

# CONSERVATION OF THE NATURAL ENVIRONMENT AND THE SUSTAINABLE CITY

## EXPERIENCE FROM SENEGAL

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# INTRODUCTION

- ❖ **The sustainability of the Cities is inextricably bound to the conservation of the natural environment and the natural resources in the urban areas.**
- ❖ **Regarding the numerous challenges experiencing by the cities of developing countries, particularly in LDCs, in terms of degradation and loss of the biodiversity, making cities sustainable require to address or manage properly the main causes.**
- ❖ **In that sense, integrated approaches through various policies and strategies need to be definitely applied. For that reason, Senegal adopted several strategies and made progressively significant and appreciable efforts, despite the remaining challenges.**

# OVERALL

- Brief presentation of Senegal
  - Structuring Elements
- Public Policies and Achievements
  - Remaining Challenges
    - Perspectives
- General Recommendations

# BRIEF PRESENTATION OF SENEGAL AND THE CHARACTERISTICS OF ITS URBANIZATION

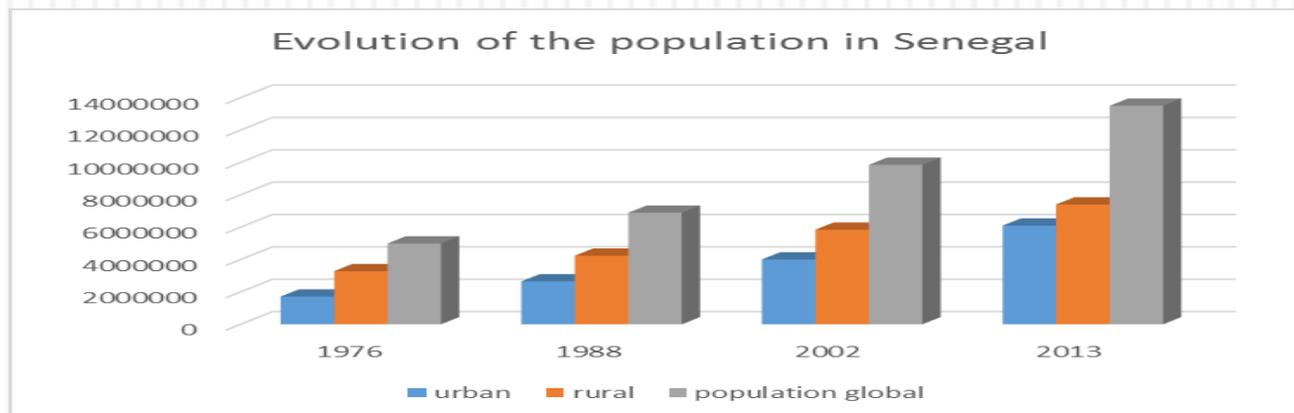
## 👉 Demographics, Administrative and Economics

- Population: **13,508,715 inhabitants in 2013**, 49.9% men and 50.1% women
- Density: **69 inhabitants per km<sup>2</sup>**
- Population mostly **rural: 54.8%** against 45.2% urban
- Population mostly young: **Average age: 22.7 years**
- Active Population: **58.2%** of the global population
- Employment rate: **74.3%** in 2013 against 25.7%
- Administrative Division: **14 regions/45 departments/123 Districts/113 Cities/370 rural communities and in 14 958 Villages.**
- Senegal is a **LDC**, with a **poverty rate approaching 47.6 %** (ESPS 2011), 57.3% in rural areas: food insecurity, high unemployment and pauperization
- GDP growth rate: 3.4% in 2012 after 1.7% 2011.

- Primary sector: 16.6% of the 2012 GDP against 14% in 2011
- Agriculture: 43.2% of primary sector activities
- Agriculture: 7.2% of the 2012 GDP

## Structuring Elements

- Sluggish economic growth (for most of the time over the past three decades)
- Weak rural sector
- Heterogeneous urban frame, with unequal Cities and Regions
- Imbalanced access to social and basic services between the rural and urban areas
- Rapid population growth



