

## **Environment has little chance to be the priority in Sub-Saharan African cities**

### **Introduction**

Sustainable Development is on everyone's lips. However, the concept is often misunderstood or even misused, and current trends seem to move away from its intrinsic principles. In facts, although Sustainable Development is at the crossroads between economic considerations, social expectations and environmental concerns, it is usually reduced to this latter component. Big companies take ownership of the concept and give it mercantile directions. Sustainable Development doesn't benefit the people who should actually take advantage of it (i.e. the poor). In emerging countries it comes to whether the success of the concept does not conceal questionable imperialist intentions of rich countries, because it appears to be part of those ideas that the Northern Countries elaborate and "impose" the world through financial restrictive measures. Poor countries usually follow these ideas prior to confronting them with their specific contexts. This paper, in a first step, after a short review of the concept of Sustainable Development, will try to show that although everyone agrees that the risks to our planet are a reality, poor countries cannot adopt the same approach to the implementation of low-carbon urban environment as rich countries. Emerging cities need to adopt a vision of Sustainable Development that always includes economic and social aspects beside Environment. In a second step, through the examples of Yamoussoukro and Abidjan (*fig. 1*) in Côte d'Ivoire, it will try to show how smarter planning efforts and focus on collective transport system may significantly contribute to implementing a low-carbon environment in Sub-Saharan African cities.

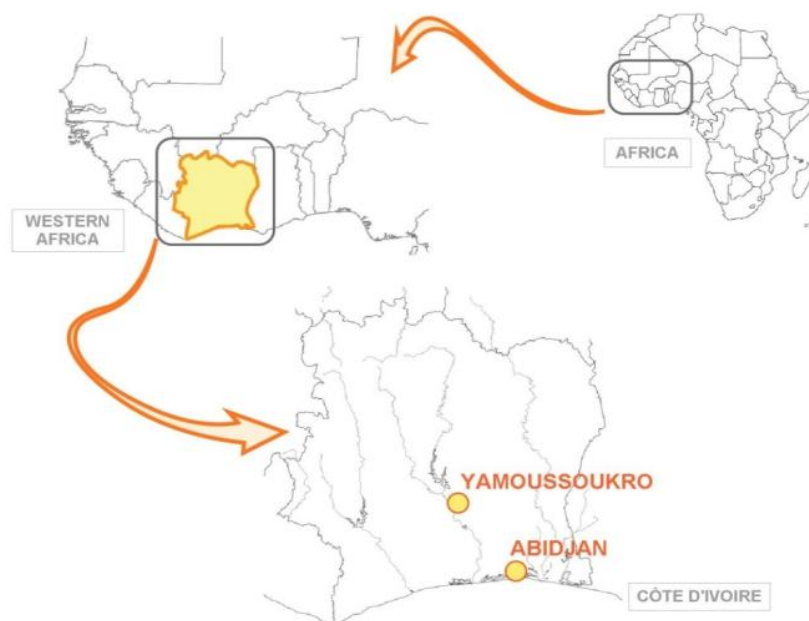


Fig. 1. Location: Abidjan and Yamoussoukro in Côte d'Ivoire. Source: Author.

## **Sustainable Development in Sub-Saharan Africa**

### ***Sustainability: a new facet of Imperialism?***

Sustainable Development, as many of those brand new concepts, stems from bureaucrats in developed countries. It is as if now that some countries are developed, they want to impose a restrictive view of development: *"From now on, do projects like this: don't use these kinds of resources, don't touch these spaces or these species, if not no funding"*. The stakeholders in developing countries then follow because they need means. Many leaders in Sub-Saharan Africa often refer to sustainability in their projects just for the satisfaction of investors from rich countries, not because of a real awareness about the planet. This may be seen as a kind of imperialism, just as with Structural Adjustment.

In today's planetary village, trends from elsewhere invade poor countries and go too fast for them. They often don't have time to think for themselves and are reduced to being mere followers in the international arena. Unfortunately, things are made so that the faster goes even faster, and the slower even slower. However, I strongly believe that *"the Africa which the world needs is a continent able to stand up, to walk on its own feet"* (Ki-Zerbo, 2003).

