Introduction: Eko o ni baje

Eko o ni baje: Eko is the indigenous Yoruba name for the city of Lagos, and this is the affectionate slogan of its people, which can be loosely translated to mean “Lagos shall never decline.” Lagosians love their city, troubled as it may be. Lagos, Nigeria, is a twenty-first-century African megalopolis inhabited by approximately 20 million individuals, with a population density of 3,926 persons per square kilometer. With Nigeria named one of the “MINT” nations (Mexico, Indonesia, Nigeria, and Turkey), the country is predicted to be one of the future economic powerhouses, with an anticipated rise to become the world’s thirteenth largest economy by 2050. Nigeria’s reality, however, is a juxtaposition of extremes, with the city of Lagos a living hyperbole of this inequity (Figure 1). While a proportion of the city lives in the lap of luxury with multimillion-dollar properties and yacht clubs, a majority of the population lives far below the poverty line with incomes of less than US$1.25 per day. Lagos is located on the Atlantic coast in the west of the country and has a total area of 3,577.28 square kilometers, approximately 22% of which is wetland. This has made the city particularly vulnerable to the adverse effects of climate change, and it has witnessed a series of environmental crises in recent years in the form of massive flooding. This intense combination of socio-economic issues (poverty and high population density) in the context of extremely polarized social conditions (the few “haves” and the many “have-nots”) creates a backdrop of increasingly acute climatic risks and shocks, painting a picture of a city on the brink. Those closest to this precipice are the poor masses living in the slum communities of Lagos state.

One such community is the Makoko community, an ancestral water-top community of fishermen located on the shores of the Lagos Lagoon (Figures 2–4).
the years, large-scale rural-urban migration and unregulated development have led to the devolution of the onetime coastal fishing village into an urban slum nestled in the bustling city. With a population of approximately 50,000, it is one of the largest low-income communities in Lagos state. Historically the residents of the community have subsisted on marine-based industry such as fishing, fish processing, and boat making; however, today a large number of its residents are economic migrants from other parts of the country and the neighboring Republic of Benin (Figure 5). In the summer of 2012, the Lagos State Government, in a bid to implement its urban renewal plan, sought to roll out large-scale demolitions across the Makoko community in order to prepare the site for new development. No accommodation was made for the resettlement or compensation of community members, which led to the backlash of a public outcry and eventually a court injunction to cease the demolitions. When the State Ministry of Physical Planning...
Figure 4. Makoko life: The Urban-Scape of the Makoko Community.

Figure 5. Makoko demographic: Makoko is a multi-ethnic and multi-cultural community with six main sub-communities, four main ethnic groups, three practiced religions and over five spoken languages.
The regeneration plan was developed around six major themes: infrastructure, land tenure, housing, local economic development and tourism, funding, and neighborhood management.

Integrated Solutions for Multifaceted Challenges

The needs analysis revealed a number of critical areas of concern, which ranged from environmental issues such as sanitation and infrastructure to socioeconomic challenges such as job creation and health care (Figure 6). With few, if any, facilities provided for the disposal of organic and solid waste, waterways are clogged with litter, and raw sewage is currently deposited directly into the open water, further exacerbating health-related issues.5 Energy provision in Nigeria remains extremely inadequate, with the national grid generating approximately 4,500 megawatts of power annually, while the city of Lagos alone has an estimated demand of 10,000 megawatts.6 In communities such as Makoko, which are essentially off-grid, a majority of the electricity supply is obtained from dangerous unauthorized cable connections and low-capacity generators. Existing health-care facilities are grossly overstretched, with each center catering to approximately 5,000 residents, and unemployment remains above the national average. An additional dimension to these issues is the disproportionate impact they have on women and children within the community. As part of the plan, the team produced a portfolio of project ideas as stand-alone urban elements to be implemented as pilot projects. Through a combination of innovative new solutions and reframed indigenous solutions, the proposed interventions seek to address the multiple challenges facing the community simultaneously. One such pilot project is the “Neighborhood Hotspot,” developed with the intention of tackling some of the most acute risk factors facing Makoko such as waste, energy, employment, and health care, and turning one of these challenges in particular (waste) into a source of opportunity.