Source: ANSD-RGPHAE-2013

## Growth rate of the population of Senegal between 1976 and 2013

	Census year				Average annual growth rate		
	1976	1988	2002	2013	1976-88	1988-02	2002-13
<b>Sex</b>							
Men	2 472 622	3 353 599	4 852 764	6 735 421	2,6%	2,7%	2,6%
Women	2 525 263	3 543 209	5 005 718	6 773 294	2,9%	2,5%	2,3%
<b>Residence</b>							
Urban	1 713 295	2 653 943	4 008 965	6 102 800	3,7%	3,0%	3,5%
Rural	3 284 590	4 242 865	5 849 517	7 405 915	2,2%	2,3%	1,7%
<b>Sénégal</b>	<b>4 997 885</b>	<b>6 896 808</b>	<b>9 858 482</b>	<b>13 508 715</b>	<b>2,7%</b>	<b>2,5%</b>	<b>2,5%</b>

Source: ANSD-RGPHAE-2013

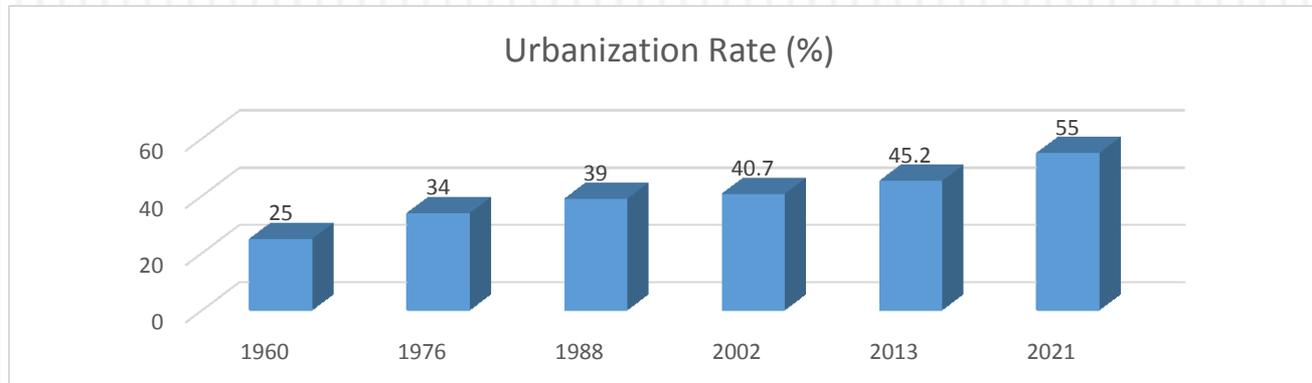
### Major consequences: High rural-urban migration

- **Internal migrants:** estimated in 2013 to be about 1,896,779 people, or 14.6% of the population compared to 2002 where it was approximately 15.3%
- **Immigrants:** estimated in 2013 to be about 244,953 or 2% of the population, coming mainly from West Africa, or 46.8%

### ❖ Rapid urbanization

- According to the statistics, Senegal is facing a **rapid urbanization**
- With a growing rate of 40.7% in 2002 and 45.2 % in 2013

