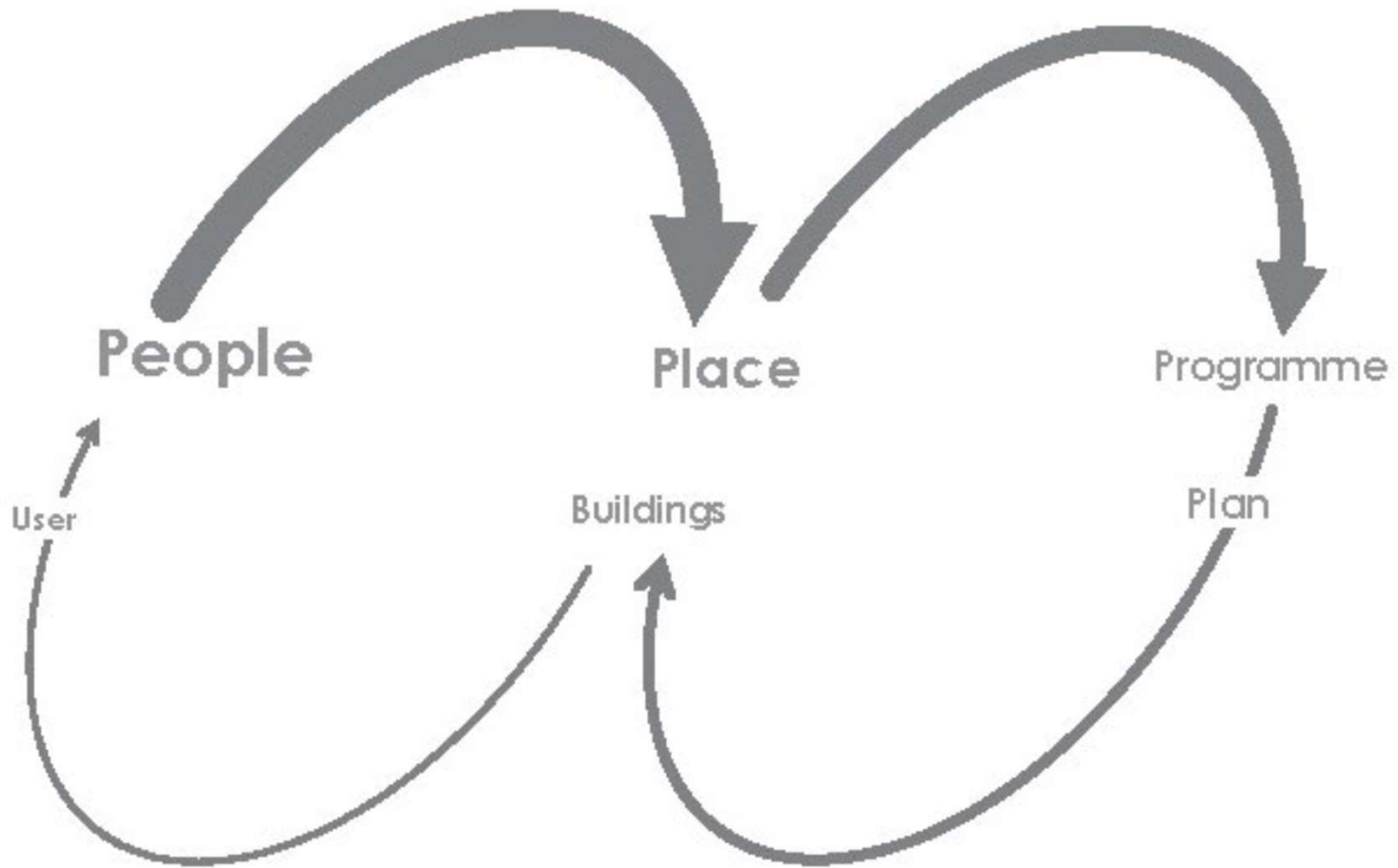


Remco Rolvink

Urban Planner / Landscape Architect

DASUDA / VE-R / World Bank

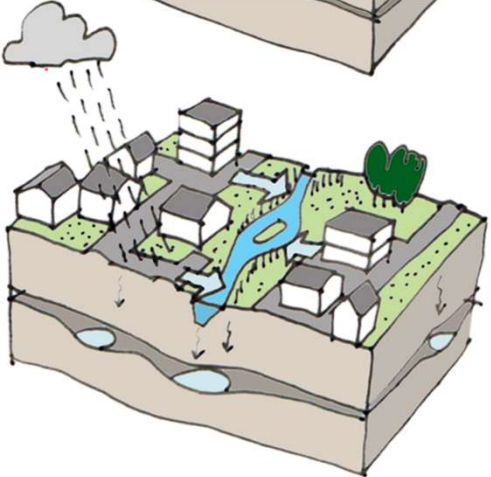
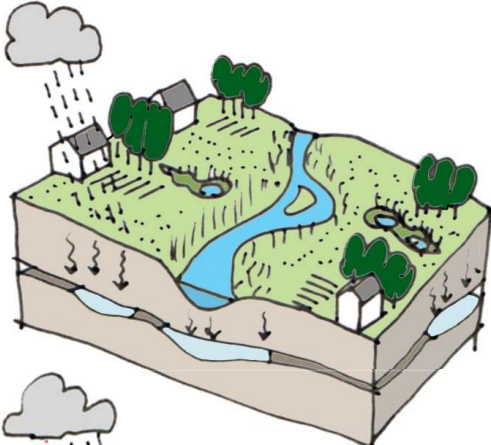
**URBAN INTERVENTIONS
START WITH PEOPLE**



