

Causes and Consequences of Spoliation in the City of Kinshasa, the Democratic Republic of the Congo

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Abstract:-

Background and objective: The study of the determining causes and consequences of the spoliation of the City of Kinshasa has a certain interest by the quality of the results that it makes available to Kinshasa, scientists, researchers and decision-makers to allow know their situation which prevails in this urban ecosystem. The objective of this work is to obtain scientific data on the causes and consequences of theft in the City of Kinshasa.

Methods: this is an observational and documentary study supported by a few techniques such as questionnaire survey and interview. The elements on the spoliation in the city of Kinshasa were discussed.

Results: The results obtained from these investigations highlight a virtual absence of a proliferation and emergence of erosion and flooding (14.2%), disappearance of a formidable number of attacks on biodiversity (10.4%), repercussions across the entire ecosystem (25.8%).

Conclusion: Spaces in the city of Kinshasa are generally despoiled by erosion leading to destruction of the ecosystem.

Keywords:- Cause, Consequence, Spoliation, City of Kinshasa.

I. INTRODUCTION

In the development process of the city of Kinshasa, which began since colonization, urban public policies in terms of town planning, development of green spaces and protection or management of the environment do not coincide with the practices of most of the cities of Africa (1). Far from being hostile to public action, the people of Kinshasa show, for the most part, indifference to the city's sanitation services and companies which are run by Kinshasa city hall and its partners (private operators and associations dealing with this management). The efforts that these multiple stakeholders deploy in the development and management of green spaces do not seem to contribute to modifying the harmful and harmful practices of certain Kinshasa, which are characterized by a certain casualness in the way they dispose of a public space (2, 3).

Thus, we are witnessing an intense spoliation of urban green spaces, diverting them from their initial vocation to the profile of residential and other functions, in defiance of urban planning prescriptions. Given this situation and given that almost all of the population lives in “cupidospheric” portion (4), determination and involvement in improving Kinshasa's environmental framework are imperative, not only by public authorities, non-governmental organizations and other associations; but also, by the resident population, for a good use of the ground. In this work, we elucidate in particular the determining causes and consequences of the spoliation in the VK in general and the districts of the four investigated communes, in particular Gombe, Kalamu, Matete and N'Djili.

II. METHODS

The city of Kinshasa served as the setting for this study. Direct observation, factual analysis served as a method of study. In addition to these methods, we used the statistical method to quantify the data collected during the field surveys using the different software; the Survey method provided the opportunity to consult those involved in the sustainable management of green spaces and other targeted individuals, in order to collect their opinions and considerations likely to elucidate the hypotheses of the work. The systemic approach or analysis helped, in this study, to integrate the observed facts into the overall understanding of the phenomenon studied in all its complexity.

Techniques used

- a) The literature search was used to gather several useful theoretical information from the pre-existing documents relevant to the study. For this work, we first read the linear documents and tools that we consulted in various libraries of the place;
- b) The pre-survey made it possible to tackle the question before the actual study of this work, on the basis of some verbal testimonies from the populations and observations made in the field. It facilitated familiarization with the geographical space and good knowledge of the area studied;

c) The survey itself by questionnaire led to the collection of opinions from samples of green spaces and residents of the four communes (Gombe, Kalamu, Matete and N'Djili) of the VK on the issue of green spaces;

d) The interview survey consisted of giving the respondents information and receiving in return appropriate information from them. This technique made it possible to survey 24 green spaces, 4 sample municipalities and interview 240 subjects at a rate of 60 per municipality, with the aim of collecting additional information on general knowledge relating to green spaces in the capital.

III. RESULTS

The results of the inventory of the consequences which emanate from these spoliations and degradations are given in table 7. All the respondents (100%) gave some consequences of the spoliation and destruction, in this case: the repercussion on the whole of the ecosystem (25.8%), the destruction of the ecosystem (6.7%), the formidable attack and / or disappearance of plant and animal biodiversity (10.4%), pollution and nuisances various to health (4.2%), unfavorable climate change (11.7%), electrocution during strong winds and torrential rains (2.1%), lack of places of entertainment, recreation, rest (6.7%), etc. (Table 1).

Table 1. Inventory of the consequences of the spoliation of green spaces in the city-province of Kinshasa

Result	n	(%)
Unfavorable climate change	28	11.7
Proliferation and emergence of erosion and flooding	46	19.2
Various nuisances and pollution to health	10	4.2
Disappearance and / or damage to plant and animal biodiversity	25	10.4
Destruction of the ecosystem	16	6.7
Impact on the entire ecosystem	62	25.8
Electrocution during strong winds and torrential rains	5	2.1
Lack of aesthetics and harmony of the city	16	6.7
Lack of places for entertainment, recreation, rest	16	6.7
Lack of shelter against bad weather (heat, noise, winds, pollution, etc.)	16	6.7
Total	240	100.0

The distribution of the results of the inventory of factual uses for the allocation of green spaces studied and looted in the 4 survey municipalities of the VK is shown in table 8. All the subjects interviewed (100%) have a degree of perception high level of factual uses to which the looted green spaces of the capital, Kinshasa are converted. For example: domestic use (50%), school use (17.5%), commercial use (16.7%), industrial use (6.3%), sanitary use (5.8%), hygienic use / dumps (3.8%). (Table 2).