Sustainable Development, as currently presented, seems to serve the rich more than the poor (Brunel, 2008). This is because the biggest polluters of the planet, with no real change in their attitudes according to sustainability principles, hide behind the concept in order to be more attractive and make profit. Sustainable Development (more precisely, Environment) is often used to put pressure on emerging countries to reduce their industrialization. This image given by Sustainable Development today tarnishes its widely accepted principles. Although Northern Countries have given birth to the concept, they should allow Southern Countries to adopt it without too much pressure.

### ***Is a low-carbon environment a luxury for poor countries?***

People are concerned about Environment only when they can meet their basic needs. These needs are often real challenges in poor countries and leaders' attention is naturally focused on them. Under such conditions, any ecofriendly project in developing cities that would not involve a significant improvement in the social conditions of poor people is not far from luxury. Let consider a project at the Indénié crossroads: a nerve junction in the sanitation system of the city of Abidjan. In 2007, during a sanitation project, the Minister of Cities and Urban Sanitation of Côte d'Ivoire created a green area at this crossroads (*fig. 2*). One of the justifications the minister gave the green area was ecology. He stated that in this era of environmental issues, no such project had been undertaken in Abidjan for decades. Nevertheless, this project earned him strong criticism because people believed that the funds<sup>i</sup> could have been used to build a *"more useful project"* like a primary school. Even today he is nicknamed the gardener of Indénié.

In a context like this, building green districts or passive houses, driving electric cars, or eating organic products are simply an unreasonable utopia. Of course, since there are real risks that things get worse, environmental issues cannot be ignored in emerging cities. So we need to find the right way to tackle the problem. A good starting point would be to avoid the isolation of Environment from the two other components of Sustainable Development.



Fig. 2. Indenié crossroads. Source: Acturoutes

Urban dwellers in emerging cities are not interested just in a project's goodness to Environment, but especially in the noticeable and valuable results it may introduce in their life. They will more easily appropriate ecofriendly projects that are coupled with the concern to help them meet their economic and social expectations. But most current projects labeled "green" in Sub-Saharan African cities don't go in this direction: energy saving, material recycling or unaffordable technologies are what is emphasized; the use of local materials in urban buildings is limited to one-time constructions of a few huts with compressed earth blocks without significant impacts in cities, etc. Such a presentation has forged an image of utopia and uselessness to green projects, so they are relegated to the background in the mind of people.

Moreover, usually shaped by the massive marketing hype around Environment, the widely held view that establishes confusion between ecofriendly projects and sustainable projects, has taken root in Sub-Saharan Africa. Even in the Ivorian government's political agenda, in the chapter of Sustainable Development – note that this is the very last chapter of the agenda to give an idea of the importance placed on the issue – only Environment is discussed (lagoon purification, forests protection, etc.), despite the catchy headline: "*let's think in a sustainable way*" (Ouattara, 2010).

This view must be fought. No more confusion should be held between an ecofriendly project and a sustainable project. The latter is what people need in Sub-Saharan African cities, not the first. People will agree to look truly and freely on environmental issues if this occurs as part of issues which they are the center, issues they see as more fundamental: namely social and economic issues. The ecological emergency is meaningful only if it is put in the well-being of humanity, especially the poorest (Brunel, 2008). In other words, in developing cities it is better to think about environmental issues within the overall framework of Sustainable Development, not independently: Sustainable Development is not just the Environment, while focusing on Environment only, none of the goals of sustainability can be reached (*fig. 3*). To illustrate this, let's consider an example of project that must be avoided in developing cities.

An Ivorian real estate developer plans to build high energy performance student residences in Abidjan. This is a complex on a 16 millions square feet site comprising 10 000 luxury studios, with all facilities: library, multimedia rooms, conference rooms, supermarket, cinema, sports, etc...

