

The Rise of Eko Atlantic:
A Debate of Just Sustainability in a State of Disparity

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A city is rising from the rapids of the ocean off the eroded coast of Lagos. This city is Eko Atlantic, a supposedly self-sustaining and luxurious artificial island that will bring new economic opportunities to Nigeria and West Africa. For the first time, Africa will have a new, modern city that will produce minimal carbon emissions and accommodate innovative buildings that are on the forefront of sustainability and urban design. Developers of Eko Atlantic predict that the new city will be an investment to improve the disparity of many citizens in Lagos with new resources to make it one of the most successful locations in the world. At first glance the conception of this project can excite anyone of the possibilities developing from this new venture but, between what the project claims it will accomplish and the reality of the state of affairs in Lagos, there is more to consider than the polished veneer of a new “sustainably and economically beneficial” city.

Since Eko Atlantic is still in its phase of construction (projected to be complete in 2015), this paper will evaluate to what extent its development and future investment will compare to the criteria set forth by the notions of Just Sustainability.¹ The evaluation will consist in investigating to what degree the environmental impacts of the new city’s urban design and construction align to the goals of sustainable development as well as if the project’s potential to bring economic betterment to the current state of people living in Lagos, Nigeria, will comply to the expectations of environmental justice.

In order to speculate these points we will first clarify the definition of Just Sustainability and the criteria which this paper will use to judge the efficiency of the Eko Atlantic City project.

¹ Further clarification of Just Sustainability provided on the following page.

Haughton defines Just Sustainability as “acknowledging the interdependency of social justice, economic well-being and environmental stewardship. The social dimension is critical since the unjust society is unlikely to be sustainable in environmental or economic terms in the long run.”² The term combines the criteria of sustainable development and environmental justice and will be used to evaluate the success of Eko Atlantic’s claim of “sustainability.”

A century worth of ocean surges from the Atlantic are continually eroding many square feet of land from the coastline of Lagos. To add to the severity of this situation, land space is becoming increasingly scarce as Lagos continues to shrink while its population density continues to grow alongside its vast disparity. In an effort to find a middle ground between these two problems of a shrinking state and a growing population the Chagoury Group, a West African conglomerate of construction and development companies, conceptualized plans to create an artificial island off the coast of Lagos. The project was Eko Atlantic, an environmental investment with a focus on sustainability. The International Union for Conservation of Nature (IUCN) interprets sustainable development with a focus to “ensure a better quality of life for all and that this should be done in a just and equitable manner, to improve the quality of life while living within the carrying capacity of ecosystems.”³ To determine the sustainability of Eko Atlantic, we will analyze the efficiency of its urban design and the impact of its construction process.

Although the project does not provide definite explanations of how the districts of the new city will produce minimal amounts of carbon emission or how green design will be integrated in any manner, its city plan will accommodate an efficient electricity generation plant, a central service system, a dedicated sewage treatment plant, and state-of-the-art communications on the artificial island.⁴ In addition to these utilities, Eko Atlantic tackles two environmental obstacles of erosion and diminishing land by reversing coastal erosion and relieving some of the pressure on land and resources in Lagos.⁵ In order to combat coastal erosion and prevent the Atlantic Ocean from claiming more land the project implements a

² Agyeman, Bullard, and Evans, "Exploring the Nexus: Bringing," 84.

³ *Ibid.*, 78-80.

⁴ "Clean City," Eko Atlantic.

⁵ *Ibid.*

concrete barrier surrounding the proposed site known as The Great Wall of Lagos. Danish Hydraulic Institute engineered the wall and tested it to withstand storms for the next hundred years. The problems of diminishing land, however, are of a much grander scale. The Chagoury Group proposed the project to reclaim land from the ocean so as to build Nigeria's financial center and modern infrastructure by dredging. This means that by the project's completion, 90 million meters cubed of sand will be dredged off shore from the coast of Lagos to develop ten square kilometers of land.⁶ The affects of this decision now begin to shift the tone of the project from sustainable to environmentally detrimental.

