investment, impacts, delivery arrangements.
- Project Purpose and Services improvement: What is the status of existing services dealing with the problem; System capacity improvement; Advancement of public services indicators (KPIs); Number of communities/ villages to benefit; What is a rough estimation of the population served by the new facility as a % of the population within the urban catchment area. Contribution to reduction of service cost; Local employment (including IDPs) during construction; Added local employment (including IDPs) after commissioning; Added women local employment after commissioning.
- Project risks & sustainability: Land-related risks; Relocation, resettlement, and compensation; Environmental impact; Are there any specific public health benefits, especially at neighbourhood level; History of maintenance expenditure from operator as proxy for adequacy of maintenance management system quality.

- Project financial and economic aspects: Investment value; Expected impact of the project on local economic development (economic benefits); Does the project target IDPs, vulnerable groups, lower income groups; Are the proposed charges affordable for those who need to pay them Fund mobilized for investment to date; Committed maintenance budget; Source of funds needed for services operation.
- Feasibility of Implementation: Has funding been secured/allocated within the municipal budget for this project; Has funding been secured from external funding sources and/or is there potential for external funding; Will the project bring in direct revenue; Will the project generate revenue indirectly (increase in local tax base) Will the project decrease current budget costs; To what extent is the system in place for collecting the proposed charges so they will actually be paid; Is there a capable system in place to implement and operate this project or is external support needed. Will private enterprises be willing to invest in this project and/or people be ready to contribute their own resources (money or labour).

Indicators scores

A. For the scoring of each project, only a subset of the data was used with the following possible scores:

- 1. Project scale and status (maximum score 10)
- 2. Type of project: Rehabilitation: 3; Upgrading: 2; New: 1
- 3. Project stage of development: Feasibility: 3; Pre-feasibility: 2; Concept: 1
- Synergy with other projects: Two projects or more: 2; One project: 1; No other project: 0
- Project In PCD with completed Investment card: 2; Project in PCD with incomplete Investment card: 1; Project not in PCD

B. Project Purpose and Services improvement (maximum score 10)

- What is a rough estimation of the population (Including IDPs) served by the new facility as a % of the population within the urban pilot area. >50%: 3; 25-50%: 2; <25%:
- 2. Villages scoring 0-4 in the villages in the commune raking: 3; Villages scoring 5-7 in the villages in the commune raking: 2; Villages scoring 8-10 in the villages in the commune raking: 1 (see note below)
- What is the project's contribution to Municipality's vision and development goals: Major contribution 2; Direct contribution: 1; Indirect contribution: 0.
- 4. What are the consequences of deferring the project in terms of citizens' health, property, safety, prosperity etc.

Major immediate consequences: 2; Major future consequences: 1; Minor consequences: 0

Note: Utilizing a multi-sector ranking system, this approach facilitates the fair allocation of funds to ensure that all villages receive infrastructure, beginning with the least developed (affluent) villages. The purpose of classifying the villages in the Commune based on the number of infrastructures they have was to identify their level of infrastructure "wealth" and prioritize interventions, starting from the least equipped villages 0 – 4 to most equipped 8-10).

C. Project risks & sustainability: (maximum score 10)

1. Land availability:

Yes: 3; Negotiation ongoing: 2; Not clear: 1.

- 2. Relocation, resettlement, and compensation: Completed: 2; Ongoing 1 Not clear: 0.
- 3. Negative environmental impact:
- No impact: 3; Moderate impact: 2; High impact: 1 4. Social Impact:

Arrange/ make easier: 2; Low compared to target: 1; Low & not documented: 0.

D. Project financial and economic aspects: (maximum score 10)

1. Have financial and economic analysis been carried out: Yes: 2; In progress: 1; Not yet: 0.

- Finance for maintenance: Mostly from ministries charge: 2; Mostly from service charge budget: 1; Not clarified: 0.
- 3. Local works for construction: >60%: 3; 60–20%: 2; <20%: 1
- Percentage of employment created for Locals Including IDP's: >60%: 2; 60-30%: 1; < 30%: 0.

E. Feasibility of Implementation: (maximum score 10)

- 1. Capital funding mobilized from Municipal Budget: Secured: 3; Being discussed: 1; No mobilization: 0.
- 2. Capital funding mobilized from External Sources: Secured: 2; Being discussed: 1; No mobilization: 0.
- 3. Is the project an income generating project. Yes: 3; Carbon credits and Offsets: 2; No, it is not: 0
- 4. Is the community willing to contribute in kind (labour) to the project? Yes : 1; No: 0.
- 5. Municipality can implement and operate project: Yes: 1; No, external support needed 1 (lack of capacity; external human resources needed)

Note: Carbon credits and offsets are generated by many initiatives and activities that have the objective of diminishing emissions. These projects encompass various initiatives such as the production of renewable energy, enhancements in energy efficiency, reforestation efforts, and the capture of methane gas from landfills. (From discussions yesterday with Meridiam).

Additional weighting tool

The proposed methodology incorporates a weighting tool that enables the re-evaluation of projects by assigning variable weights to: (i) one criterion in comparison to another criterion within the same group; and (ii) one criterion group in comparison to another criterion group (refer to Figure below). This allows for the exploration of various project prioritizing situations and the testing of which indicators or dimensions of projects are given priority over others by assigning larger weights to certain indicators in the algorithm.

By changing the weighting of one criterion or a group of criteria, great care should be taken to change the weighting of the other criteria so that the total weight of a group or of the five groups total 100%.

[INSERT NEIGHBORHOOD]		Commune	Ranking Points	
[INSERT PROJECT NAME]				
[INSERT SECTOR]				
[INSERT PROJECT NUMBER]		Final Score		
Criteria and Criterion Groups for PCD Priority Project As- sessment Scoring and ranking	Rating of Criteria	Rating of Criteria	Weighting within Group	Weighting within Group
				100%
Project Scale and Status	10	10	100%	20%
Type of Project	1 to 3	3	30%	
Project stage	1 to 3	3	30%	
Linkages/ synergies with other projects	0 to 2	2	20%	
Project documentation and information - Investment card	0 to 2	2	20%	
Project Purpose and Service Improvement	10	10	100%	20%
% Population (Including IDPs) served	1 to 3	3	30%	
Village infrastructure "wealth" ranking in the commune	1 to 3	3	30%	
Alignment with CAD3 Vision and Development Goals	0 to 2	2	20%	
Consequences of deferring the project	0 to 2	2	20%	
Project risks & sustainability	10	10	100%	20%
Land availability	1 to 3	3	30%	
Relocation, resettlement, and compensation:	0 to 2	2	20%	
Negative environmental impact	1 to 3	3	30%	
Maintenance Expenditures	0 to 2	2	20%	
Project financial and economic aspects	10	10	100%	20%
Have financial and economic analysis been carried out	1 to 3	3	30%	
Finance for maintenance	0 to 2	2	20%	
Local works for construction	1 to 3	3	30%	
Percentage of employment created for locals incl. IDPs	0 to 2	2	20%	
Feasibility of Implementation	10	10	100%	20%
Mobilization of capital Funding Municipality Budget	0 to 3	2	30%	2070
Mobilization of capital Funding External Sources	0 to 2	2	20%	
Is the project an income generating project? Carbon Credits	1 to 3	3	30%	
Community contribution in kind (money and or labor)	0 to 1	1	10%	
Municipality can implement and operate project	0 to 1	1	10%	



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