Makoko-Iwaya Waterfront
Economic Opportunities
Makoko on Water – it’s a fascinating boat ride through an autarkic and vibrant, still peaceful community on water within an ever busy, noisy and hectic Megacity. Although the lack of government support and infrastructure result in poor living conditions, the communal life offers exemplary potentials to adapt to rapid urbanisation and climate change in coastal cities. The “Makoko/Iwaya Waterfront Regeneration Plan” - a comprehensive people-centered development framework – was submitted to the Ministry of Physical Planning in October 2013. One of the major objectives is ensuring participation and community ownership in the formulation, implementation and sustainability of the plan. It looks at all facets of life and development in Makoko-Iwaya Waterfront including land use, housing, tourism opportunities, tenure security, funding strategies and an institutional framework for implementation and management.

The idea of the Regeneration Plan centers on the assumption that upgrading of infrastructure and the transformation of the communities can only succeed if its residents are empowered to contribute with their own funds. This brochure gives you an idea of the identified potential for economic empowerment as an integral part of the Regeneration Plan. Supported by a working group with members of the communities, professionals, academicians and human rights organizations, Fabulous Urban developed the concept of “Decentralized Neighborhood Hotspots” powered by biogas facilities which offer a wide range of micro-entrepreneurial opportunities for a resource-based economy. The income will be sufficient to pay each worker an appropriate salary and still save money in a fund for the general maintenance of the facility so that it can be self-sustainable. “Opportunity Cards” describe and visualize these job potentials with a cost/benefit analysis for necessary financial investments which, if implemented within the framework of the Regeneration Plan through concerted efforts from society, government and the communities, could turn the Makoko/Iwaya Waterfront communities into a worldwide showcase of a sustainable and flood-resilient lifestyle.

Credits

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Introduction
Green spaces
Wetlands

We suggest an entirely new waterfront experience with wetlands, trees and plants, fish ponds and community gardens.

The retrofitted waterfront with wetlands can become a new green leisure and recreational space for entire Lagos.
The conflicts we find in the Makoko area may reinforce each other on different levels:

- **Macro:** Nigeria, Africa, worldwide
- **Meso:** Lagos
- **Micro:** Makoko

**Direction of influence**
- Wide influence
- Modest influence
- Thin influence

**Conflicts in the Makoko area**

- Lack of jobs and steady income of households
- Polluted environment
- Climate change
- Rise of sea water level
- Rise of local lagoon water level
- Land reclamation projects
- Local flaring projects
- Lack of infrastructure
- Inadequate housing quality
- Uncomfortable neighborhood
- Lack of green and leisure spaces
The suggested decentralized infrastructure will not only create a better neighborhood but create new job opportunities. The additional income allows people to upgrade their houses themselves. The two measures together will create in the mid and long term a better neighborhood for everybody.
Challenges and approaches

**Micro: Makoko**
- New job opportunities
- Better quality of the houses
- Additional income for the households
- More effective fish processing through suggested fish ponds
- Cleaner environment

**Meso: Lagos State**
- Improved health care: suggested doctor’s room at each Neighborhood Hotspot
- Lack of nearby recreational spaces for everybody: suggested Makoko waterfront

**Macro: Nigeria**
- 70% of the population lives in slums. Makoko can become best practice for other poor areas.

**Direction of influence**
- Local approach is possible
- Local approach is partly possible
- Showcase role model

**Expected global climate change**
- 70%

**New infrastructures**
- Neighborhood Hotspots
- Solid waste centers
- New public spaces

**Suggested fish ponds**

**Tourism**

**Increasing water level of the Lagos Lagoon**

**Diagram: © FABULOUS URBAN**
We believe that Makoko could become a worldwide showcase for a sustainable and flood-resilient lifestyle and way of construction. We further suggest completing it with flexible, low-cost, low-tech, and flood-resilient infrastructure, which in addition will create jobs and initiate a new resource based micro-economy, providing waste management and renewable energy.