While David Frame, managing director of South Energyx Nigeria Ltd (a private partner), claims the new city to be "sustainable, clean and energy efficient with minimal carbon emissions," it appears that the tactics of construction on this new island city are less sustainable.⁷ Creating the artificial island requires capital dredging of sand for land reclamation. The act of dredging removes seabed on the ocean floor to use as material with which to build an artificial island. Disrupting the seabed destroys natural habitats found in the seabed and suspends sediments of sand that pollute the water of nearby habitats. As a result, sufficient sunlight cannot reach marine life located further in the depths of the water and suspended sediment clogs the gills of fish. When these creatures die from insufficient sunlight or suffocation, their "decomposed organic materials can increase hydrogen sulfide levels in the water, making it toxic. It is often impossible for an ecosystem to revive after such an event."⁸ In the case of Eko Atlantic, dredging will possibly effect its surrounding physical environment, ecology, and the economy, politics, and equity of Lagos. Although the artificial island will boost industry, the creation of new resources, and tourism, the marine life and geological systems will be forsaken for economic benefit.

Royal Haskoning, supervisors of the marine engineering, provided an environmental and social impact assessment of the Eko Atlantic shoreline during construction (published 2012) and determined that the project had minimal to no degenerative effects on coastal, land, human,

⁶ Royal Haskoning, *Environmental and Social Impact*.

⁷ Iroegbu-Chikezie, "A City behind Walls."

⁸ "Environmental Impacts," *The Impacts of the Palm Islands, United Arab Emirates*.

water, or physical environments.⁹ The report may suggest that the Eko Atlantic dredging is not as environmentally threatening as previously perceived but it should be noted that the impact assessment is only a short-term evaluation. Eko Atlantic is still under construction and therefore its true, long-term environmental consequences are yet to be conceived, much less included in an initial report provided as a mitigation requirement to propel the project. To observe the potential outcomes of these long-term environmental consequences and whether they lack compliance to the standard of sustainable development, we will study existing artificial islands located east of Lagos in Dubai, United Arab Emirates.

On numerous occasions the Eko-Atlantic project has been equated to the global investment projects happening off the coast of Dubai known as Palm Islands.¹⁰ Reports of environmental conditions during development and post completion recorded the construction activity as “damaging the marine habitat, burying coral reefs, oyster beds and subterranean fields of sea grass, threatening local marine species as well as other species dependent on them for food.”¹¹ The loss of one species affects the biodiversity of all species in the area because ecosystems exist in an ecological balance. Loss of marine life and disrupted ecosystems are struggles that the Palm Islands currently face and struggles that Eko Atlantic may on day have to also deal with. Even though the results of one project may not necessarily predict the outcomes of another, it cannot be ignored that an ecological change will take place in Eko Atlantic. The urban design of the new city demonstrates efficiency and careful planning to improve the living conditions of its future inhabitants while addressing environmental obstacles; but the mere creation of the artificial island does more harm to its ecosystem than good. For this reason the construction of Eko Atlantic does not align with the focus of sustainable development.

While we may not yet be able to observe the long-term environmental impacts of Eko Atlantic we can readily observe the environmental injustice that is taking place as a result of the project. Severe income inequality existed in Lagos prior to the development of the new city and continues to persist as the artificial island comes closer to completion. In a city with such great disparity, political desire to create a financial center in Lagos ran into the problem of limited

⁹ Royal Haskoning, *Environmental and Social Impact*.

¹⁰ Palm Islands include the following artificial islands: Palm Jumeirah and Palm Jebel Ali.

¹¹ Butler, "The Price of 'The,'" Mongabay.com.

urban space. In order to establish Nigeria as the financial hub of West Africa, private interests decided to move the center onto an artificial island in the periphery of Lagos and sugarcoat the move as being “sustainable.” Here we analyze the concept of sustainability provided by the private interest funding Eko Atlantic and the criteria of Just Sustainability provided by the expectations of environmental justice.

Apart from attempting to protect the coast of Lagos, what is this endeavor truly promoting? One can argue that the project is not working in the best interest of the urban poor. In Lagos, so close to the opulence of Eko Atlantic, “two thirds of the city lives in slums with limited access to clean drinking water, food, roads, electricity, or housing. It is crucial to ask why slums continue to persist on such a massive scale in the midst of rapid development.”¹² Support for Eko Atlantic comes from the Nigerian government and private investors. The project lacks public involvement and inevitably lacks transparency for its motives. The government did not ask residents of Lagos for their opinions or concerns regarding the development of the new city or what they as citizens would like to see change in their state in order to improve their daily living. Change needs to occur within the city—building a city outside the critical zone of the urban poor will provide little to not effect on the general well being of the citizens. It is evident that the motivation cannot be external but rather it must be internal.¹³ Harvard International Review mentions frequently that while Eko Atlantic has the potential to change the status of the poor, it has an even greater risk of further marginalizing them and making the disparity gap even larger than it already is.