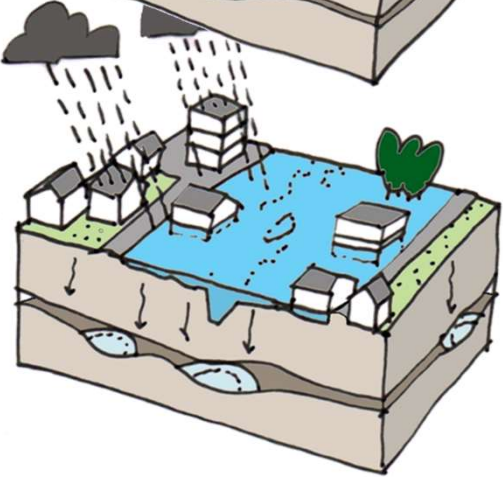
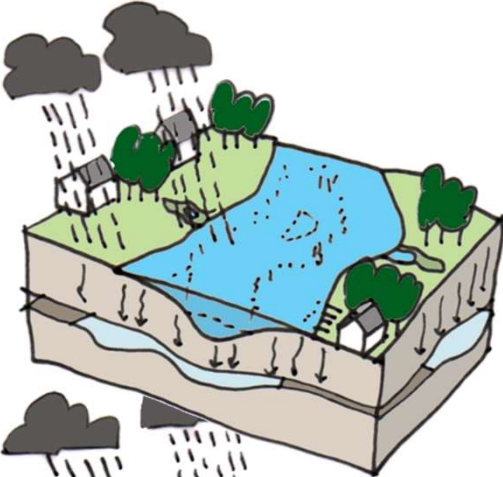
...not the other way around

THREATS AND RISKS IN DENSE URBAN AREAS

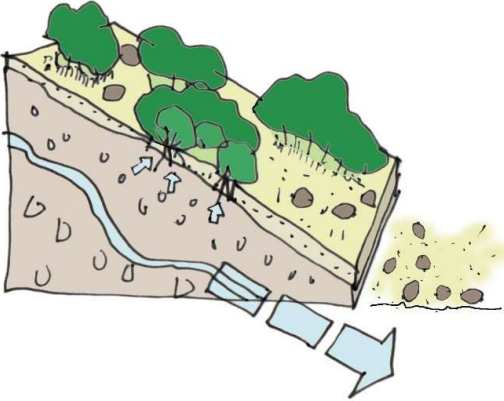
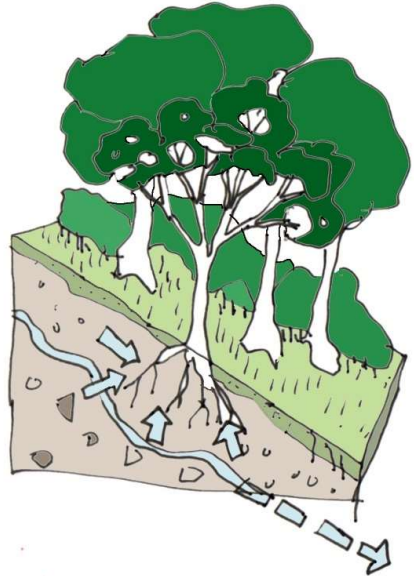
RAPID URBANISATION EFFECTS



Urbanisation = less green
= less infiltration of rain
water



Urbanisation = less distance
to the river of vulnerable
functions



Diminished water retaining
vegetation in upstream area

PEAK RISK



Cameroon

RAPID URBANIZED AREAS WITHOUT PLANNED MEASURES ARE MORE VULNERABLE



**PARTICIPATORY DESIGN
IS ESSENTIAL FOR
LASTING SOLUTIONS**

- **Engaged people cooperate and have ownership**
- **Local people have local knowledge**
which is an essential base for planning
- **Communication between people with various**
viewpoints is enriching