The suggested infrastructure will be:

- highly flexible according to the needs
- low-cost and ready to implement immediately
- resistant against floods and increasing water level: no vulnerable wired and pipe system
- provide new jobs and income and initiate a new local network economy
- provide electricity to the entire community
- support social activities and provide new basic medical services
- environment-friendly due to decentralized energy plants and closed-loop cycles

Upgrading strategy

Masterplan of the Makoko / Iwaya Waterfront area with the highlighted suggested public facilities: Neighborhood Hotspots with the renewable energy production, floating markets, recycling stations, schools, and walk-in clinic.

We suggest widening strategically some of the canals for better accessibility.
Flexible decentralized infrastructure can be provided by a network of shared facilities called “Neighborhood Hotspots”. These small community centers in different parts of Makoko contain decentralized biogas plants and serve as waste business incubator.

Neighborhood Hotspot: Area of influence served households
Makoko houses on stilts
Neighborhood Hotspot
Key goals

Biogas cooking
The biogas can be used for community cooking with a small restaurant.

Rain water harvesting system
Rain water is collected, treated, and stored.

Sanitary facilities
Against a small fee toilets and showers are available; the waste is used for the biogas production.

Professional health care
A doctor’s room provides basic medical service and trains community members (nurses).

Empowering girls and women
Basic education on health care and contraception as well as a small library and a few shared computers in a multi-purpose room are provided.

Waste upcycling
Handmade products can be created from collected plastic and paper waste.

Urban gardening
Fertilizer, the byproduct of the biogas plant will be used to grow tomatoes, peppers, and salad.
The operation of the Neighborhood Hotspots is provided by a biogas cooperative. The cooperative pays each worker the same monthly salary of 18,000 Naira (minimum wage). The rest will be saved in a fund for reinvestment and maintenance.

**Return of investment**

- **36 months**
  - Selling water: 80,000 N
  - Cooking fee: 45,000 N
  - Selling toilet bags: 264,000 N
  - Charging batteries: 510,000 N

- **Biogas cooperative**: 16,703,100 N

- **Biogas cooking entrepreneur**: 18,000 N
- **Biogas entrepreneur**: 18,000 N
- **Toilet entrepreneur**: 18,000 N
- **Waste picker**: 18,000 N

**Investment costs of entire hotspot**:

- **Earnings**:
  - Selling water
  - Cooking fee
  - Selling toilet bags
  - Charging batteries

- **Savings of the cooperative**:
  - Earnings

- **Income of the workers**:
  - Biogas cooperative
  - Biogas cooking entrepreneur
  - Biogas entrepreneur
  - Toilet entrepreneur
  - Waste picker
Neighborhood Hotspot
Suggested closed-loop cycles

value added chain within the Makoko community

number of created jobs
product flow
cash flow
products
processing
localist

diagram: © FABULOUS URBAN
Today, 40% of the Makoko community lives below poverty line (on less than 1.25 US$/ day) and almost no-one is able to secure their livelihoods.*

*Data based on field research Makoko April 2013 and Rosemary Orsowo Nkula, Determinants of Urban Housing for the Poor, 2009)
The opportunity cards explain in detail all the new job opportunities: economically, socially, spatially. They inform about minimal investment, minimal spatial requirements, expected turnover, target group, new jobs, and profit.
Opportunity cards

Social business opportunities
impact oriented

Organic waste economy *new*

Solid waste economy *new*

Pro-profit business opportunities
market oriented

Leisure and tourism *new*

Urban manufacturing existing, improved

Fishing and fish processing existing, improved

Market and trading existing, improved

Solid waste picking

Social business
Tourism vision
Strategy map for Lagos State

Makoko as part of a holistic Lagos-wide tourism strategy

- Strategy I: Living on water
- Strategy II: Metropolitan waterfront
- Strategy III: Nature-water experience

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Makoko

Strategy I: Living on water
the ancient wisdom of vernacular architecture

Strategy II: Metropolitan waterfront
International architecture blends with African traditions

Strategy III: Nature-water experience
Discovering the lagoon scenery of Lagos

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