WORKBOOK OF INNOVATIVE POLICIES

TOOLBOX OF POLICY RECOMMENDATIONS
COLLAGE OF INNOVATIVE POLICIES
SUMMARY OF DO'S AND DONT'S THROUGH
EXAMPLES

a corridor

TOWARDS SUSTAINABLE

urban development"

complex cities -
Inclusive cities program

Master architecture, urbanism and building sciences

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This mini booklet provides an overview of the interesting policies research that took place in parallel to the spatial strategy of this thesis. It proposes recommendations to the strategies of the project : **A Corridor towards sustainable urban development.** And showcase the references to achieve them.

It is intend to **complement** the theories and strategies proposed on the main booklet with a **supportive planning policy framework.**
In the **Toolbox of Policy Recommendations**, there is a direct application of policy recommendations to the project [A Corridor towards sustainable urban development].
Secondly the **Collage of innovative policies** propose a selection of relevant and innovative policies copy-pasted from literature review to create a common overview.
It is just a summary of some interesting perspectives and reflections found during the process of this thesis, it is *not intended to be understood as any final policy framework*, further research would be needed for that, it just give hopeful insight on current approaches proposed by other experts.
Finally, the **Summary of do's and dont's through examples** reflects on initiatives that took place in different locations and reflect on whether they were successful or not.

WHAT'S IN?

01

TOOLBOX OF POLICY RECOMMENDATION

01|TOOLBOX OF POLICY RECOMMENDATIONS

[A Corridor towards sustainable development]

A| 'Non conventional' housing policies

B| Adaptive governance

C| Core initiatives

D| Policy recommendations for strategy M: THE CORRIDORS

-Spatial democracy: Process of consolidation of informal land through its legitimated use
-Inclusive formalization of informal nodes
- Densification of informal land
- Harnessing the potential of public transportation

E| Policy recommendations for strategy L: MOAMBA AIRPORT

- Innovative approaches to new urban development in MMA: guided occupation
- Inclusive mobility based sustainable urban development.

F| Policy recommendations for strategy L: NEW KATEMBE

- Evaluation of current New Katembe plan

A. 'NON CONVENTIONAL' -

HOUSING POLICIES

This thesis is a reflection about planning for future development with what is known as ´Non conventional housing policies´. It follows the theory proposed by Gesto, B (2015) on her phD thesis:

"Municipal programs of guided occupation: preference instrument of basic habitability versus future informal urbanization".

The basis of the theory resides in the shift of the concept of housing towards an understanding as a process and not as a final object. Therefore, there is a perception of housing as a dynamic reality that do not need to be closed as final proposal in the master planning and it is adapted to the inhabitants and residents and their own realities.

This basic idea emerges from the immense complexity of the developing countries and the necessity to adapt the planning tools to a flexible frame where the particular inhabitant can decide and develop in relation to his resources.
In order to present this theory, is essential to define what are housing policies, defined as: *"set of guidelines that motivate, restrict or facilitate actions related to housing"(Gesto, B. 2015).*

The first reflection about new ways of approaching the housing techniques was reflected by John Turner in 1968 on his book *"Uncontrolled urban settlement: problems and policies"*,

where the 'non conventional housing policies' are proposed due to the increasing of social conflict, the necessity of reducing costs and the changing of the housing concept. Therefore, the ´non conventional housing policies´ are defined as *"partial, gradual interventions of different densities, character and importance, in the housing process, directed to go forward, contributing to the consolidation of the housing forms that are more adapted to the social levels"* (Ramírez, 2002) and can also be named as 'alternative housing policies'

In order to understand the concept of 'Non conventional housing policies', it is essential to define what is a conventional housing policy, introduced by Gesto, B. (2015) as *"those policies characterized by the systemic intervention of the state in all the phases of the production and provision process until the finishing phase of the house"*. As an alternative, Gesto, B reflect about the involvement of the state in the ´non conventional housing policies´ where the state only presents a partial intervention due to the changing of the housing concept consequence of a lack of resources. As stated on the document: *"The house is not understood as a final object, a commodity and conceived as a process, the 'living process' where the object is not recognizable anymore and the house – as socially accepted- can not appear until some time ahead."*

Classification of housing policies

There are two main groups to understand the housing poli-

cies, keeping in mind that this research is based in the work of Gesto, B. in 2015 and therefore, there are other housing policies that are not included in this classification.

As can be perceived in the following diagram, the housing policies studied propose a resolution of the existent housing problem in developing countries or those focused on the prevention of the extension of the informal city into new development proposals, preventive policies for ex-novo strategies. Considering the policies directed to improve the current situations of informality, there are two options. Since long time ago, there have been eviction policies in which the solution for an informal settlement was based in the reallocation of the inhabitants in areas far away from the settlement, the destruction of the settlement and the building of a new development over the tabula rasa strategy.

After the study of the 'non conventional housing policies' there is a new perspective based on the effort on regularizing the existent housing tissue. The regularization seeks for a legal recognition based on the tenure permits and rights. Once there are tenure rights, the inhabitants of the informal settlements are keen to invest on their own houses and develop a proper frame for the improvement of the informal settlements. At the same time, there is need for a physical improvement with a inclusion of basic infrastructures and facilities than can be considered in a neighborhood or residential scale.

On the other hand, the preventive measures to avoid the formation of informal tissue on ex-novo developments that have been proposed historically are related with the social housing. The planning proposals rely on a percentage of social housing that expressed their commitment with the realities of the areas. However, this percentage was usually smaller than needed and the houses did not fulfill the necessities of the inhabitants. As a consequence, the social housing strategies did not avoid completely the informal settlements next to new developments. However, there are new approaches known as 'non conventional' based on the progressive housing that reduce the initial costs of the strategies and allow the inhabitant to develop in relation to his particular economic situation and necessities. These approaches are: the guided occupation –explained in detail in the section 06.J Moamba airport strategy- together with the sites and services approach, where there is a basic infrastructure urbanization before the occupation that can get to individually constructed bathrooms and kitchen (without core) or with the planning of common kitchen and bathrooms (with core). These two strategies are based on the housing typology of shell house that defines a house that is understood as a process and the construction and development of facilities is done gradually as soon as the inhabitant obtain the resources to finance the construction costs.

It is essential, that although proposing alternative ways to approach the reality in the MMA, this thesis do not state that the informal city is something good. There are precarious living conditions in most of the informal extensions. As state by Busquets in 1999: "it is not about exalting and encouraging the 'informal urbanization' but acknowledge its value as city construction process". The proposal of this thesis seeks for a proper adaptation of the current reality and a planning approach related with the current reality of the area.