## Evolution of the urbanization in Senegal



Source: ANSD & DPDH

### ❖ Change of the structure of the Cities

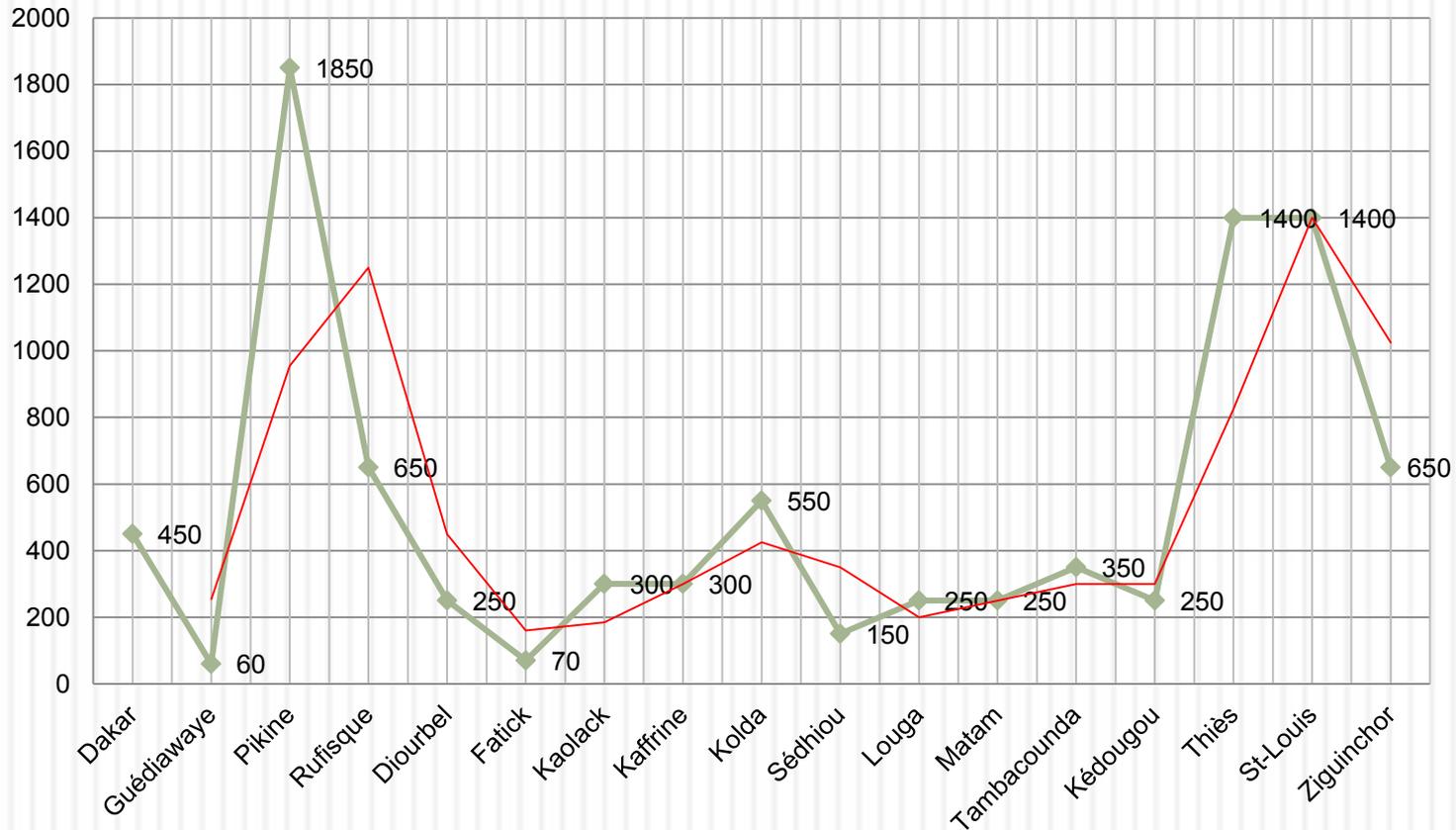
- Slums are growing and becoming more crowded in some localities
- Deep Impoverishment and reduced access to jobs
- Serious problems in infrastructure, health, transport, waste management, water scarcity, energy supply, sanitation and safety
- Increasing of Population growth in flood-prone areas and of vulnerability to natural disasters
- Depletion of natural resources at the expense of the landscape heritage and green spaces
- Deforestation



**DEGRADATION OF THE NATURAL ENVIRONMENT AND THE  
QUALITY OF URBAN LIFE**

# State of slums situation in Senegal

Localities with the biggest slums (average occupied area in hectares)