Table 1. Risk rating

| ISSUE                              | Risk Rating |
|------------------------------------|-------------|
| Tenure and Housing                 | Red         |
| Water and Sanitation               | Red         |
| Electricity                        | Yellow      |
| Healthcare                         | Amber       |
| Environmental Risk                 | Yellow      |
| Security                           | Green       |
| Roads and Circulation              | Red         |
| Employment                         | Green       |
| Community Resources                | Green       |
| Community Empowerment              | Red         |

Figure 6. Situational analysis: Risk factors were rated as red, amber, or green. These results informed the six core themes of the Sustainable Urban Regeneration Plan. Infrastructure, which addressed community facilities such as schools, health care, sanitation and waste, access to land and water, and energy provision; land tenure, which posited a framework under which the ancestral and informal rights of residents could be considered; housing, which examined the design and access to affordable quality housing for residents both on land and on water; local economic development and tourism, which explored strategies for drawing inward investment into the community from the private sector by developing local industry; funding, which considered the means by which public sector funds could be made available and leveraged within the community; and neighborhood management, which outlined frameworks for sustainable local governance and made recommendations on how these structures could engage with existing government offices.

Figure 7. The neighborhood hotspot (visualization): They will be able to provide electricity from the biogas production for the entire community on water as well as badly needed human and organic waste management. Each hotspot contains four 20-meter biogas digester bags (stored on boats), and creates 28 jobs—overall, the system generates 644 new jobs.
Figure 8. Hotspot location map: In total 23 neighborhood hotspots are intended for implementation in the masterplan, with a pilot location indicated.

Figure 9. Hotspot ground floor.
Figure 10. Linkages with other opportunities: With sustainable energy provision as a central feature, the neighborhood hotspot has a ripple effect, generating other local opportunities.

Figure 11. Opportunity card: Urban gardening at the neighborhood hotspot.
Figure 12. Construction: Straightforward, simple, and modular (three types of triangles that can freely and according to needs be combined).

Figure 13. Section of the neighborhood hotspot: Flood resilient design with biogas flotation platforms responsive to rising and falling with water levels.

Figure 14. Existing buildings in Makoko: Indigenous construction techniques of a people adapted to living on water.
The Neighborhood Hotspot
In recent years, neighborhood management has emerged as an effective model for the reversal of urban decline, particularly in areas such as Makoko where the issues are numerous, complex, and intertwined. The primary objective of neighborhood management is to create effective service delivery within a particular geographic boundary that is tailored to address the unique issues faced by its local community, thereby improving the quality of life of its people. The approach aims to deliver renewal, compatible with existing community structures, at a local level by bringing together integrated service provision, appropriate and therefore flexible infrastructure, community involvement, and leadership. Furthermore, by viewing community regeneration holistically, a neighborhood management model of renewal affords development professionals and local citizens a vantage point from which to see the opportunities among the challenges. The neighborhood hotspot is a structural embodiment of the principles of neighborhood management. Waste management formed the seed of the neighborhood hotspot concept, as an issue that presents environmental as well as social challenges, but also potential economic benefits. Serving primarily as a biogas plant generating energy from organic waste, the structure doubles as a community center, which acts as a nucleus for local services (Figures 7 and 8). In addition to a biogas plant and kiosk, each neighborhood hotspot has the potential to incorporate a range of different activities, providing space for urban gardening, workshop, and cooking facilities, in addition to doctor’s offices and reading rooms. The structure is therefore simultaneously a business incubator, a place for social exchange, a knowledge center for renewable energy production, waste management, urban gardening, and water harvesting—a truly public and social infrastructure that empowers the community (Figures 9–11). The construction of the structure is simple and based on sustainable, local, indigenous methods of building with wood on stilts. This not only creates the opportunity to showcase climate resilient construction techniques, but the combination of traditional construction methods and local materials engages local artisans in the process, thereby generating jobs and building on local capability (Figures 12–14). This ability of the neighborhood hotspot concept to embed waste-to-value philosophy, within a flexible, robust, easy-to-maintain, affordable, and low-technology infrastructure, which additionally creates jobs and delivers much-needed services, has earned it a place at both the 2014 International Architecture Biennale Rotterdam as well as the 2014 Venice Biennale.

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Fabienne Hoelzel founded FABULOUS URBAN, an urban design and planning practice for emerging and developing regions based in Geneva, Switzerland in 2013, after working several years for one of Latin America’s largest slum-upgrading programs as the Urban Design and Planning Program Coordinator at the Social Housing and Urban Development Authority of São Paulo, Brazil. Fabienne has also part-time research and teaching position at the Institute of Urban Design at the ETH Zurich.

Lookman Oshodi is a registered town planner with vast experience in land, housing, environment and urban development matters. He has worked extensively in private housing, government supported housing, homelessness prevention, community development, strategic urban and regional development. He is currently Project Manager–Social Housing with Urban Spaces Innovation, where he is collaborating with the urban poor and other stakeholders exploring social housing as a viable strategy of expanding access to decent and affordable housing in Nigeria.

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