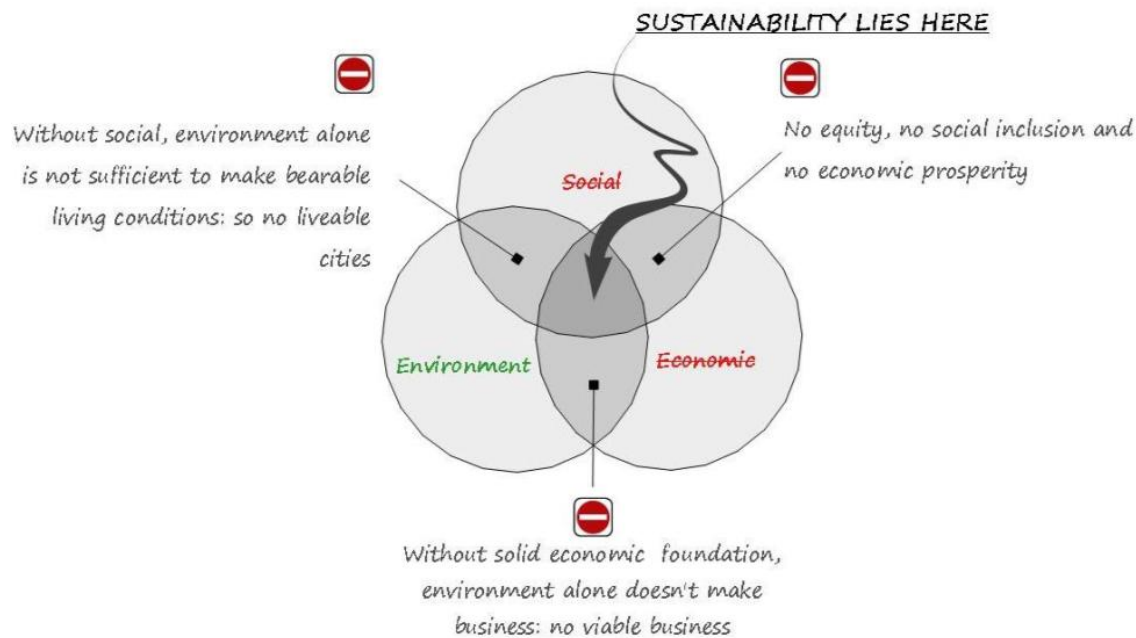


Fig. 3. Consequences of focusing on Environment only in a sustainability process. Source: Author

In addition, the project is supposed to use solar and wind energies and recycled wastewater. Considering the too high standing of the project, the firm responsible for the architectural studies for the business plan suggested, among other things, to abandon the new energy solutions, to include double rooms and to increase the number of beds. These suggestions would make a greater contribution to solving the lack of places<sup>ii</sup> in university residences in Ivory Coast. The developer responded that investors are interested in green projects only. This project which doesn't bring a full contribution to solving real problems is not truly sustainable: the initial investment is too high; the residences are not affordable for average social class students, so they dig through social inequalities. Such project is not suitable in the context of sustainable development.

### **Implementing low-carbon environment in Sub-Saharan African cities**

#### ***Planning is the key***

Cities have emerged today as an unavoidable issue for the future of the planet. In Sub-Saharan Africa, they are globally characterized by a planned core, a few residential enclaves for elites and vast informal districts at their outskirts. The statement today is simple and alarming: urban growth is the result of the sprawl of these slums through illegal subdivisions. To set directions for cities growth, far from being a luxury, planning is a necessity in Sub-Saharan Africa. If there must be a prerequisite for aid from developed countries, this should be the development of planning documents. Nevertheless, in most developing cities, planning tools must be rethought. Current master plans are too rigid and do not take into account much of the population consisting of poor.

So these poor people attempt to escape from a planning process that excludes them (JC Adrian, 2009) and settle in slums on illegal dangerous sites (*fig. 4-5*). This makes them the first victims of environmental disasters. This sad aspect of urbanization in developing countries is indeed the primary purpose of the social aspect of sustainable development and more attention should be focused on it. Solving it requires a smarter and flexible planning.