Image 34. Classification of housing policies
Source- Graph translated by author from the theory of Gesto, b. (2015). LOS PROGRAMAS MUNICIPALES DE OCUPACIÓN GUIADA: INST-RU- MENTOS PREFERENTES DE HABITABILIDAD BÁSICA VERSUS LA URBANIZACIÓN INFORMAL FUTURA. El caso de Trujillo (Perú). http://oa.upm.es/39714/.
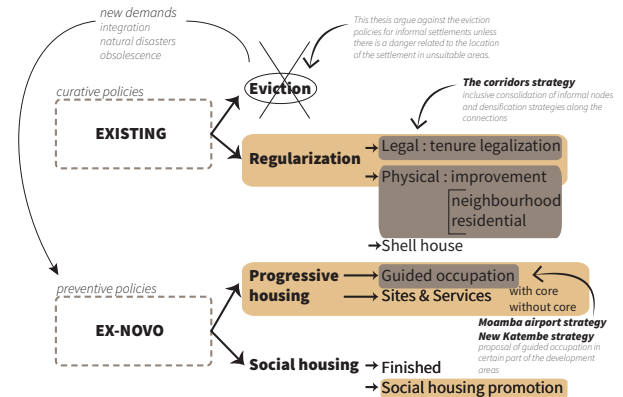
B. ADAPTIVE GOVERNANCE -

THEORY PAPER

ADAPTIVE GOVERNANCE INTO AFRICA: A shift towards an inclusive urban development. Case studies of South Africa, Mozambique and Uganda.

ABSTRACT - In 2008, the world population became pre-dominantly urban. Since then, the population living in urban areas experienced a continuous growth; it is expected to keep increasing until it reaches 66% of urbanites in the world in 2050 (UN, 2014). Africa, together with Asia, is the area with higher urban growth and is, at the same time, the least prepare to absorb this growth. The emergence of informal settlements in African cities is a consequence of the dynamic process behind cities' development. Nowadays, 50,3% of the population in Sub-Saharan African countries live in slums (World Bank, 2014). One of the main factors causing this development crisis is the disconnection between the urban policies and the reality of the major African cities. In order to deal with these complex contexts, it is essential to understand the need of a shift in the governance of major African cities, so that it includes the large variety of agents involved in the current city dynamics and combine formal and informal governance structures into a common development. This shift has been little discussed in African contexts. This paper will argue towards the introduction of adaptive governance perspectives to deal with the reality of urban development

in African contexts. Adaptive governance includes not only good governance and citizen's participation, but a collaboration among the different stakeholders involved in the urban development, understanding their own role and promoting the power distribution. Through the examples of three cases of citizens' mobilization and the participation of the market in Maputo, Mozambique and a proposal for resilience strengthening program in Stellenbosch, South Africa, this paper will present the advantages and challenges of the transition from traditional governance into an inclusive one. This paper will also raise awareness about new approaches to urban policies and governance strategies.

KEYWORDS - *African urbanization, adaptive governance, transition in urban development, informal settlements.*

1. INTRODUCTION

The world population is currently experiencing an exponential growth, especially in the African and Asian continents. Moreover, both continents are urbanizing at record rates. We are living through a fast urbanization era, and this urbanization often happens in countries with low capacity for planning, which is leading to precarious urban conditions and unsustainable living environments.

However, as stated by Harris Mule, Ministry of Finance of Kenya at the symposium 'African Governance and Civil Society' in 2001, it is essential to highlight the 'bright spots' or successes that were accomplished within the Africa's development in the past decade. The whole continent is now free, with a progressive opening up and expansion of the civil rights, which promote new policy discussions and political perspectives. Education is progressively spreading and life expectancy is rising. Mule expressed his general vision about the policy environment as starting to develop towards 'respectable economic growth rates'. However, in the same frame, he also listed the big problems and challenges for the country. The most important ones are those linked to governance and institutions: *"It was clear that unless problems of governance were understood, addressed and resolved, Africa would never get very far."* (Mule, 2001)

The situation in Africa can be identified as a development crisis. While the urban population is growing rapidly, the precarious living conditions of a big part of the urbanites illustrate that the urban policies are not displaying a proper frame to ensure human rights to either the current or future population. This makes visible the weakness of the local governments to confront the reality of their country (Lindell, 2008). Cities present a dualism between the colonial city center, which is generally planned and formally laid-out and their peripheries, with low density, spreading residential areas, that are extending gradually and absorbing population growth without any prior urban plan to ensure basic living conditions.

"The African City expresses unpredictability, difference, uncer-

tainty, ideological and financial problems, despotism, liberal-
ization of markets, alignment of interests, the crisis of values in
the community, etc. It has become so extensive and so diverse
that it is no longer possible to address it as a linear unit only. It
has overcome the paradigm of duality: it is more than a diptych
– it is now an urban mosaic with multiple parts of complex
geometries. The dichotomies between formal versus informal
city, city versus countryside, the urban versus the rural, tend to
fade, crossing and overlaying themselves, juxtaposing many
others, and in the process evolving form and expression. The
African City gained a plural meaning that must be strength-
ened."(Viana, 2009)

African cities are especially difficult to intervene. It is essential
to understand and relate their governance structures to build
up urban policies that not only get to improve the current pre-
carious conditions of the 50.3% of the sub-Saharan Africans
living in slums (World Bank, 2014), but also establish a basis
for the expected urban growth of the continent..

Nowadays, there is an almost continental disconnection
between the government and the rest of the actors involved
in the urban development of the city, including the citizens.
This essay explores a shift in the current African governance
structures towards a more adaptive governance that includes
the whole variety of actors involved in the urban develop-
ment of the continent. It does so by exploring a collaborative,
control released frame, where there is leadership from the

government, but the different roles necessary in policy making
are defined and divided among the social groups without
an unique power concentration. It will first introduce the
concept of adaptive governance and present some examples
of changing situations that are happening in South Africa and
Mozambique.

**2 THE CURRENT STATE OF THE AFRICAN URBAN GOVER-
NANCE.**

*"In many African cities, with extensively in- formalized systems of
service provision and livelihoods, popular groups have devised
their own sets of rules for regulating relations irrespective of
state policy or approval"* (Lindell, 2008)

When understanding the current situation of African gover-
nance, it is essential to reflect on 'what works?' in terms of
urban governance and development, what can be considered
as good governance? Richard C. Crook and David Booth on
his article 'Conclusion: Rethinking African Governance and
Development' in 2011, made a summary of the main ideas de-
veloped by the African Power and Politics Program reflected in
the Institute of Development Studies Bulletin. They reflect to-
wards the governance that is successful to arrange the public
goods essential for a sustainable and inclusive development.
The results highlighted the success of the presence of forms of
local collective action as form of social obligation method, the

necessity of administrative coordination and policy coherence for the whole amount of agencies and actors involved in the development and the presence of authorities able to take the lead and impose their authority. (Crook & Booth, 2011)

It is indubitable that the concept of governance and, furthermore, good governance is rather difficult to define. However, as expressed in the series *"Putting good governance into practice"* (Farrington, 2009) there are several programmes developing measurement methods to give an objective qualification of the governance quality, specially in developing countries; like the Ibrahim Index of African Governance. This arises the relevance of researching about governance strategies in Africa.