**HOW TO ORGANIZE
PARTICIPATION:
A SET OF PRINCIPLES**

TAKE IT IN STEPS



Awareness



Comprehension



Commitment



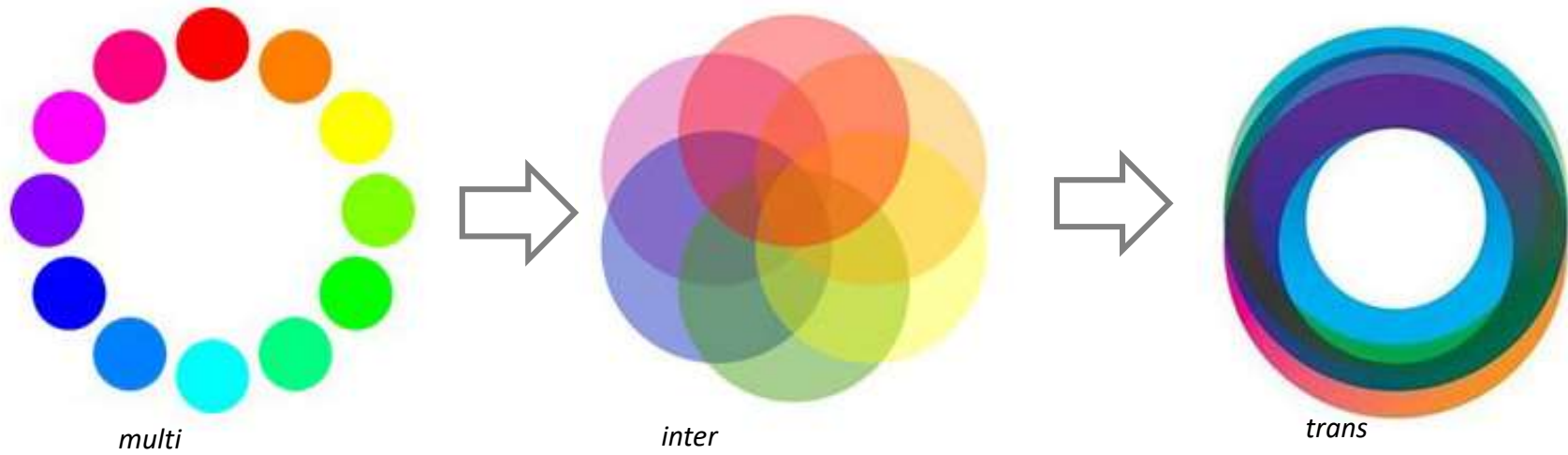
Action

LISTEN, WATCH, LEARN AND GET INVOLVED

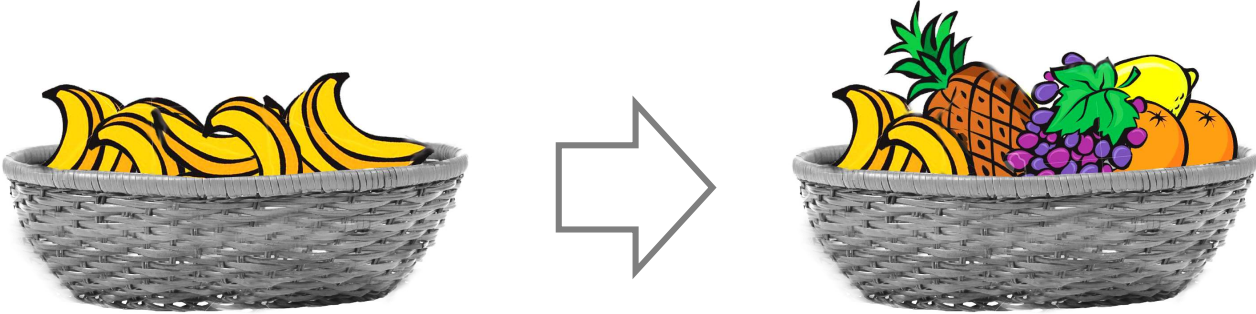


(clockwise from top left) Working on site in Kisumu, Thika, Cape Town and Nairobi

