# Mboka Bilanga

Model of management and developement of the rural enclaves of Kinshasa, R.D. of Congo



The peripherical valleys
of Kinshasa hosted the
first waves of the rural
exodus giving birth to a
suggestive hybrid
landscape between
"urban" and "rural"



Here an unregulated settlement process over a fragile land morphology generated serious disconnections, hydrogeological risks and weak management of the agricultural potential



Country / City Italy, Ferrara
University / School University of Ferrara
Academic year 2015/2016

Title of the project Mboka Bilanga. Model of management and developement of the rural enclaves of Kinshasa, Democratic Republic of Congo

Authors Giuseppe Macaluso, Pietro Manaresi





# PERFORMATIVE NATURE

**Barcelona International Landscape Architecture Biennial** 

September 2018 Barcelona SCHOOL PRIZE

#### X International Landscape Architecture Biennial

Máster d'Arquitectura del Paisatge -DUOT - UPC
ETSAB- Escola Tècnica Superior
d'Arquitectura de Barcelona
Avenida Diagonal, 649 piso 5
08028 Barcelona-Spain

### **TECHNICAL DOSSIER**

Title of the project
Authors
Giuseppe Macaluso, Pietro Manaresi
Title of the course
Academic year
Teaching Staff
Department/Section/Program of belonging
Architecture department - Sealine research centre

Mboka Bilanga. Model of management and developement of the rural enclaves of Kinshasa, R.D of Congo
Giuseppe Macaluso, Pietro Manaresi
Landscape Architecture and Infrastructures

2015/2016

Luca Emanueli, Gianni Lobosco, Marco Stefani, Serena Conti
Department/Section/Program of belonging
Architecture department - Sealine research centre

University/School
University of Ferrara

#### Written statement, short description of the project in English, no more than 250 words

Mboka Bilanga is a project for a southern megalopolis facing the lack of infrastructure and the outcomes of an ungoverned urban sprawl. The topic of the research is a new design approach for the urban-scape of Kinshasa - RDCongo - taking in account the potential and creativity of informal solutions and local tactics. The aim is to convert the kinois valleys, nowadays considered as a waste product of the megalopolis, into a repertoire of sustainable urban strategies based on a wise management of the local environmental resources such as agriculture. These valleys hosted the first waves of the rural exodus, giving birth to a suggestive hybrid landscape between "urban" and "rural". Literally translated from Lingala, the vehicular language of Kinshasa, Mboka Bilanga means city-field, a term that points out the presence of a strongly rural area nested in a recognizable urban context. Here an unregulated settlement process over a fragile land morphology generated serious disconnections, hydrogeological risks and weak management of the agricultural potential. The strategy is based on the replicable nature of local based and small-scale survival tactics that have to be intertwined to gain an urban relevance. The Selembao valley is used as a model to present the three main strategic actions: to defend the valley from hydrogeological risks, to improve agriculture, to link the city fragments. The valley is divided in smaller territorial unities to simplify the managing of a self-empowering cycle based on the agricultural profits and to adapt the strategy to the singular weakness and potential of each unit.

Consolidate, Farming and Connect are three actions striving for create synergy among singular resilient activities to form an urban strategy.

For further information

Máster d'Arquitectura del Paisatge -DUOT - UPC

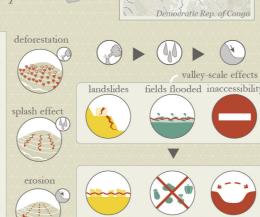
T: + 34 93 401 64 11 / +34 93 552 0842 Contact via email at: biennal.paisatge@upc.edu Consult the web page http://landscape.coac.net/

# Mboka Bilanga

# A new design approach for the urban-scape of Kinshasa

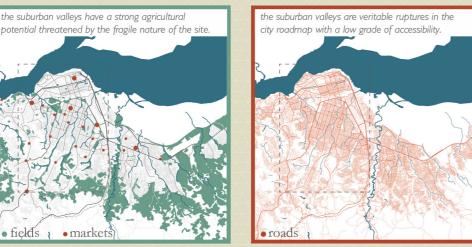
The aim of the project is to convert the kinois valleys, nowadays considered as a waste product of the megalopolis, into a repertoire of sustainable urban strategies