At the same time, to highlight the main principles to foster good governance in Africa, H. Mule expressed the priority on creating strong nations states that are stable, coherent, viable and durable. Foster good leadership. Ensure stable and representative constitutional arrangements, defend the role of the state, build capacities and empower the excluded and ensure free and fair elections. (Mule, 2001) These could be understood as some basic principles for good governance, where it is stated the necessity of involve the whole variety of the social spectrum and organize and define the different roles of each group according to the necessities and objectives to accomplish.

"The growing distance between how urban Africans actually live

and normative trajectories of urbanization and public life can constitute new fields of economic action" (Simone, 2004)

The disconnection or development crisis can be identified as an opportunity to act towards a change in the governance structures and rethink the current urban strategies and perspectives. Using the base of the advances that the African continent presented in the past decade (Lindell, 2008) and understanding the current state of the governance, there is scope for change and new proposals of sustainable development supported by an inclusive and balanced governance power.

3 THE CONCEPT OF ADAPTIVE GOVERNANCE.

The term Adaptive governance was firstly proposed in relation with Ecological systems. It was stated as a governance approach that arose from the concept of resilience.

Resilience is defined as:

"The concept of resilience emerged from the work of Holling, and describes the ability of an ecological system to bounce back or recover from a hazard. The resilience concept has since been broadened to include the capacity of different kinds of social and economic systems to recover, and their capacity to adapt and transform as a result of ongoing stresses and shocks. Thus, the resilience of an informal settlement increases and the risk of disruption decreases if it has benefited from investment

in robust infrastructure that is adapted to local conditions and built to anticipate future threats. " (Seeliger & Turok, 2013)

When speaking about informal settlements, it is essential to understand the fast dynamics of these areas and look for policies that are opened to absorb the changes and adjust themselves towards the real necessities of the settlement. In order to define Adaptive governance, it is crucial to understand the term governance: *"Governance is the structures and processes by which people in societies make decisions and share power [...] The term governance has recently become a catchword for various alternatives to conventional top-down government control, including collaboration, partnership, and networks (Folke et al., 2005) Therefore, within the term governance, there are already several stakeholders involved in a collaborative and egalitarian approach. The World Bank define governance as "traditions and institutions by which authority in a country is exercise for the common good"* and the European Commission express governance as "*the state's ability to serve citizens"* (UNDP, 2004)

Adaptive governance is characterized by *"systems that are able to reconfigure themselves"* (Folke, Hahn, Olsson, & Norberg, 2005). Folke et al. in 2005 also stated the main aspects that an adaptive governance presents related to the necessity of assuming that the changes are going to be there and proposing the answer of learning to live with them and understanding this as an opportunity for renewal and reorganization.

The concept of Adaptive governance goes beyond including all the stakeholders involved in the process and emphasizes the necessity of learning and understanding the roles of each stakeholder and establish a solid organization to deal with the changes that a dynamic system presents.

Adaptive governance has evolved from the merely ecological-related policy to a broader scope. As stated by Rijke et al. on their article in 2012 *"Fit-for-purpose governance: A framework to make adaptive governance operational"*, the term of Adaptive Governance is a concept that is gaining prominence but policy makers and practitioners are finding difficult to apply. They narrowed the uncertainty aspects that constrains a direct application of Adaptive Governance perspectives into: 'ambiguous purposes of governance', 'unclear governance context' and 'uncertain governance outcomes' and propose a frame to overcome them.

The perspective of Rijke et al. introduces an insight of possible manners to transform the theoretical concept of Adaptive governance into a tool to be used by policy makers and planners. Something that is already happening in some cases, as introduced in the section 4 of this essay.

Some authors go further in the discussion of Adaptive Governance and propose an approach that leads to deliberated transformation with the coming situations and not only adaptation to changes:

"transformative adaptation is necessary to avoid catastrophic environmental and social consequences. This is particularly the case in urban settlements where disconnection from the systems that support life is pervasive and injustice and inequality play out daily."(Ziervogel, Cowen, & Ziniades, 2016)

The definition of adaptive governance is also adapted to urban planning theories and development proposals, getting distance from the merely ecological problems. For example, Seeliger and Turok in 2013 defined adaptive governance as

"an approach to system management that combines the insights of experimental learning in complex systems with organizational theory. Policy actions are deliberately open to change in the light of their impact on the ground and are flexible in response to shifting circumstances."

Highlighting the necessity of strengthening the structures of the community and building up multi-scalar socio-ecological processes, understanding their impacts and learning from them. With an adaptive governance approach, the times of crisis can create a space for new management instead of increase vulnerability in the areas.

"Adaptive governance recognizes that the complexity of informal urban settlements requires collaborative management and practical involvement through flexibility and negotiation, rather than the application of standard rules and procedures.

This means a tractable and variable approach that can accommodate informal and interim solutions within more formal structures and systems. "(Seeliger & Turok, 2013)

4 SOME GLANCES OF A SHIFT IN AFRICAN GOVERNANCE. CASES OF MAPUTO, MOZAMBIQUE AND STELLENBOSCH, SOUTH AFRICA.

There are some cases that illustrate the shift happening in some parts of Africa to challenge the traditional top-down government and introduce the opinions and knowledge from citizens and other stakeholders. The state of African governance is in transition, which introduces scope for new approaches and perceptions. In this section, I will review the cases presented by Morten Nielsen in 2011 within the borders of Maputo city; the proposal of Seeliger and Turok in 2013 to upgrade the Enkanini settlement of the city of Stellenbosch in South Africa and the market's association in Maputo, cases of practice of governance that occur beyond state institutions and involve a wide range of different actors.

A.MAPUTO, MOZAMBIQUE. CITIZEN'S ASSOCIATION.

Morten Nielsen, on his article *"Inverse governmentality: The paradoxical production of peri-urban planning in Maputo, Mozambique"* in 2011 presents an insight of the ambiguity around the governance structures in the country of Mozambique and the different strategies that are taking place in the capital city

to deal with complex urban situations, usually related to land tenure conditions.