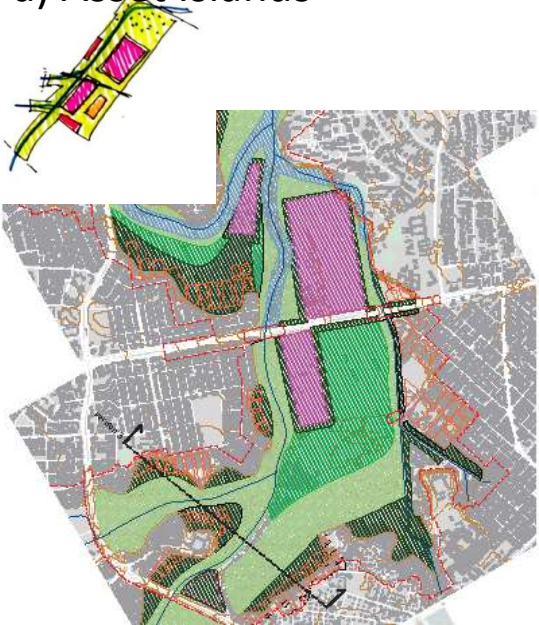
WORK TRANSDISCIPLINARY



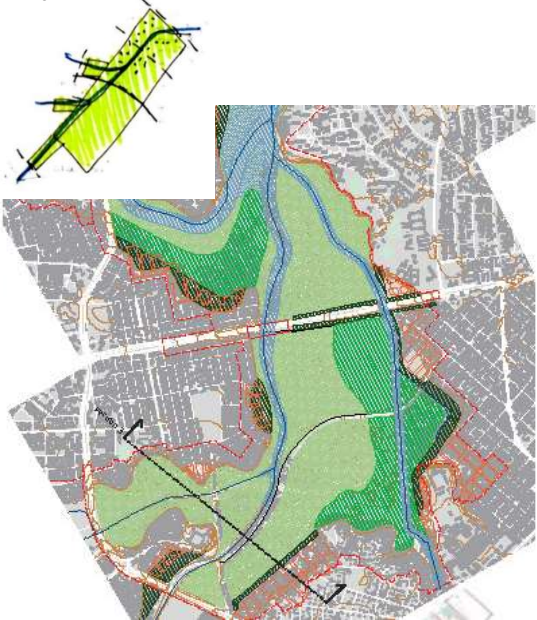
DISCOVER WITH OPTIONS: THE 'WHAT IF' APPROACH



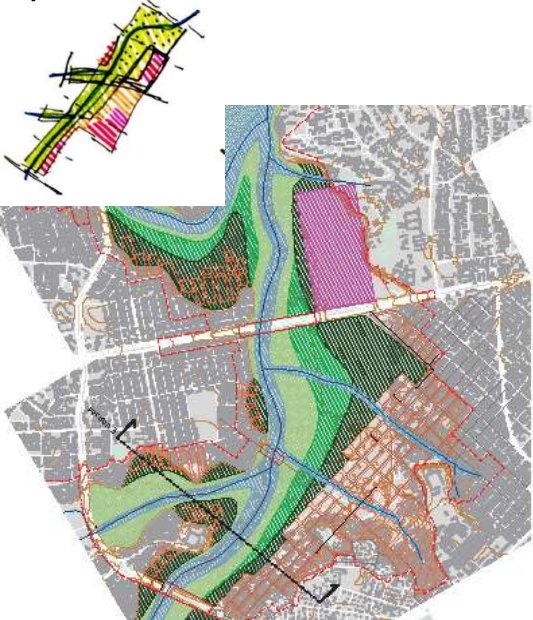
a) Asset Islands



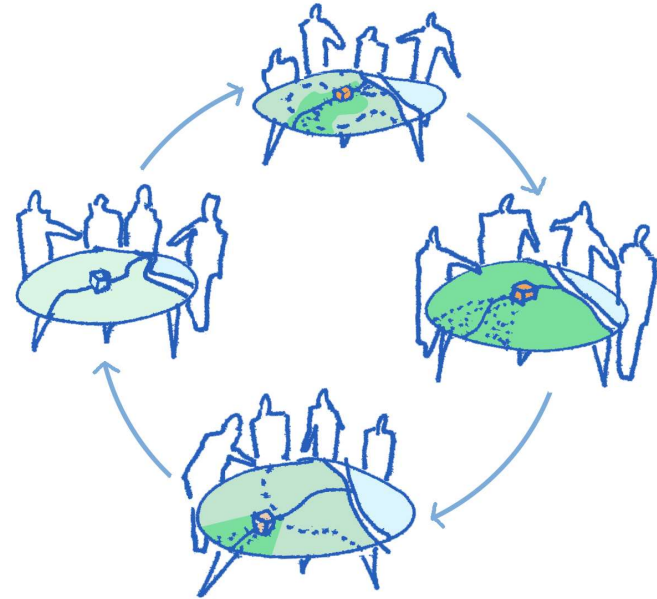
b) Wetland Park



c) River Front



WORKING IN GROUPS



Carrousel sessions: examples in Kisumu, Nairobi and Cape Town

INDIVIDUAL OPINION; RANKING AND SHARING



Individual ranking: 'Where do you put your money?' examples of Kisumu, Cape Town and Dar es Salaam

GIVE ATTENTION TO THE ARGUMENTS OF THE MINORITY

engage with
minority
viewpoint



come to
consensus



**IT MIGHT TAKE LONGER,
BUT IT WILL GET THE
PROCESS FURTHER**

“If you want to go fast
go alone.

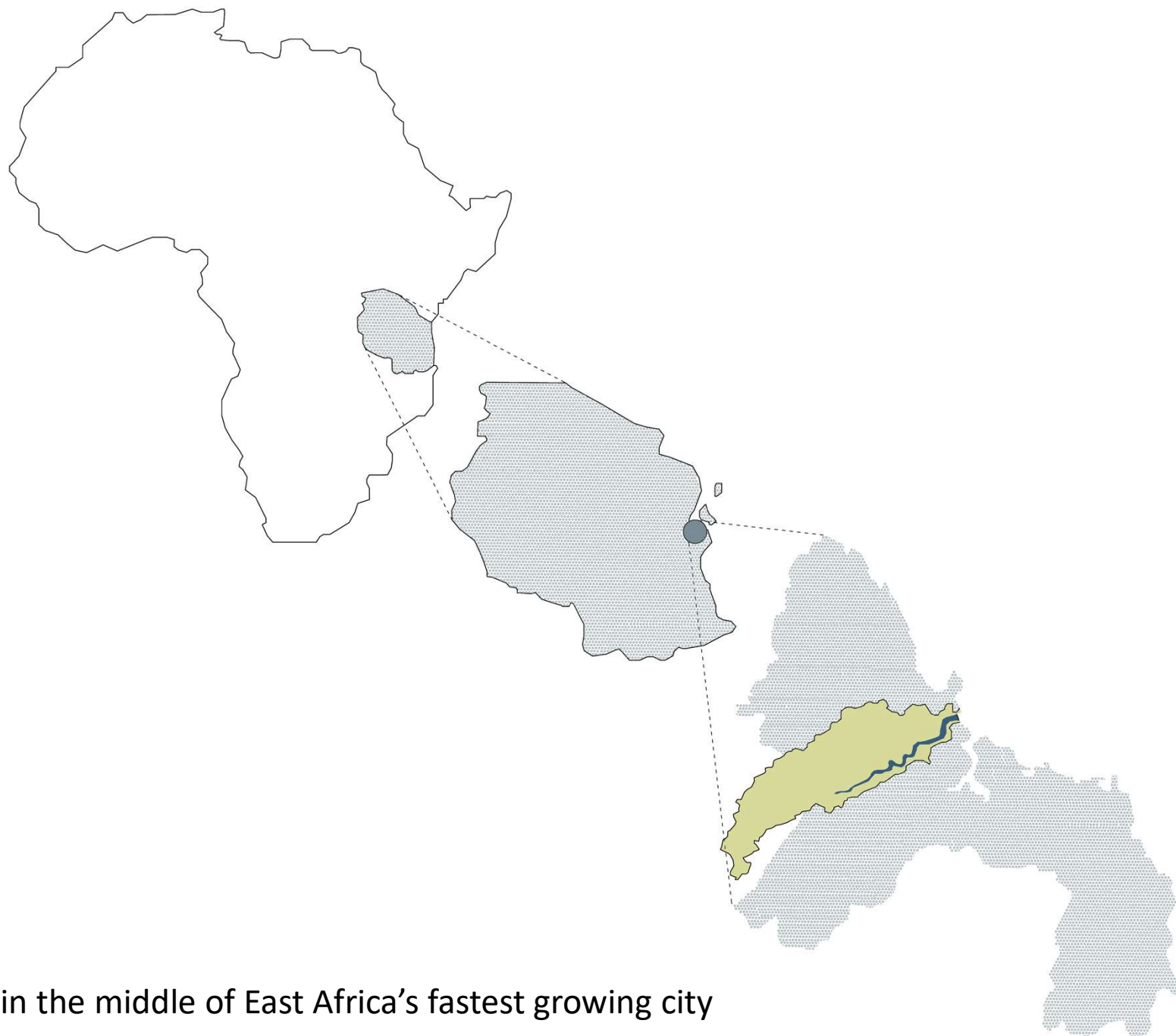
If you want to go far
travel together. ”