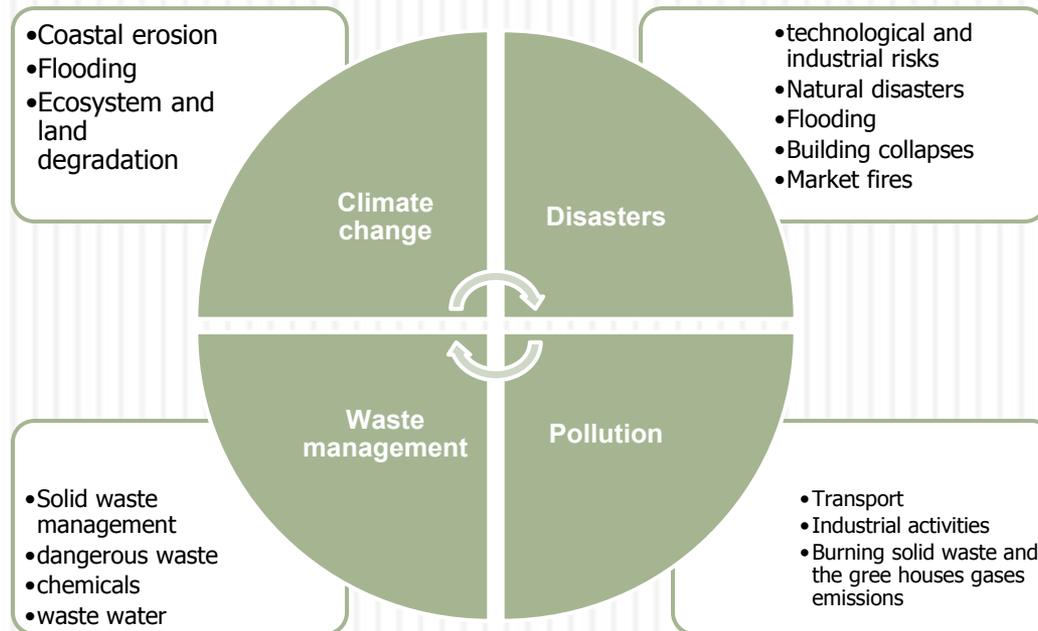


Source: Ministry of Habitat and Urbanization

## 👉 Other factors contributing to the degradation of the natural environment and preventing sustainable cities

- **Climate change**
- **Natural and industrial disasters**
- **Pollution**
- **Waste management**

### ❖ Current situation in Senegal





Coastal Erosion in Hann



Transport of dangerous goods



Factory pollution



Flooding in flood-prone areas



Illegal occupation of public roads by street vendors



Transportation pollution

# PUBLIC POLICIES AND ACHIEVEMENTS

**Responding to the above major challenges, the Senegalese Government adopted integrated approaches through various policies aiming two main objectives:**

- **Addressing the current situation by setting a measurable goals followed by concrete actions in:**
  - ✓ generating job opportunities in rural and urban areas and expanding basic services in rural areas in order slowing down the flow of internal migration,
  - ✓ stopping the proliferation of slums, strengthening infrastructure, relocating people from flood areas, facilitating social housing, transportation management
  - ✓ controlling the waste and pollution for clean and healthy cities's environment, managing natural disasters, etc.
  
- **Planning inclusive, safe and liveables Cities by:**
  - ✓ preventing future slums from forming, anticipating on the new global challenges,
  - ✓ promoting more efficiently sustainable production and consumption,
  - ✓ renovating and modernizing urban centers, establishment of modern cities (Green cities Project), managing green spaces, urban and peri-urban forests
  - ✓ promoting renewal and access to sustainable energy, regenerating the degraded urban ecosystems, reforestation, Promoting sustainable industrialization, etc.

# Quick view on Senegalese main and recent public policies on urbanization and sustainable development

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## ❖ Legal and regulatory framework

- Environmental Code
- Water Code
- Sanitation Code
- Construction Code
- Town Planning Code and
- Other Urban Planning tools

## ❖ Institutional Framework

- Ministry of Urban Planning and Housing, Infrastructure, Environment and Sust. Dvpt, Hydraulic and Sanitation, Municipalities.
- Private sector
- The National Agency for territory Planning (ANAT)

## ❖ Government policies and strategies

### ➤ Emerging Senegal Plan (Plan Senegal Emergent-P.S.E)

- ✓ Promotion of rural and agricultural development, and regionalization of public policies
- ✓ Reduction of socio-economic inequalities between localities
- ✓ Strengthening the resilience to external shocks and management of the environment
- ✓ Restructuration of urban centers and upgrade of rural housing
- ✓ Enhancement of the inclusive and sustainable economic growth and creation of better opportunities for job employment in order to reduce poverty

➤ **Urbanization and Habitat Policy Letter 2011-2021**

- ✓ Enhance the effectiveness of the Social Housing projects
- ✓ Improve the living standards
- ✓ Better management of the cities spaces
- ✓ Eliminating slums and irregular occupations
- ✓ Controlling construction in accordance with the State rules
- ✓ Capacity building of the relevant technical ministries

➤ **The Natural resources and environmental policy Letter**

- ✓ Preservation of natural resources and the environment
- ✓ Fighting pollution and nuisances
- ✓ Management of wetlands, chemicals and waste
- ✓ Enhance the capabilities of planning
- ✓ Promote sustainable production and consumption patterns.

➤ **The policy on sustainable production and consumption**

This policy is primarily set up to implement international recommendations made to protect the environment against pollution and nuisances. Several actions have been undertaken in that sense and are gradually producing the positive effects expected.