It is important to explain that the land in Maputo is public, therefore the government is the owner of all of it and, if the land is registered in the official cadastre and if the solicitor count on specific requirements, it is possible to obtain a DUAT, the official land tenure permission. (Wanjiku Kihato, Royston, Raimundo, & Raimundo, 2013)

Nielsen explains three different cases where the land tenure ownership is immersed in a process of change and how the inhabitants and the municipality relates towards each other to solve these situations.

The first case named 'Caught in the middle' presents the reaction from a primary school teacher to the fast urbanization happening in her neighborhood, next to the coast line of Maputo city. There were mansions being built in re-parceled areas of the neighborhood. As a counter move, she contacted an architect and, with the support and help from the neighbors – also financial support – they presented a parceling plan to the Maputo municipality that accepted it.

The second one is 'Getting closer to the state'. In the neighborhood of 'Mulwene' there was a big immigration after the flooding of 2000. Before the flooding, there was a parceling of a part of it destined to educational purposes and called

'Teachers Zone' with three commercial zones included. When the flooding happened, these three areas were occupied illegally with irregular pieces. The residents of the commercial zones settled a committee to parceling out the areas motivated by the formal parceling of their neighbors and the threat of a possible reallocation. The parceling took place with the collaboration of the residents and although it does not mean a formalization of the areas; it helped to transform the status and localization of residents in the area.

The last case is named 'Urban Farming'. It shows a completely different response from the citizens of the informal settlements to deal with their fear of being reallocated. In this case, the situation happened in one of the fertile valleys in the peripheries of the city. The land was occupied by a farmer's association since 1988 and they exploited the land for agricultural purposes. For the past years, their land was threatened by the sprawl in the surroundings of their area. Trying to legalize their status, they submitted a request of land titling and formal parceling to the area. It was approved with the condition that they had to present a proper re parceling plan. However, without any trust in the government, they understood that the land was going to be sell anyway and decided to take the lead on it. They talked to an architect and did a plan to obtain the biggest profitability of the area and started to sell the land without having its legal ownership.

For the author, these cases are closely related to the fact that

there is an existing tension between the government and the citizens. This can be understood as a lack of trust that lead to different answers from the citizens, in terms of positive perspectives to upgrade the informal settlements or taking advantage of the situation before the government expropriates the land:

"whereas the informalization of urban planning in Maputo is comparable with other urban situations, the balancing of the tense relationship between governor and governed through imitations of planning ideals seems to be particularly pronounced in Mozambique." (Nielsen, 2011)

B. MAPUTO, MOZAMBIQUE. MARKET'S ASSOCIATION. INSTITUTIONAL INSIGHTS.

Ilda Lindell, on her article "The Multiple Sites of Urban Governance: Insights from an African City" in 2008, illustrates the reality of one of the major citizen's associations in Maputo, Mozambique: the marketplaces association.

This movement emerged in 1999 after the informal vendors in Maputo suffered for years the harassment from the municipality. Trying to defend their only means of survival, they created an association divided in the executive-committee and the women's desk in defend of the women's right, elected by democratic vote; and market committees in 15 of the city markets.

The executive-committee, maintained by the fees that the vendors pay, ensures the infrastructure and maintenance of the marketplace, apart from the security and cleaning tasks. Also, they are able to provide micro-credits to the vendors that need them. In return, the market-committee, association of vendors from each market, establish the rules in the market and has the power to suspend or give trading rights to the vendors.

The marketplace association is part of the Mozambican trade union federation to find support when they are under the local state pressure and fight for the rights of the informal economy rights and advice the trade union towards this matter.

However the internal conflicts that happen between the different scales of power within the association, their main tension is with the government and its continuous pressure and threat to the vendor's rights. The only relations that ever happened between the association and the state members, are based on individual personal relations. These ended up on increasing the power influence of the government towards the market vendors and lead to revolts from the vendors, joining forces as a common unit, to their own market committee.

This case reflects the disconnection of the public government with most of the stakeholders involved in the urban development of the cities, stated before in this essay. As described by Ilda Lindell on her conclusion about the urban governance in

Maputo:

"These struggles result in a highly unstable and fluid 'system' of governance, characterized by great uncertainty, unpredictability and precarious alliances with patrons, short-lived agreements and the constant management of conflicts " (Lindell, 2008)

C.ENKANINI SETTLEMENT, STELLENBOSCH, SOUTH AFRICA.

The case of the Enkanini settlement in Stellenbosch, South Africa presented by Seeliger and Turok in 2013 introduces a completely different approach. A vision, from a group of experts, of how to include Adaptive governance principles in the upgrading of an informal settlement. It illustrates how the informal settlements could be managed from a resilient perspective and an adaptive governance frame that enforce the local capabilities. The main aim of the project was to present a new approach to integrate the settlements into the formal city, not just manage them.

The informal settlement of Enkanini is characterized from a low income, young and insecure community that lives in shacks and is vulnerable to be removed. They are exposed to precarious habitability conditions with frequent shocks of hunger, illness, crime and natural disasters. The area has a high natural heritage value, home of endangered species.

The social instability is increasing by the volatile political situation, the lack of reliable community structures for problem-solving situations, the division of the neighborhood by race basis that leads to conflicts and the lack of basic services from the municipality. At the same time, the environmental risks are growing in terms of sanitation, energy, waste and fragmented landscape because of the touristic interest of the natural area.

The city of Stellenbosch is growing in a rapid rate and the labour market is not able to absorb the work force, this increases the political instability and decreases the tourism and, therefore, the investments in the area.

The adaptive governance strategy applied in this case study is focused on the collaboration among stakeholders, practical problem solving and responsibility sharing. This is introduced in a strategy for the whole settlement materialized in different concrete initiatives: rethinking of the waste system with a forum concentration proposed to involve stakeholders and community-based organizations to address the failures. Also, the legitimation of the Enkanini area by its formalization as residential zone with an adjusted system of taxation and services charges that increases over time with the rising of the incomes. In order to do this, the municipality worked with local residents to collect reliable data about the area. The installation of improved services and infrastructures would be pursued by the city of Cape Town developed with the com-

munity, private developers and the consultation with adjacent communities for the reallocation of some residents, necessary to open public infrastructures. In order to make this possible, it is essential to boost the job opportunities; in order to do so, national and provincial authorities are involved in parallel to a training program for the inhabitants of the settlement. At the same time, the activation of a network of job markets to connect people to opportunities, vacancies, grants and training courses; an overall infrastructure about the employment infrastructure.

This project, just a proposal in this moment, wants to change the current negative perspective of the settlement into a positive one that takes the opportunities into account. The main is to involved the local community together with other stakeholders as the government or the private sector in an inclusive decision-making for settlement upgrading.