African Proverb

MSIMBAZI RIVER, DAR ES SALAAM, TANZANIA



Flood prone area + Resettlement issue



River in the middle of East Africa's fastest growing city



Hard lesson in resiliency

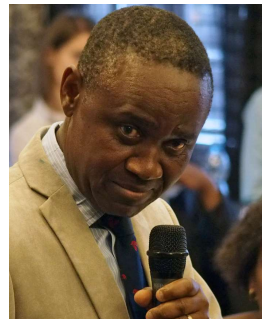
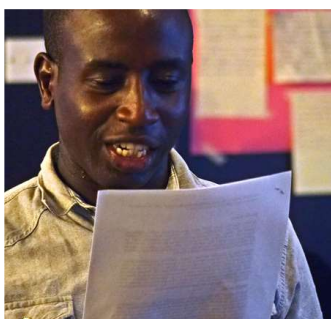


Flood prone area + Resettlement issue



HOT Open Street Map Team mapped flooded households in Msimbazi Lower Basin

Community and government in dialogue



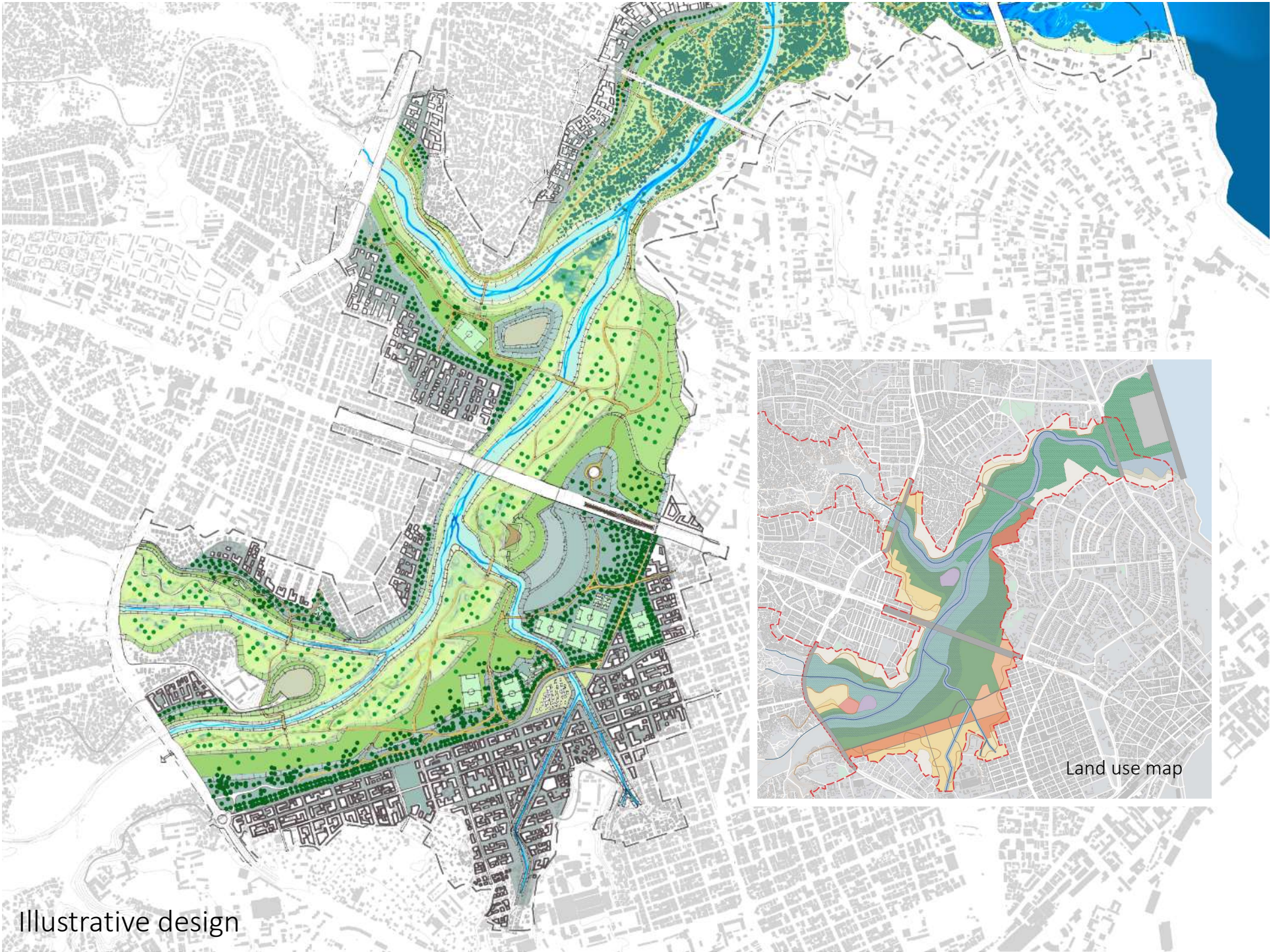


Plan is result of participatory process



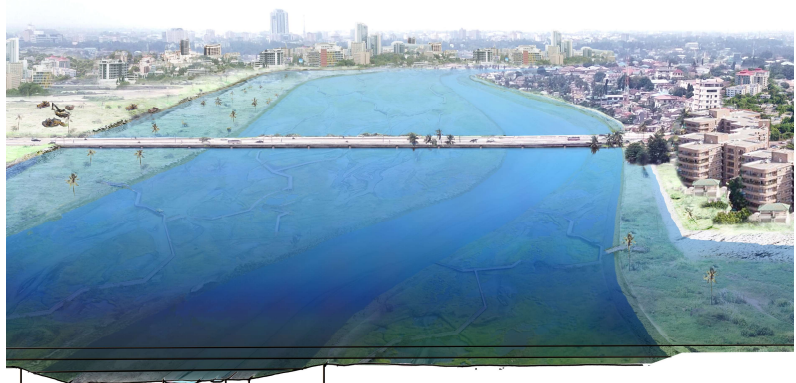


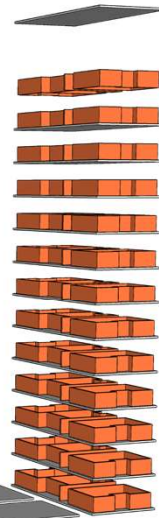
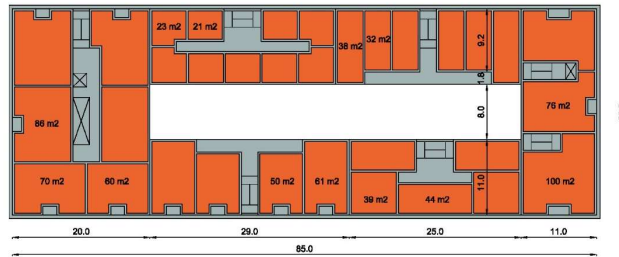
Msimbazi Opportunity Plan