## ❖ Some examples of Achievements

### Senegal has progressively accomplished important improvements illustrated by the following achievements

- Creation of a specialized housing finance institution (BHS) and various national institutions for the promotion of housing: SNHLM, SICAP, SCAT - URBAM, etc.
- Besides the adoption of the Town Planning Code, aforementioned, Senegal involved also in a big social housing program: Plan Jahay to relocate population in flooding areas
- Adoption of a restructuration and land regularization policy to fight against the slums and improve living conditions of the populations installed in floodplains
- Several actions had undertaken for a better management of natural resources and conservation of the biodiversity
- Important work have been taken to protect the coastline against coastal erosion, for instance shoreline protection and the construction of a rockfill dam along the coast over a length of 2197 meters already achieved with an additional of 750 meters in progress
- Several actions are also carried out at the place of settlements threatened by the sea.
- Rehabilitation of degraded urban environments by creating green spaces, urban and suburban forests, with micro gardening activities, and others economic productive programs
- Limitation of the vehicles age at importation, etc.



Shoreline protection



Green public space



Micro gardening activities



Renovation and strengthening road infrastructure and transportation

# REMAINING CHALLENGES

CLIMATE CHANGE	DISASTER RISK REDUCTION	POLLUTION	WASTE MANAGEMENT
<ul style="list-style-type: none"> <li>• Lack of coordination</li> <li>• Advancing of the Sea</li> <li>• Non-consideration of sustainable development principles in some planning documents;</li> <li>• Illegal occupation of the lowlands and coastal areas;</li> <li>• Unregulated exploitation of sand quarries;</li> </ul>	<ul style="list-style-type: none"> <li>• insufficient environmental education</li> <li>• Non-compliance with regulations on disaster risk</li> <li>• illegal exploitation of the coast;               <ul style="list-style-type: none"> <li>• Non-integration of sustainable development principles into programs;</li> </ul> </li> <li>• mismanagement of dangerous chemicals</li> </ul>	<ul style="list-style-type: none"> <li>• Circulation of old vehicles</li> <li>• High traffic congestion during peak hours</li> <li>• lack of efficiency of anti-pollution actions</li> <li>• maintaining polluting industries</li> <li>• current impossibility to relocate some of the most polluting industries</li> <li>• Burning solid waste</li> </ul>	<ul style="list-style-type: none"> <li>• Poor management of electronic waste</li> <li>• lack of appropriate framework of management of industrial and biomedical waste</li> <li>• Lack of expertise and means to transform household waste</li> <li>• Mismanagement of wastewater</li> </ul>

**INADEQUATE FINANCIAL RESOURCES AND TECHNICAL ASSISTANCE TO ADDRESS EFFECTIVELY THESE ISSUES AND THE DEDICATED PROJECTS**

## **Additionally, Senegal is still facing the main challenges related to:**

- the control of rural-urban migration flows and maintenance of rural people in their land, to promote agricultural development and food production which are fundamental in improving the socio-economic situation of the population and their well-being.
- Senegal needs to better manage the cities spaces by enhancing their architectural quality, addressing the phenomena of shantytowns and anarchic occupation, strengthening the economic and development capacities of cities
- Senegal also needs to ensure the implementation of policies on restructuring and land regularization
- Senegal need to enhance more its actions on the management and conservation of the natural environmental in the cities, etc.

# PERSPECTIVES

**To overcome the remaining constraints, the Government has recently decided to implement a National urban renewal Plan which will focus on the following elements:**

- Restructuring and modernizing the urban and rural housing.
- Improving citizens' access to land and property, particularly with intensive development of serviced plots programs.
- Mobilizing more domestic resources, through a dynamic cooperation with the national banking system and private sector and also with the international partners
- Implementing the different policies in order to reach a balanced urban architecture, articulated around the promotion of secondary poles and with liveables cities