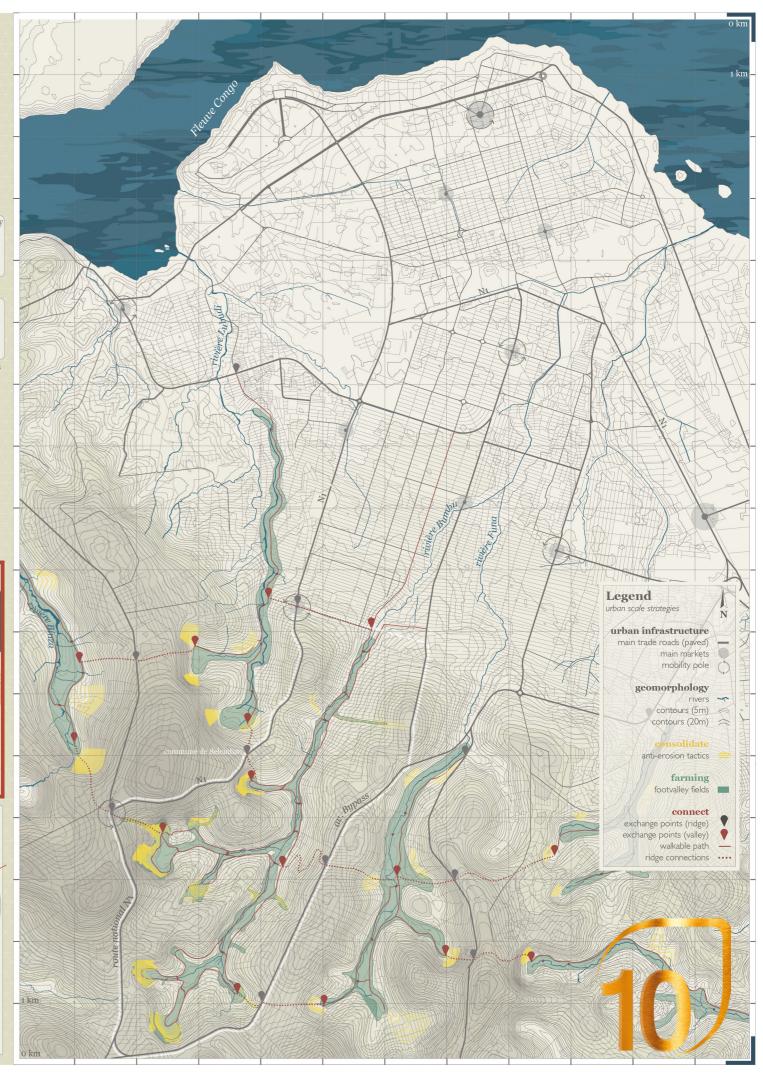




Due to an unregulated settlement process and to a fragile land morphology the suburbs landscape of Kinshasa presents serious disconnections, hydrogeological risks and weak management of the agricultural potential.

The fundamental strategy is based on the replicable nature of local based and small-scale tactics that have to be intertwined to gain an urban scale relevance.





the suburban sandy valleys are at the roots of

many hydrogeological issues affecting the city.



**FARMING** 

### **CONSOLIDATE**



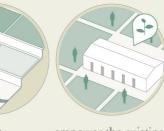
bio-engeneering





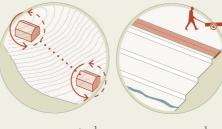
bio-engeneering

enhance valleyfloor agriculture



empower the existing partnership relations based on farming

## **CONNECT**



ensure punctual access to the valleyfloor

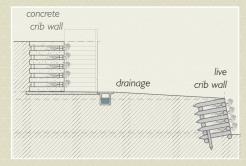
preserve and enhance slow mobility

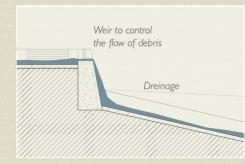
# Mboka Bilanga

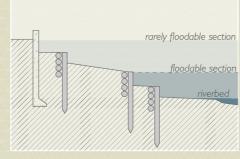
# The case study of the Selembao valley

A model for the three main strategic actions: to defend the valley from hydrogeological risks, to improve agriculture, to link the city fragments.

### CONSOLIDATE







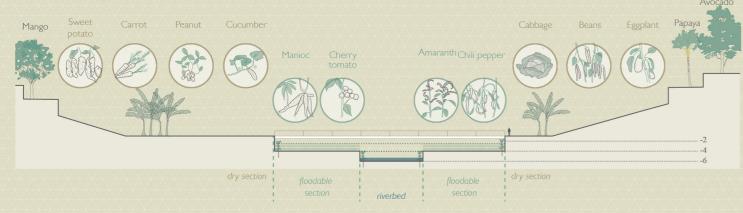
**EROSION** 

RAIN WATER

**FLOODS** 

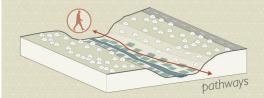
Natural and concrete crib walls are set to create or reinforce terraces and act against erosion. The drainage system is improved and enlarged to control the rain water flows and to filter sand and waste. The riverbed is reshaped in three levels designed to contain the flows both in the dry and the rainy season.

#### **FARMING**

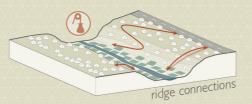


The three level shape of the riverbed let to manage agriculture in order to better exploit the great potential of this fertile land nowadays affected by seasonal floods. Crops that resist to the excess of water or that have a short growing cycle will be grown on an intermediate level, safe in the the dry season and rarely floodable in the rainy one.

### **CONNECT**







The structure resulting from the consolidate strategy generates pathways on the valley floor and on the slopes that enhance the inner walkability. Moreover, existing and new bridges will be equipped or renovate to operate not only as connections but also as reference point to the access of services such as schools and markets. The connection with the city is implemented by cableways or new roads linking strategic points of the valley with the ridges.