Sustainability goes beyond the concept of green design. People are an important factor in establishing sustainable living and their living conditions should be a priority when redeveloping cities with new industry. Excluding the public from Nigeria’s conversation of a new, modern and sustainable future weighs heavily towards environmental injustice. This environmental injustice defines Lagos’ urban poor as people “forced, through their lack of access to decision-making and policy-making processes, to live with a disproportionate share of environmental ‘bads’—and

¹² Phillips, "African Urbanization: Slum Growth," 29.

¹³ *Ibid.*, 31.

thus to suffer the related public health problems and quality-of-life burdens.”¹⁴ The current state of citizens living in Lagos will not change because a luxury city will be built on its coast; it will change from within the city with government action that takes into account the lives of the people it has a responsibility to help.

Eko Atlantic is a global scale project interested in global investments. The project will continue forth regardless if the poor residents of Lagos experience an economic boost or not. The mediators of Eko Atlantic assume that the project will bring some sort of benefit to the city without specifying in what shape or form that benefit will come. The private and the public sector must cooperate with each other for integral success to take place.¹⁵ As Phillips highlights in the Harvard International Review, Eko Atlantic may not produce the kind of economic benefit that Lagos so desperately needs for its slums. He further emphasizes that “housing, education, healthcare, infrastructure, and basic services must all be equally addressed to build a sustainable city” but none of that is being immediately addressed in the state of Lagos.¹⁶ Instead, this “sustainable city” is being built outside of Lagos apart from where the slums and the poor reside.

How is Eko-Atlantic supposed to help the state if the poor will be barred from entering if they do not meet a certain standard of elite? Urban poor activists have “questioned whether it will stand as another symbol of the gap between a corrupt elite and the masses of poor in Nigeria.”¹⁷ Realistically this island will prevent access to the people of Lagos. If the new city is expected to handle 150,000 commuters in addition to a mere 250,000 residents, who will those commuters be? Lagos’ urban space is in desperate need of renewal but it appears that the money which could be used to improve the city is actually much more attractive to private investors when used to create greenfield development. These “accusations of elitism are also inevitable, as the promised safe environment could be provided by controlling access into and out of the area to prevent entry by those considered less desirable.”¹⁸ How can the Nigerian government really expect their city’s poor to benefit from a project that they have almost no chance of accessing?

¹⁴ Agyeman, Bullard, and Evans, "Exploring the Nexus: Bringing," 81-82.

¹⁵ Phillips, "African Urbanization: Slum Growth," 30.

¹⁶ *Ibid.*, 31.

¹⁷ "NIGERIA: Africa's First Smart," 19884A.

¹⁸ "Rise of Nigerian 'Manhattan'?", 41.

These questions no longer ask what methods of sustainable living Eko Atlantic will provide but rather for whom environmental justice should be served.

Hence, Eko Atlantic exhibits some elements of sustainable development but fails to comply with the standards of environmental justice. The urban design of the artificial island enables the project to improve living conditions of its future inhabitants while addressing the issue of coastal erosion. However, the obstacle of diminishing land calls attention to the fact that Eko Atlantic's method of constructing the artificial island does not proceed within the carrying capacity of the ecosystem. Moreover, while Eko Atlantic may one day "serve as a showcase, some residents and activists say that its steady electricity, clean water and private security will offer something still unavailable to the vast majority of Nigerians."¹⁹ Lack of transparency and public involvement render the project to instigate environmental injustice and require governmental change to implement Just Sustainability. As Eko Atlantic approaches its completion, we shall skeptically await the results of its creation.

¹⁹ "NIGERIA: Africa's First Smart," 19884B.

References Cited

Agyeman, Julian, Robert D. Bullard, and Bob Evans. "Exploring the Nexus: Bringing Together Sustainability, Environmental Justice and Equity." *Space and Polity* 6, no. 1 (2002): 77-90.