Illustrative design

Land use map





RESETTLEMENT OF INHABITANTS AT RISK AT LANGUE DE BARBARIE, SAINT-LOUIS, SENEGAL



Photo: Peter Yeung







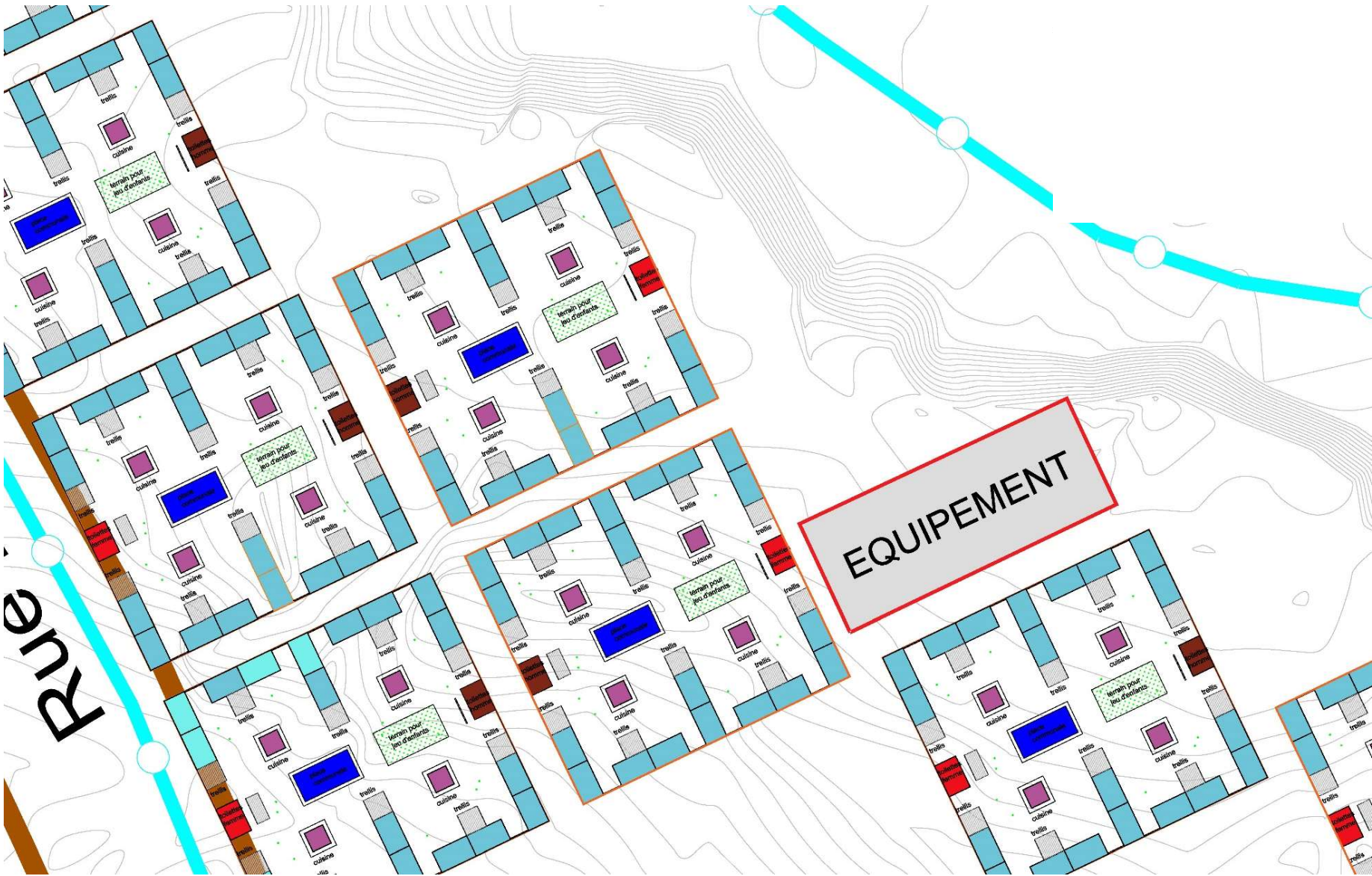




INITIAL LAYOUT OF TEMPORARY SETTLEMENT



LAYOUT AFTER PARTICIPATION



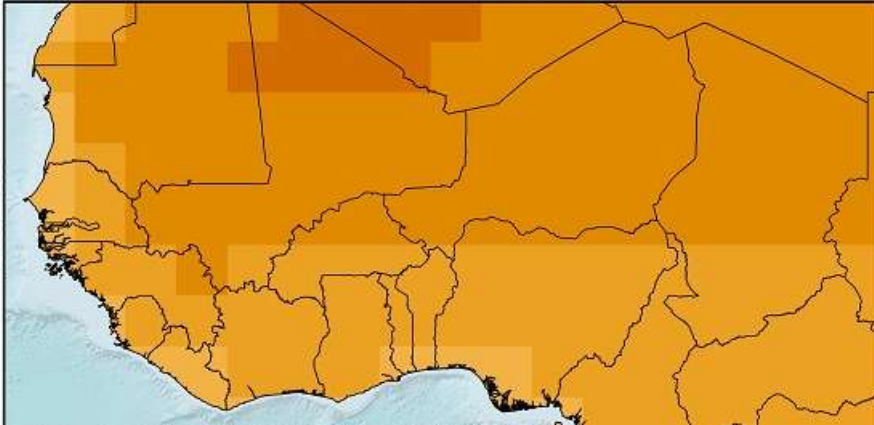
NEXT STEP: MAKE PLAN FOR PERMANENT RESILIENT SOLUTIONS FOR THOUSANDS OF INHABITANTS AT RISK