Fig. 4. Slums of Lagos, Nigeria. Source: IRIN/Dulue Mbachu



Fig. 5. Slums of Accra, Ghana. Source: UNICEF/Jill Westenra

A smarter planning must be strategic rather than exhaustive (JC Adrian, 2009). Since action and monitoring means are very limited, planning documents should not provide too many details, but must define strategic axes, sufficiently precise and easily understood by everyone. Defining strategic axes means that planning tools should *steer urban development rather than hope to control it* (ISTED, 2007). Poor urban settlements are characterized by their dynamism; new trends are constantly emerging, linked to the struggle for basic needs. They cannot therefore be confined in a too prescriptive framework. Thus, to take into account the poor, planning must be flexible and try to integrate the informal sector. This approach of urban planning doesn't imagine an ideal world in order to impose it on reality; it rather strives to change reality, even at a modest pace, toward an ideal world. One of its key principles is community participation, so that people are involved in the planning process and are more willing to apply its results.

The above about planning is part of the social and economic components of sustainable development, and this should be a prerequisite to addressing more directly environmental aspects. These environmental aspects are the identification and protection of sensitive sites and the fight against the unbridled spatial extension and the functional partitioning of the urban space. These are however missing from the current planning tools. For instance, in Yamoussoukro, the Master Plan of 1997 predicted that the surface area of the urban fabric would multiply by 5 within 25 years (*fig. 6*). Although the plan was developed in the context of the transfer of the Ivorian capital city from Abidjan to Yamoussoukro, this urban sprawl would excessively increase the ecological footprint of the city. The Plan also provided a strong demarcation between the administrative, the residential and the academic areas of the city<sup>iii</sup>. Fortunately today, these forecasts are far from being achieved. They are against space compactness and functional diversity: two of the main points<sup>iv</sup> on which Sub-Saharan African cities may significantly contribute to building a living environment with low ecological footprint.





Fig. 7. Exhaust gases of cars in Abidjan. Source: Author



Fig. 8. A bus of SOTRA in very poor condition arriving à a bus stop in Abidjan. Source: Carlo Crippa

The Abidjan Transport Company SOTRA was founded in 1960. It is the first urban transport company of West Africa, and the only one to have survived management and finance difficulties. But SOTRA no longer meets the needs of public transport in Abidjan because the company could never exceed the size of its fleet of buses of late 1980s (fig. 9), whereas the population of Abidjan has grown at a rate above 4% for over 20 years. The poorest citizens who have no alternative means of transport often wait for several hours at bus stops.

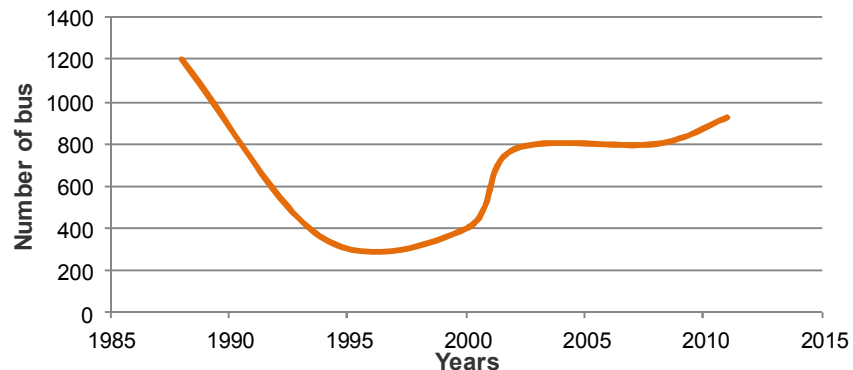


Fig. 9. Chart of the evolution of the number of buses of SOTRA fleet from 1980 to 2011. Source: SOTRA

SOTRA's vehicle fleet continues to age despite some one-time efforts by the Ivorian Government to enhance its dynamism. The company requires a firmer support to bring a significant change in transport sector in Abidjan. This support could be organized around the three following pillars:

1. *A large-scale financial support* to help supply the fleet of SOTRA with buses in order to give the company the ability to provide a larger share of traffic in Abidjan.
2. *The Creation and planning of more reserved roadways* for SOTRA's vehicles in order to make them more competitive in terms of travel time.
3. *An awareness campaign* against the proliferation of private cars in order to encourage people use public transport.