Table 2. Results of the inventory of land use uses of looted spaces in the 4 sample municipalities of Kinshasa

Assignment use	n	%
Domestic residential use	120	50.0
Commercial use	40	16.7
Sanitary use	14	5.8
School use	42	17.5
Industrial use	15	6.3
Hygienic use (dumps)	9	3.8
Total	240	100.0

Figure 1 highlights the meteoric-galloping rise of the populations of Kinshasa from its origins until the dawn of 2015. They rose from 23,730 to 15,000,000 inhabitants from 1924 to 2015 (Figure 1).

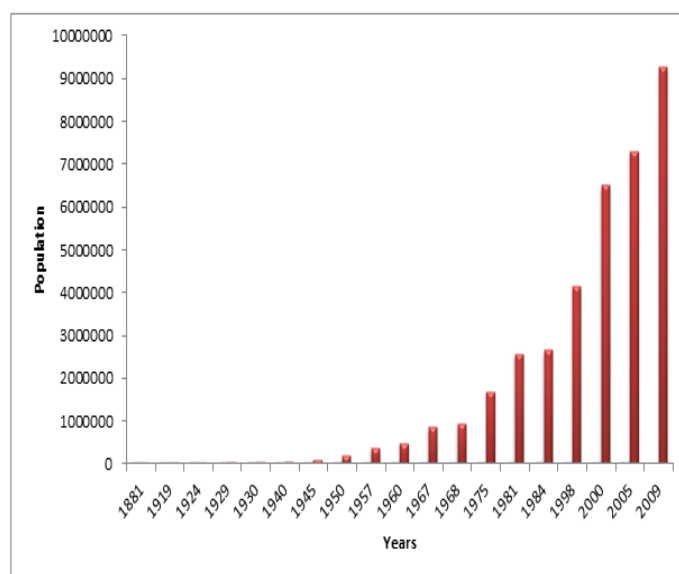


Figure 1:- The demographic development of the VK, 1881-2009.

IV. DISCUSSION

The population of Kinshasa increased from 5,000 to 15,000,000 inhabitants from 1881 to 2015 and has experienced a marked increase in population growth from 1881 to the present day. This situation only pushes the Kinshasa populations to put pressure on the anarchic occupation of urban spaces and green spaces in the city of Kinshasa. The uncontrolled and uncontrolled demographic growth has negative repercussions on land reserves; furthermore, the spatial evolution of the VK shows that it has grown from 115 to more than 100,000 ha from 1881 to the present day. Looted green spaces are often used for domestic purposes (50%). This phenomenon worries and urgently requires the intervention of the competent authority in the application of the sanctions which are imposed on the right of the spoilers (5, 6; 7).

Thus, we are witnessing an intense spoliation of urban green spaces, diverting them from their initial vocation in favor of residential and other functions, in defiance of urban planning prescriptions (8). Given this situation and given almost the entire population (Kinshasa) lives in a quite cupidospheric portion, the determination and the implication for the improvement of the environmental framework (of the capital, Kinshasa) prove imperative, not only by the public authority, non-governmental organizations (NGOs) and other associations; but also, by the resident population, for a [rational] use of the land (9-15). To better clarify the causes of the theft of green spaces in Kinshasa, we distinguish on the one hand, legal and cyclical causes, on the other hand structural causes (16-20).

The crisis or the absence of public policy in matters of housing and habitat has been the basis of anarchic housing and construction (21). The constructions have resulted in incalculable environmental damage, causing the theft of green spaces, the proliferation and emergence of erosions and floods, the destruction of the urban ecosystem of Kinshasa, the disappearance of animal and plant biodiversity, climate change. unfavorable, the emergence and proliferation of various nuisances and pollution, electrocution during strong winds and torrential rains, repercussions of certain harmful consequences on the entire urban ecosystem of Kinshasa, following the dissolution of the ONL in 1982 and that of the Caisse Nationale d'Epargne et de Crédit Immobilier (CNECI) (22-26).

From 1974 to 1999, the private sector, with the contribution of Non-Governmental Organizations (NGOs) and the support of American Protestant Churches, had built 2,266 housing units in the DRC, including 146 in Kinshasa. This is the Habitat 2000 Project in Ngafani / Selembao, ex Mont-Ngafula. The continuation of this work, by the Congolese, to build even more houses, ended in a permanent stop of the works, due to poor management (calamitous management) (27-29).

V. CONCLUSION

This study shows that the determining causes of the theft of these green spaces in Kinshasa are essentially of a legal, cyclical and structural nature. As for the consequences of the destruction and theft of green spaces are ecological, environmental, economic and health.

Conflict of interest

The authors declare no conflict of interest

Knowledge

We thank all who participated in the study.

Author's contributions

MNNJA, BLM, ANN and AKJ designed and analyzed the statistical data for the study. BKL, LDB and PJJ supervised the study. All authors have read and approved the final and revised version of the manuscript.

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