5 CONCLUSIONS

This essay explores insight in some of the current African governance trends and illustrates the concept of Adaptive governance as method to enhance them.

The examples presented highlight the shift in the citizen's mentality and encourage the proposal of new ideas and approaches within the African context. This context can seem, at first sight, unprepared for a shift in governance. Nonethe-

less, in contrast, it is developing its own strategies to build up change.

The examples proposed are bottom-up strategies from citizens, civil sector associations and urban experts, but they can not be developed completely if the government does not get involved in their formalization. As clearly reflected in the case of the Marketplace association of Maputo, the lack of connection between the government and the informal social structures of governance that are created within the city, leads to conflict and instability and increases the problematic in the overall city atmosphere.

With the proposal of an adaptive governance, the actors involved in urban governance work together from the beginning of the planning process and these strategies would take place as a form of governance; in collaboration within the whole variety of stakeholders and adapting the policies to the events and changes that arise in a dynamic context as the African cities. In order to achieve this, it is essential that national and local governments break the barriers with the rest of the stakeholders and get closer to citizens and the social infrastructures of the city. At the same time, in order to incorporate the informal structures that are a reality in these contexts, it is essential to rely on structured planning activities. This reflects not only in the policies themselves, but also in an organization that fits in the public sector's philosophy and opens space for different stakeholders without the state playing a leader role.

The introduction of a method of Adaptive governance in some of the major African cities could lead to a big improvement in the urbanization crisis and open up communication lines between the different stakeholders involved in the urban development, leading to more realistic and implementable solutions.

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C. CORE INITIATIVES -

Before introducing the strategy proposed for the MMA, it is essential to present the Core initiatives. The Core initiatives are implementations over the current situation that need to take place before the implementation of any strategies and conform the basic framework to allow the pursuit of the strategies. These core initiatives are the following: 1. Creation of limits by programmatic natural spaces, 2. Privatization of certain resources, currently public such as garbage and 3. Organization of a common institution that entails the management of mobility structure and urban development.

1.CREATION OF LIMITS BY PROGRAMMATIC NATURAL SPACES.

Already introduced as one of the major changes in perspective proposed in the strategy, this core initiative seeks the maintaining of the current natural spaces of the area by the definition of a program on them that prevent it from the urban sprawl. The natural qualities are one of the major opportunities of MMA and main touristic attraction. Therefore, it is essential to maintain its preservation.

However, the usual method to preserve an area lead to fences and walls to prevent the entrance. Otherwise, there are natural areas that should be preserved because of their natural qualities and are just forgotten without any specific

normative.

This initiative seeks for the planning of natural areas before realizing the planning of the urban areas. With this approach, there will be an specific use for each one of the areas and they will be included in the development plan of the city; something that did not happen in the New Katembe master plan, where the major natural reservoir 'Reserva Especial de Maputo' was highlighted but not the natural spaces within the extension of the future city of Katembe.

Some of the proposed uses are related to the accessibility to the parks with specific routes that will respect the natural space but at the same time highlight its potential. Same is the case of the proposal of certain sports that do not damage the environment and allows its utilization. Such as kayaking, trekking or climbing.

2. PRIVATIZATION OF CERTAIN RESOURCES, CURRENTLY PUBLIC SUCH AS GARBAGE

Although it can lead to confusions due to the history of mistakes introduced by privatizing strategies, this initiative proposes a privatization. However, there are several conditions that should be follow.

As explained in the conclusions of the feedback after the field trip, the current management of basic resources is in a dangerous point. Since last February, there were several water shortages in Maputo city due to the lack of water sources. At the same time, there is a major problematic related to the rainy season and the enormous damages caused by the flooding. Anytime it rains even the formal city of Maputo, most developed area of MMA suffers from severe flooding. There is a lack of proper sewage even in the formal city and, of course, in the informal settlements. Finally, in terms of garbage, there are several landfills in the city that are being occupied by informal settlers that do not have other locations to live. This lead to dangerous situations for the population, as the one lived in Maputo last February when 17 people died after a 30m high landfill collapsed on top of an informal settlement.

Due to the weak character of the governance in MMA and the lack of investments in resources management, there is an urgency for introducing changes. The current government is assuming the control of the majority of resources and there is not any visible change to implement the access of public resources in the informal settlements.

There are several examples of implementation that took place in other locations that could be imitated in MMA but there is a lack of investment potential. This is something that a collaboration between a private company and the government can pursue.

There are major technological advances in managing basic resources, something that is fully studied in TU Delft and whose

most innovative strategy leads to circular economy terms. This core initiative proposes the sharing of certain management of resources to those private companies that propose an innovative vision for reaching a more environmentally sustainable approach.

For example, in the case of the garbage, there are several technical innovations to recycle the garbage and turn it into energy. In the case of the Netherlands, this is managed by a private company that achieve the current situation when there are no landfills in the country. This type of committed management of resources can sustain the privatization, at least temporarily.

3. ORGANIZATION OF A COMMON INSTITUTION THAT ENTAILS THE MANAGEMENT OF MOBILITY STRUCTURE AND URBAN DEVELOPMENT.

One of the major disadvantages of the planning approach of MMA is the lack of connection between the mobility structures and the urban development plans. This is caused by a lack of communication between the government departments in charge of each one of these decisions. Apart from the lack of continuation and relation between the urban mobility strategies of Maputo and Matola that ask for a common planning system.

The UN-Habitat 2009 report of *"Planning sustainable cities"* dedicated one whole chapter - Contemporary approaches to

linking spatial planning to urban infrastructure, explained in the collage of innovative policies, section 2 of this booklet - to approach the strategies to connect urban development and mobility. In the report, it is stated that:

"While the detailed and static land-use planning associated with traditional master planning has generally been discredited, and there are questions as to the relevance, feasibility and possible influence of large-scale city-wide spatial planning, strategic spatial planning that is able to give direction to major infrastructure development is an important part of the new approach to planning."

Therefore, in order to succeed in the development of the strategies proposed in this thesis, it is essential to create a common organization where the decision makers of Maputo and Matola in terms of mobility and urban development are reunited and propose a common, combined strategy. Not only those involved from the government but all the stakeholders involved.

Although this seems difficult to pursue, it is something that took place in the plan proposed for the neighbor city of Johannesburg:

"Struggles by civic and political organizations from the 1980s for a 'one city' approach, which would allow finances and resources to be shared across the city, resulted eventually in the

formation of a Central Witwatersrand Metropolitan Chamber
- A negotiating forum comprising stakeholders from all sides,
including political parties, civic organizations, unions, business,
NGOs and others.- in the transitional period of the early 1990s,
and in the reorganization of local government in the post-apart-
heid period. […] Spatial planning by the Metropolitan Chamber
responded to the 'one city' concept, and also reflected the ideas
of restructuring the city towards greater integration and com-
paction, which were current in anti-apartheid planning circles
at the time (Harrison, Todes, & Watson, 2008). These ideas were
the basis for the normative dimensions of planning legislation
passed in the early post-apartheid period: the 1995 Devel-
opment Facilitation Act and the 2000 White Paper on Spatial
Planning and Land Use Management" (Todes, 2006).