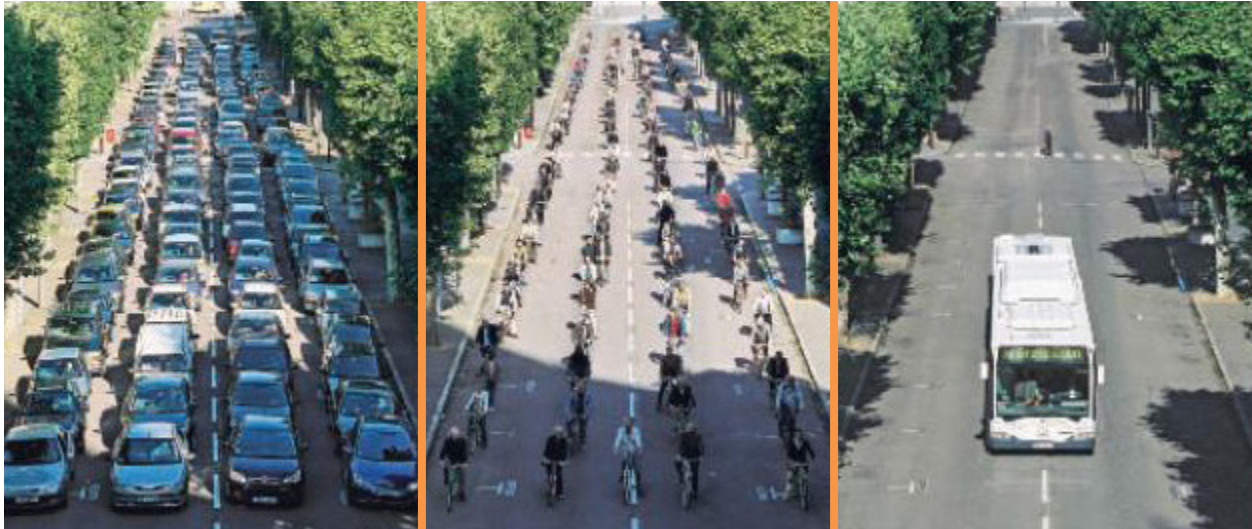


Fig. 10. Comparison of the space requirement of three means of transport. Source: CNOA

This support of public transport would have many advantages, including the reduction or eradication of traffic jams (fig. 10) and the improvement of the overall economic performance of the city through a more fluid mobility of the population. So there would be a positive impact on the lives of all inhabitants of Abidjan, especially the poorest. Then, and this is of course very important, there are the benefits for the Environment with a clear decrease in pollution from transport. The investment will be significant, sure, but the environmental and social urgencies are important too. The benefits on the lives of people should be a sufficient reward.

## **Conclusion**

Sustainability is to consider the development in a responsible way; it is to feed a constant concern about the most vulnerable people among us and the common heritage that is the planet. This common heritage binds us in a common future: sustainable development is therefore the concern of all. If this be true, the concept becomes consistently problematic because our world is a world of differences, an unequal world, and a world of divergent interests. For Sustainable Development to address the root problems in each country, instead of ignoring these differences and putting forward a unified vision of the concept, we should recognize them. The recognition of the differences is the recognition of the right (and at the same time the duty) of each country to address the sustainability of development specifically. But of course, a specific approach doesn't mean an isolated approach. In Sub-Saharan African cities, the social and economic components of sustainable development are very important but they are not yet well emphasized in projects. They must be always coupled with the Environment component in green projects for the implementation of low-carbon living spaces. This means that humanity must be at the center of Sustainable Development and not the Environment; because development is about humanity and without development, sustainable means nothing.