This article provides a comprehensive notion of what the possibility of joint sustainability and environmental justice can accomplish in the realms of environment, economics, and equity. The core of their equitable justice argument complements the basis of the paper and is a clear springboard to analyze the effectiveness of the Eko Atlantic project.

Butler, Tina. "The Price of 'The World': Dubai's Artificial Future." Mongabay.com. Last modified August 23, 2005. Accessed March 11, 2014. http://news.mongabay.com/2005/0823-tina_butler_dubai.html#d6qmlJKFq3Bcq6BC.99.

The author provides a rebuttal response to her article from an environmental scientist at Nakheel which provides a great perspective between the reality of those working on the project and those who are reacting to the affects of the projects. Either way the article points out that the Palm Islands are guilty of altering the marine ecology that they originally claimed would not be greatly disturbed.

"Clean City." Eko Atlantic. Last modified 2012. Accessed March 17, 2014. <http://www.ekoatlantic.com/about-us/clean-city/>.

"Effects, Ecology and Economy." Chapter 3 to *Environmental Aspects of Dredging*, edited by R. N. Bray, 33-81. Leiden, The Netherlands: Taylor & Francis/Balkema, 2008.

Provides an understanding of the positive and negative environmental effects of dredging on the ecology as well as the economy.

"Environmental Impacts." The Impacts of the Palm Islands, United Arab Emirates. Last modified 2009. Accessed March 11, 2014. <https://sites.google.com/site/palmislandsimpact/environmental-impacts>.

Although this is not a scholarly site it provides a comprehensive overview of the creation of the Palm Islands as well as its impacts down the line. The sources are commutatively cited and listed which makes further reading and cross-reference checking a genuine resource.

Overall, this site was a decent springboard into further research.

Iroegbu-Chikezie, Okwy. "A City behind Walls." *The Nation* (Nigeria), May 29, 2012.

"NIGERIA: Africa's First Smart City." *Africa Research Bulletin: Economic, Financial and Technical Series* 50, no. 2 (April 4, 2013): 19883A-19884B.

The Africa Research Bulletin is one of the rare few publications that actually address the contradictions of the Eko-Atlantic project and the potential environmental injustice that it will bring. Namely it points out the concerns of activists in regard to the enlarging of the income inequality gap as well as the probability of jobs being outsourced rather than given to the citizens of Lagos. It is a refreshing article that addresses the issues that the usual articles of propaganda fail to include.

Okeowo, Alexis. "A Safer Waterfront in Lagos, If You Can Afford It." *The New Yorker*, August 21, 2013. Accessed March 24, 2014.

<http://www.newyorker.com/online/blogs/currency/2013/08/in-nigeria-a-luxury-island-and-a-floating-slum.html>.

This article is another criticism of Eko Atlantic. While it is not a scholarly article, it pin points the gaps in the logic of creating Eko Atlantic, such as the governments disregard of the urban poor and possible alternative opportunities that are taking place in Mokoko. Either way, it is another means of calling attention from the glamor of the Eko Atlantic project to the current human state of affairs in Lagos.

Royal Haskoning, comp. *Environmental and Social Impact Assessment of the Eko Atlantic Shoreline Protection and Reclamation Project - A Summary*. N.p.: n.p., 2012.

Phillips, Alexandra. "African Urbanization: Slum Growth and the Rise of the Fringe City." *Harvard International Review* 35, no. 3 (Winter 2014): 29-31.

Alexandra Phillips subtly disarms the prospective success of Eko-Atlantic as one that may bring about environmental injustice. Her observations and critics are well placed and go beyond the default assumption that the project will only bring good outcomes. She centers her argument on alleviating the problem of slums in Africa and supports her position with examples of Morocco and Rwanda governmental action in comparison to Nigeria's choices.

"Rise of Nigerian 'Manhattan'?" Projects. *African Business*, no. 396 (April 1, 2013): 41.

Salahuddin, Bayyinah. "The Marine Environmental Impacts of Artificial Island Construction Dubai, UAE." Master's thesis, Nicholas School of the Environment and Earth Sciences of Duke University, 2006.

Salahuddin's masters' thesis encapsulated the general difficulty of finding a source whose data was trustworthy and reliable. It also suggested a few good points that really puts into question the reliability of any information written about how environmentally conscious a project is until the aftermath of the environmental impacts it creates. Generally it was quite informative and detailed about the data it represented.