This common organization give some positive insight in the
possibility of strengthening connections between the different
stakeholders of the mobility and urban development.

D. POLICY RECOMMENDATIONS -

FOR STRATEGY M. THE CORRIDORS

This strategy introduced a statement against the usual procedure to consolidate the informal economy nodes –as the case of Xipamanine market explained in the section 03 of this workbook- and the approaches that consider this economy a problem instead of understanding its value in the economy of the country. The policy recommendations for this strategy will be based on the definition of corridor proposed in the strategy:

An urban development corridor is redefined in the case of MMA into a connection between two informal nodes by public transportation. The corridor proposes the guidelines for a densification strategy in the area of 1 km along the connection and the informal nodes.
It presents a strategy that follows the current dynamism of the cities and respect how the majority of their population use it and move through it. The formal economy represents 10% of the economy in MMA and its population use the public transport, specifically the Chapas, in a daily basis.

The policy recommendations will be divided in the three aspects of these corridors: [1]the informal economy nodes, [2]the connections and [3]the priority densification areas.

[1]. INFORMAL ECONOMY NODES

The informal economy nodes existing nowadays will be consider of new centers of development and there will be an strategy of inclusive consolidation that include the following steps:

-1.1 IDENTIFICATION:
Informal nodes are those where there is an informal activity happening in a constant daily basis and provide a service for the surrounding neighborhoods. As stated by Gesto, B. in 2015:
"The informal sector, generally associated to the economy, can be understood as the dynamic group of people that act in innumerable activities that are not regulated by a contract or a law. It's a series of activities (generally income generators or producers) that do not follow the institutional rules and are not protected by them, in opposition to the formal activity that operated inside the established procedures"

-1.2. CONSOLIDATION – APPROPRIATION
When an informal node is identified, there is an analysis of it and identification of the essential agents involved in the daily dynamic of the node – find the structure behind the informality, the formality behind the informal city -. The node structure is requested and trained for a solid organization under the assistance from the government and, when there are clear agents and rules, the land is leased in agreement for a certain period. There is a temporary DUAT permit.

-1.3. INCLUSION OF INFRASTRUCTURES
In a collaboration public-private, the node will be improved with the basic infrastructures to obtain the resources needed for the development of the economic activities, such as electricity, sewage, water or garbage collection.

-1.4. PUBLIC TRANSPORT CONNECTION
In a city scale, the nodes will be priority in the creation of corridors by the connection of them via improved public transport – chapa- routes (they will be explained in detail in the section: connections).

-1.5. COVERTURE
In order to facilitate the continuation of the economic activities during the raining seasons, there will be a coverture with basic structures. It can be a collaboration public-private in relation to the specific necessities of each one of the agents.

-1.6. INCLUSION OF FACILITIES
The last step to inclusively consolidate an informal node is the support of its activity by necessary facilities. First, those related to the node itself such as a community center to discuss between the agents and where there are basic facilities as toilets or water sources. Once this scale of facilities is covered, a second scale related to the inclusion on a neighborhood scale with schools or medical centers. In this way, centralizing the

main uses in a node allow a hierarchy of connections within the informal centers and a clear social hub.

MAIN POLICIES

- The informal nodes will be consolidated in an inclusive way and by the collaboration of stakeholders from public, private and civil society sectors looking for an adaptive governance approach.

- The main agents in the inclusive consolidation are the informal seller, who have the right to be trained to organize themselves and create their own method of consolidation. Every informal node is different and deeply attached to the people working on it.

- The government should recognize the essential role of these informal nodes in the MMA local community and provide support for their introduction in the formal city with respect and adaptive planning. Otherwise, the nodes will be replicated in a different location, as can be learn from former examples of non adaptive consolidation.

- Once the current informal nodes, the city should develop a strategy to be able to recognize new ones and follow the same initiative with them, using the evaluation of inclusive consolidations until the moment to help the improvement of decision making. In order to do it, the recommendation is

the creation of an organism where there are delegates from the government, private sector involved, priority NGO's and institutions and delegates from other informal nodes. An open organization where everyone interested could be involved. This organization can be convenient to understand the dynamic of the city and be able to provide a proper frame for new informal nodes by understanding where are they going to happen and use 'non conventional' housing policies to reserve the space.

[2]. CONNECTIONS

The connections are defined by the easiest routes of public transport from one node to the other. As public transport there is a priority of Chapa routes for being the most used in the main cities of Mozambique. This method of transport, although informal, is starting to present a basic organization by the work of volunteers to map it and organize it in routes. At the same time, the connections define the priority densification areas which are 1 km each side of the connections.

- If the connections between nodes already exist, it is essential to ensure its quality and maintenance

- If there is need for new connections, mobility analysis and proposals should be conducted with a basis of adaptive governance approach.

- It is recommended to define a department within the mobility-urban development new organization dedicated to the connections design and maintenance

- There will be a Chapa Rapid Transit (CRT) lane in every connection to ensure the priority of this method of transport and the maintenance of an open line between informal nodes. This CRT lane will be complimented with several covered stops to facilitate its use.

[3] PRIORITY DENSIFICATION AREAS

Areas defined by 1km in each side of the corridors. Understanding corridor in terms of connections and informal nodes.

- New policies are proposed for those areas. Such as a limited high of 4 heights for being the maximum height where there is no necessity of elevator. However, further research is needed in a neighborhood scale to define the rules for these areas. The rules need to be adapted to the current reality of the neighbors and improve their living conditions by the use of the least economic resources possible

- For those living in the priority area for more than 5 years, there is a direct access to the DUATs, tenancy permit in MMA – which is currently really difficult to obtain -. The introduction of basic infrastructures should be contrasted with the local

chefs of 10 casas, as well as the owner period in the neighborhood.

- The private development of plots by a developer is not allowed, the plots should be developed in individual initiatives to prevent market movements in relation to these areas. The owners in the moment of the corridor definition should remain owners and inhabitants at least for other 10 years.

- The population will be trained in densification techniques and offer technical support for the renovation and improvement of their houses. There is further research needed for the specification of those techniques, however there are already some taking place in the area than can be studies in depth and evaluated.
- The densification entails the support with proper infrastructures (energy, water, gas, sewage and communication) that will be facilitated in a public investment.