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## References

Ahmed Sangaré, 2010. *Problématique des équipements commerciaux de Yamoussoukro : étude d'un pôle commercial*. DEIAU. École Africaine des Métiers de l'Architecture et de l'Urbanisme.

Alassane Ouattara, 2010. *Vivre ensemble*. [online] Available at:  
<[http://www.adosolutions.ci/ado/lire.php?link=sol\\_programme](http://www.adosolutions.ci/ado/lire.php?link=sol_programme)> [Accessed 21 July 2011].

Audrey Aknin and al., 2005. Quel développement durable pour les pays en voie de développement ? *Les cahiers du GEMDEV* No.30 [online] Available at:  
<[http://www.gemdev.org/publications/cahiers/cahiers30\\_res.htm](http://www.gemdev.org/publications/cahiers/cahiers30_res.htm)> [Accessed 24 July 2011].

Conseil National de l'Ordre des Architectes de France (CNOA), 2008. *Architecture responsable et développement durable* [DVD]

Francis Yedan, 2008. Parc automobile ivoirien : une véritable mutation. *CenterBlog*, [blog] 31 December, Available at: <<http://francisyedan.centerblog.net/6409632-PARC-AUTOMOBILE-IVOIRIEN-UNE-VERITABLE-MUTATION>> [Accessed 01 August 2011]

ISTED, 2007. *Emerging Cities. Keys to understanding and acting*. Paris. ISTE.

Jean-Claude Adrian, 2009. *Orienter l'urbanisation en Afrique vers le développement et la réduction de la pauvreté*. Paris. ISTE.

Joseph Ki-Zerbo, 2003. *À quand l'Afrique ?*, Paris. Editions de l'Aube.

Ministère de l'Enseignement Supérieur et de la Recherche Scientifique de Côte d'Ivoire, 2009. *Les résidences universitaires privées : une solution pour améliorer le cadre de vie et de travail des étudiants*. [online] Available at:  
<[http://mesrsci.com/index.php?option=com\\_content&view=article&id=50:les-residences-universitaires-privées-une-solution-pour-améliorer-le-cadre-de-vie-et-de-travail-des-étudiants&catid=17:actualités](http://mesrsci.com/index.php?option=com_content&view=article&id=50:les-residences-universitaires-privées-une-solution-pour-améliorer-le-cadre-de-vie-et-de-travail-des-étudiants&catid=17:actualités)> [Accessed 23 July 2011].

Richard Bergson, 2002. L'automobile est le pire ennemi du développement durable. *LeDevoir.com* [online] Available at : <<http://www.ledevoir.com/environnement/actualites-sur-l-environnement/8073/l-automobile-est-le-pire-ennemi-du-developpement-durable>> [Accessed 01 August 2011]

Sylvie Brunel, 2008. *À qui profite le développement durable ?*, Paris. Larousse, À dire vrai.

Hassy J. K. N'Guessan, 2010. L'invasion des véhicules d'occasion en transit par le port d'Abidjan : le dynamisme ambivalent d'une activité en plein essor , *Les Cahiers d'Outre-Mer* No 251 [online] Available at :  
<<http://com.revues.org/index6044.html>. Consulté le 24 juillet 2011> [Accessed 24 July 2011].

## End notes

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<sup>i</sup> The project cost 350 000 000 CFA francs or about € 535 000.

<sup>ii</sup> There are 12 000 beds in dormitories in Côte d'Ivoire for 150 000 students (Ministère de l'Enseignement Supérieur et de la Recherche Scientifique de Côte d'Ivoire, 2009).

<sup>iii</sup> First Ivorian President Houphouët-Boigny has wanted these three dominant urban functions in Yamoussoukro.

<sup>iv</sup> The other main points are public transport, the protection of sensitive sites and household waste management.

<sup>v</sup> The average age of vehicles in Côte d'Ivoire is 20 years.

<sup>vi</sup> In Côte d'Ivoire, there are 25 000 car registrations each year.

<sup>vii</sup> SOTRA stands for Société Abidjanaise des Transports. It is Abidjan Transport Company.