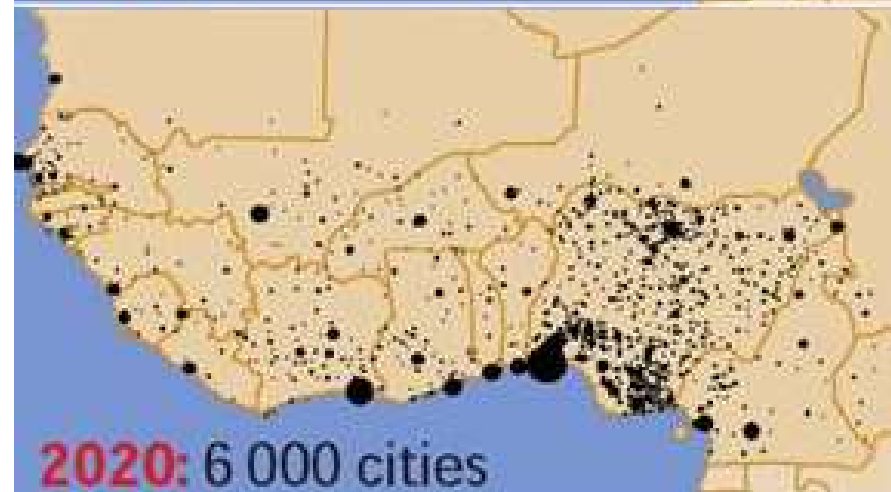
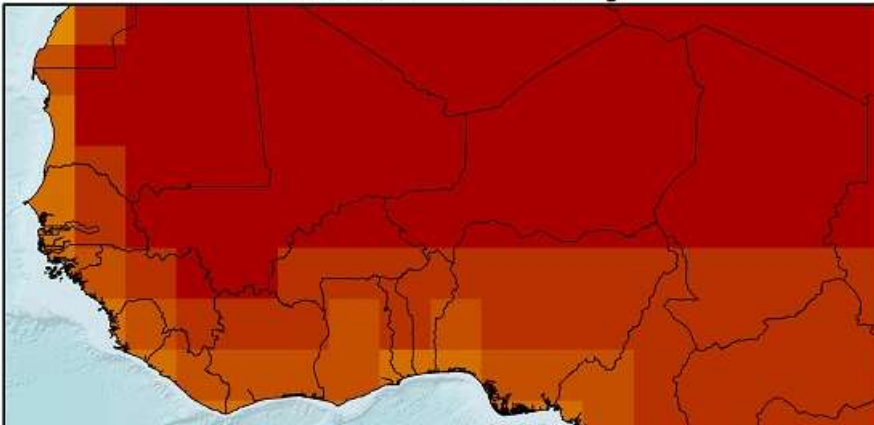
**AND THERE IS MUCH
MORE TO COME...**