- The priority densification areas are linked to the facilities inclusion proposed in the inclusive consolidation of informal nodes and they will provide the basic services in neighborhood scale.

- In the future, the 1km densified area will be extended. However, there should be policies to focus the densification in these areas until there is an extension of the mobility infrastructure plan to connect new densification areas to these ones.
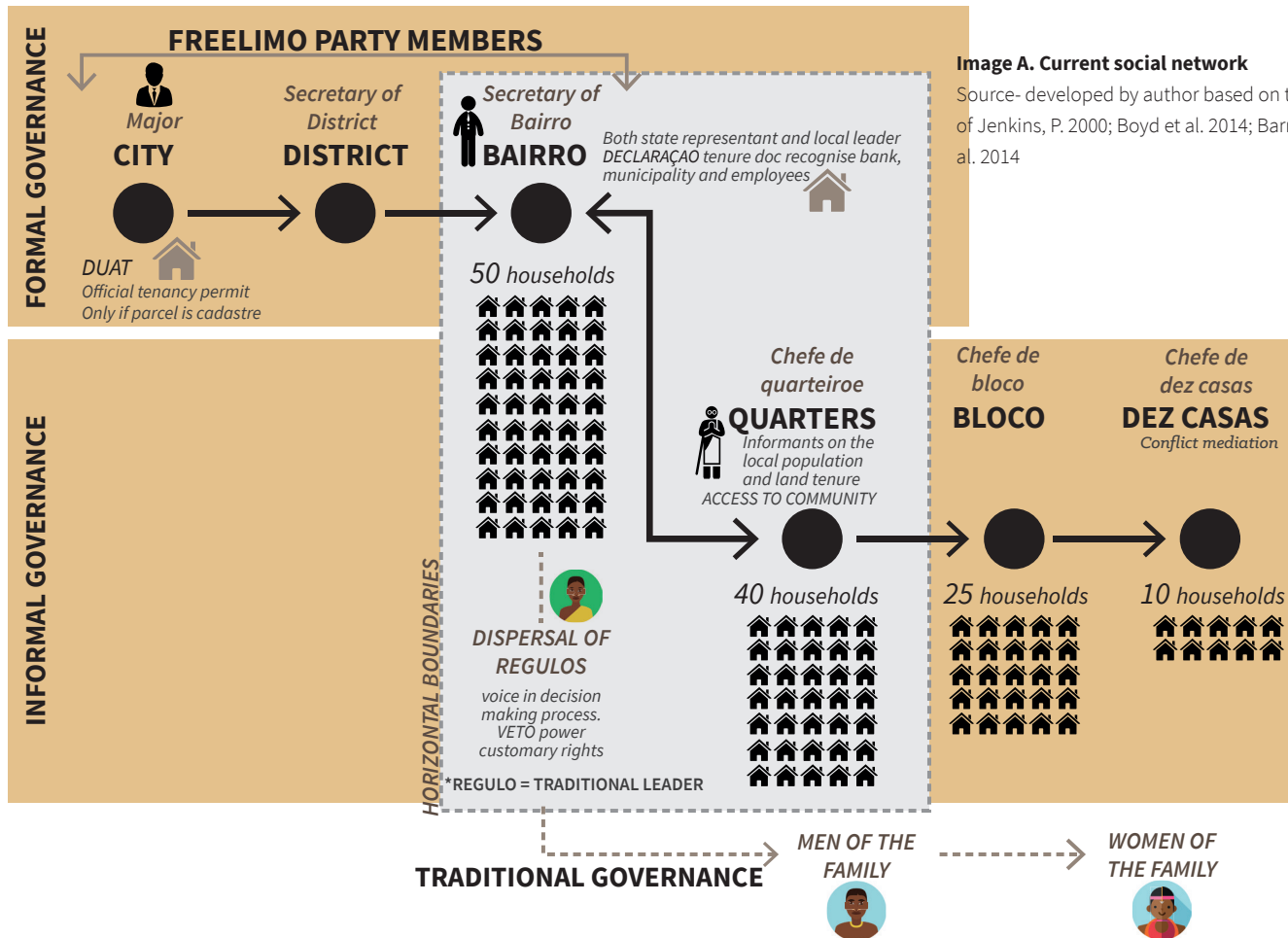
Image A. Current social network

Source- developed by author based on theory of Jenkins, P. 2000; Boyd et al. 2014; Barros et al. 2014

FORMAL GOVERNANCE

FREELIMO PARTY MEMBERS

Major
CITY

DUAT
Official tenancy permit
Only if parcel is cadastre

Secretary of District
DISTRICT

Secretary of Bairro
BAIRRO

Both state represenant and local leader
DECLARAÇAO tenure doc recognise bank,
municipality and employees

50 households

INFORMAL GOVERNANCE

HORIZONTAL BOUNDARIES

DISPERSAL OF REGULOS

voice in decision
making process.
VETO power
customary rights

*REGULO = TRADITIONAL LEADER

Chefe de quarteiroe
QUARTERS
Informants on the
local population
and land tenure
ACCESS TO COMMUNITY

40 households

Chefe de bloco
BLOCO

25 households

Chefe de dez casas
DEZ CASAS
Conflict mediation

10 households

TRADITIONAL GOVERNANCE

MEN OF THE FAMILY

WOMEN OF THE FAMILY

E. POLICY RECOMMENDATIONS -

The strategy in large scale related to the Moamba airport proposes the moving of the current airport next to the city of Moamba and an urban development of the current Maputo International airport. The proposal of policies for this strategy will be, therefore, divided in: [1] Maputo International Airport, [2] New Moamba urban area, [3] New industrial area, [4] Mobility strategy and [5] Guided occupation techniques.

[1] MAPUTO INTERNATIONAL AIRPORT

The movement of the airport will be leaded by a sustainable industry in order to reuse as much as possible the current infrastructures and consolidating the free space.

-The future use of the airport area need to substitute the old function of the airport and therefore provide a similar daily people flow that serves the community surrounding the airport to survive. There are several big scale programs that could be applied in this area, according to the future national policies and PEUMM 2008 of the cities of Maputo and Matola, some of the proposed uses could be: University campus, which consolidate the current Eduardo Mondlane University and improve its facilities and conditions, currently spread around the city of Maputo. This program will entail housing

policies and residential areas specifically for the students. The development of an industrial park to include the new industries related with the core strategies. Finally, one of the main national policies relates to the technological advances in the area and the necessity of including new approaches for the improvement and present an international image of MMA.