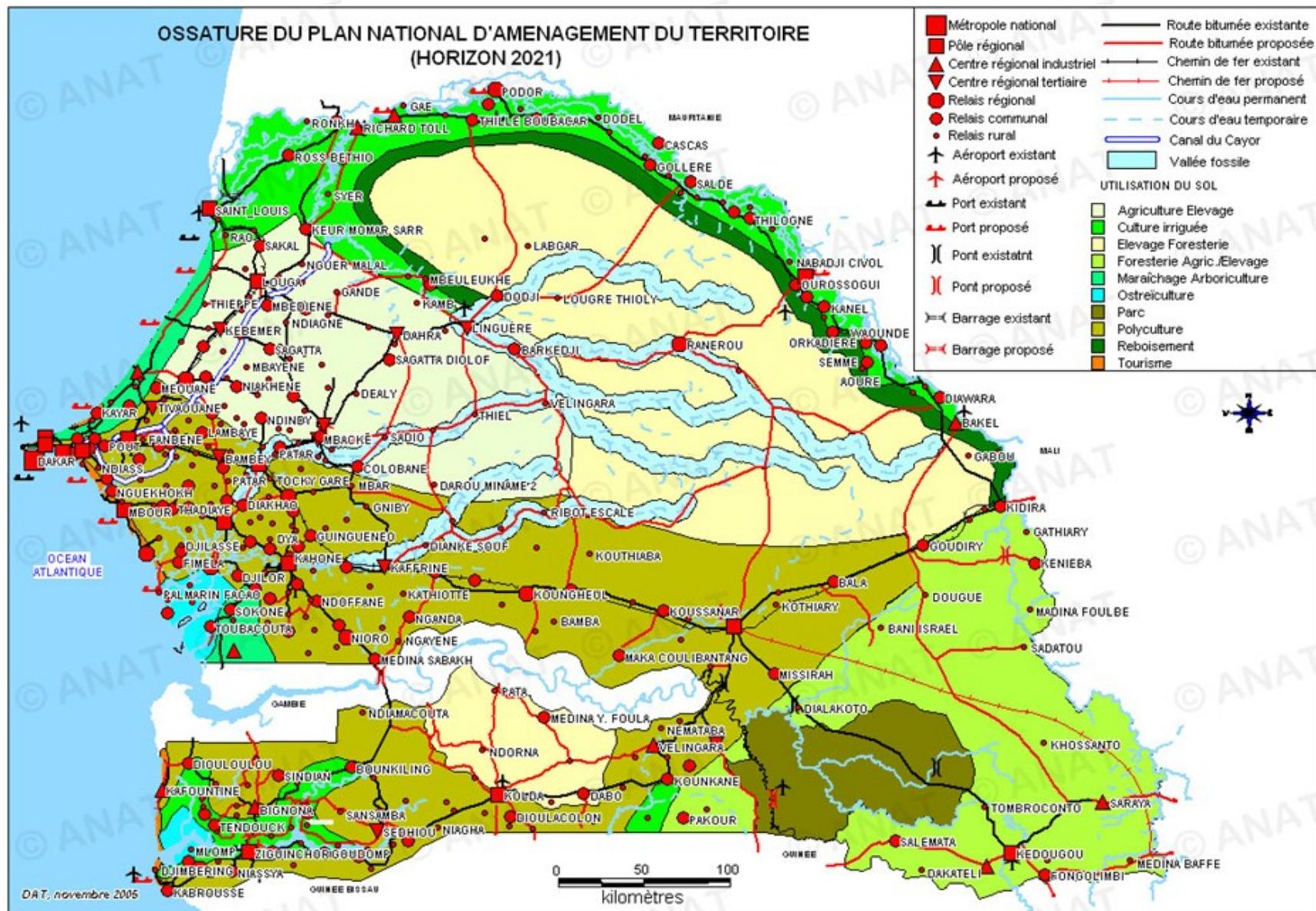
**Parallel to the National urban renewal,**

- A pact for the development of essential services in rural areas will benefit all localities in order to enhance energy services, water, education and health infrastructure, roads access and Community socio-economic infrastructure.

# GENERAL RECOMMENDATIONS FOR THE POST-2015 DEVELOPMENT AGENDA

- Promoting a better urban planning and management, and sustainable industrialization
- Promoting access to social and economic amenities in human settlements and increasing the efficiency of their use, including waste management, transportation and energy
- Strengthening resilience to natural disasters by building capacities for adequately anticipating and responding to disasters and reducing their impact on people living in vulnerable situations;
- Building efficient infrastructure networks and public facilities, upgrading rural housing and informal settlements through integrated infrastructures and basic services
- Reduction of inequalities through equal access to adequate housing, to education and healthcare services and facilities, equal job opportunities,
- Enhancement of promotion of ecological urbanism, including green spaces, soil and waste, flooding and the climate change and pollution, and of renewal energy
- Enhancing financial and technical capacities of LDCs to achieve sustainable and resilient cities, and to mobilize international public and private financing.

# OSSATURE DU PLAN NATIONAL D'AMENAGEMENT DU TERRITOIRE (HORIZON 2021)





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