CLIMATE CHANGE

Mid 21st century

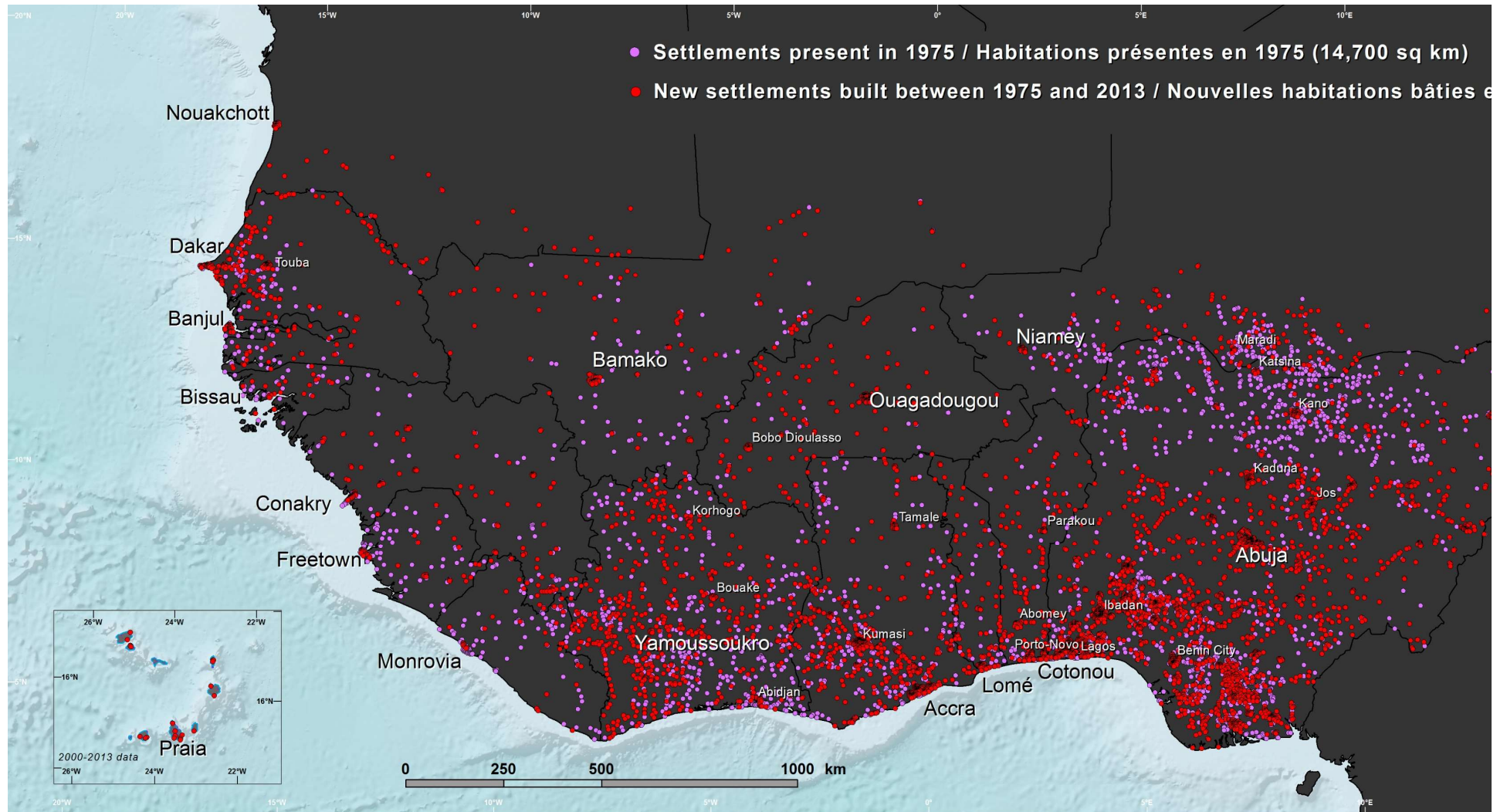


Late 21st century



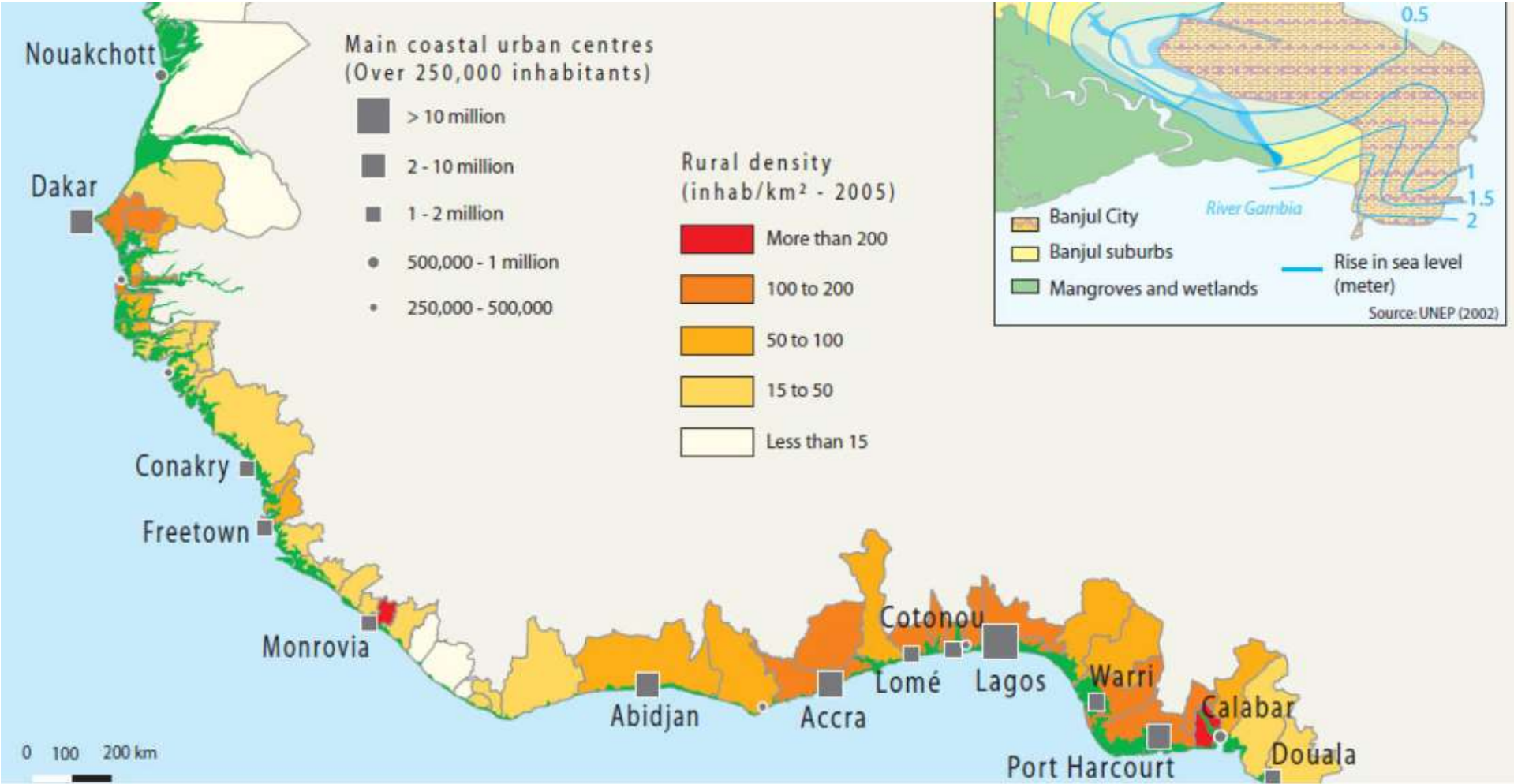
West Africa rise of heat and growth of cities

CLIMATE CHANGE



West Africa pressure on the coast

URGENT NEED FOR AWARENESS AND ACTION



West Africa Coast population distribution in climate effect sensitive zone

*“I am very afraid for the future
of this place. Sooner or later we
will have to leave, but we have
nowhere to go.”*

Buabasah a resident of Fuvemeh, a West African town being
swallowed by the sea as reported by Matteo Fagotto

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