-The development of the area outside this specific use will be in high density with a maximum of 4 heights to prevent from the need of an expensive maintenance. One of the conclusions of the interviews during the field trip has been the lack of proper maintenance in the high building in the city center of Maputo that force their inhabitants to use the stairs until the 25 floor. These areas will be developed by private investments on their majority, although the proposition should align with the strategy sustainable urban development framework

[2] NEW MOAMBA URBAN AREA

The new airport will be constructed under sustainable techniques and will increase the industrial production of the MMA. There are several circular economy policies that could help to commit this proposal.

-The current urban layer in the proposed area of expansion should be included in the future urban plan for the area and densified. The proposal is divided in phases and the priority area, related to the N4 and the new airport, should consist on

the densification of the current rural areas located inside the proposed area and the development of new areas

-The new areas development will present an inclusive planning where there is space for private developers, guided occupation strategies and social housing percentages. In the case of the private developers, it is essential to produce a financial return to the investment in The Corridors strategy, therefore there is scope for proposing contextualized urban plans.

[3] NEW INDUSTRIAL AREA

There are two kinds of industrial development, based in the national strategy proposal of sustainable industrialization that was based in the following concepts:

The report proposes an industrialization process as principal guide for an inclusive and sustainable development model. The proposed industrialization process is fully described in the report. The base main industrialization pillars are: development of human capital, development of infrastructures, research innovation and technological development and organization of the institutions. Strategies to accomplish the industrialization process 1- Appropriate technology 2- Training process of the national workforce 3- Extension of agro-ecological areas 4- New industrial areas along development corridors 5- New infrastructures and support services

- Industry related to the core strategy 2: of committed industrial development, such as the privatization of the garbage system to improve the system in a national scale and include the newest technologies in the area of development.

- Industry related to the sustainable ways of construction: due to the large scale of the development intervention, there will be need for the creation of an industry that will provide the construction necessities for the strategy introducing sustainable methods of development.

[4] MOBILITY

There is a parallel strategy to provide a hierarchy of roads in relation to the reallocation of the airport and the creation of new industrial areas and a new node in the current airport area. This hierarchy will strengthen the role of the N4, infrastructure that connects South Africa with the three strategies of this thesis.

[5] GUIDED OCCUPATION

Within the context of 'non conventional' housing policies, there are those to prevent the spread of informal urbanization trend in new developments within the context of developing countries. The progressive housing strategies present a low first investment profile and allow the gradual development as soon as the agents involved acquire the resources.

The Moamba airport strategy introduce approaches of guided occupation, which suppose the lowest step in terms of initial costs and the one that covers a bigger amount of population. This strategy is defined by Gesto, B (2015) as:

"A Guided occupation is a housing policy in which the population gain access to plots without services in an organized way, where they will build their own dwelling in a progressive way, as well as the gradual access to the infrastructures and services, according to the economic capacity of the diff erent agents involved, especially the inhabitants and the public sector. It relies on a previous planning by a local or estate authority, even if during the occupation there can be a lack of services and infrastructures. It belongs to the named 'progressive housing policies' that understand the dwelling as a process instead of an object."

The value of this strategy relies on the approach of prevent the creation of new informal settlements in those contexts where there is a clear trend of informal urbanization. It's a strategy that looks into the future of the area understanding the current reality of the area.

This approach has been successfully implemented in South American contexts such as Trujillo or Huascar in Peru. These examples in this annex in the section of do's and donts.

F. POLICY RECOMMENDATIONS -

EVALUATION OF CURRENT PLAN

The current urban plan proposed for Katembe in the close future presents several interesting qualities:

- Connectivity improvement with Ponta do Ouro

- New connection with South Africa through the N4

- Rapid access to Maputo through the bridge

- Basic infrastructure inclusion for the area. Aim for a proper urban planning.

- Acknowledgment of the touristic potential of the area.

- Phasing approach

- Extension of the Katembe port linked to Maputo port

However, there are several aspects to think about that could be interesting to include in the proposal in order to enhance its final outcome and its sustainable profile. These have been added to the evaluation map although further research must be conducted to pro- pose a final urban plan for the idea that

fully commit with the aspects that need to be implemented:

-Respect the current natural spaces, as reflected in the core interventions of the general strategy. They will receive a specific program to avoid their categorization as areas where the urbanization is allow, as well as the informal sprawl occupation on them.

- Represent the dynamics of the area with the hierarchy of roads and the creation of a city center. The ministries will be moved to Katembe from Maputo and located in the city center. It is essential to define the future role of Katembe in relation to the city of Maputo. Is it going to be a dormitory area or a parallel node?

- Include as an active part the current population of Katembe. In the decision process and the spatial design of the plan.

- Increase the touristic potential of the area by the use of natural spaces and the urbanization related to the coasts and the maritime port.

- Incentive the industry in relation with the new connections but locating them in areas where the natural spaces can not be damaged.

- Reduce the scale of intervention by prioritizing the public transport which demand higher densities (keeping the 4 floors

height maximum to prevent the necessity of elevators that require maintenance).

- Understand the informal trend of urbanization that guided the urban development of Maputo and Matola and propose areas preserved where a guided occupation can take place. As well as facilitate spaces for informal economy activities. "The Corridors" strategy might be applied in the area of Katembe as well when the informal growth of the city take place. Under the approach of guided occupation (explained in the previous section J.5) there is scope for separating the informal city from precarious living conditions and introducing a new way of development.

02|

COLLAGE OF INNOVATIVE POLICIES

Responding to **informality through planning and governance**...*by UN-Habitat*

Planning tools for regularization and upgrading of informally developed areas...*by UN-Habitat.*

5 stage program to bridge the gap between formal and informal economies...*by Institute of Liberty and Democracy*

Working with **informal economic actors** to manage public space and provide services...*by UN-Habitat.*

Inclusive urban planning... *by Martha Chen*

The three prongued approach...*Sustainable urban development for Africa, UN-Habitat*

Contemporary approaches to **linking spatial planning to urban infrastructure**...*by UN-Habitat.*

Regulatory policy framework for **informal economies and complementary development policies**...*by Frederico Nieto, Yejin Ha and Ananda Weliwita.*

Institutional incentives for sustaining **small-scale infrastructure**...*by Elinor Ostrom et al.*
Institutional incentives for sustaining **large-scale infrastructure**...*by Elinor Ostrom et al.*

Responding to informality through planning and governance

RECOGNIZE

The role of the informal economy and the specific identity of Mozambique

PROPOSE CHANGE

Policies, laws and regulations that are obsolete or don't work properly

STRENGHTEN

The legitimacy of planning system to reduce informality by strenghten of planning tools and governance approaches

Planning tools for regularization and upgrading of informally developed areas

Contemporary approaches to linking spatial planning to urban infrastructure

STRATEGY M. THE CORRIDORS

STRATEGY L. CATEMBE BRIDGE

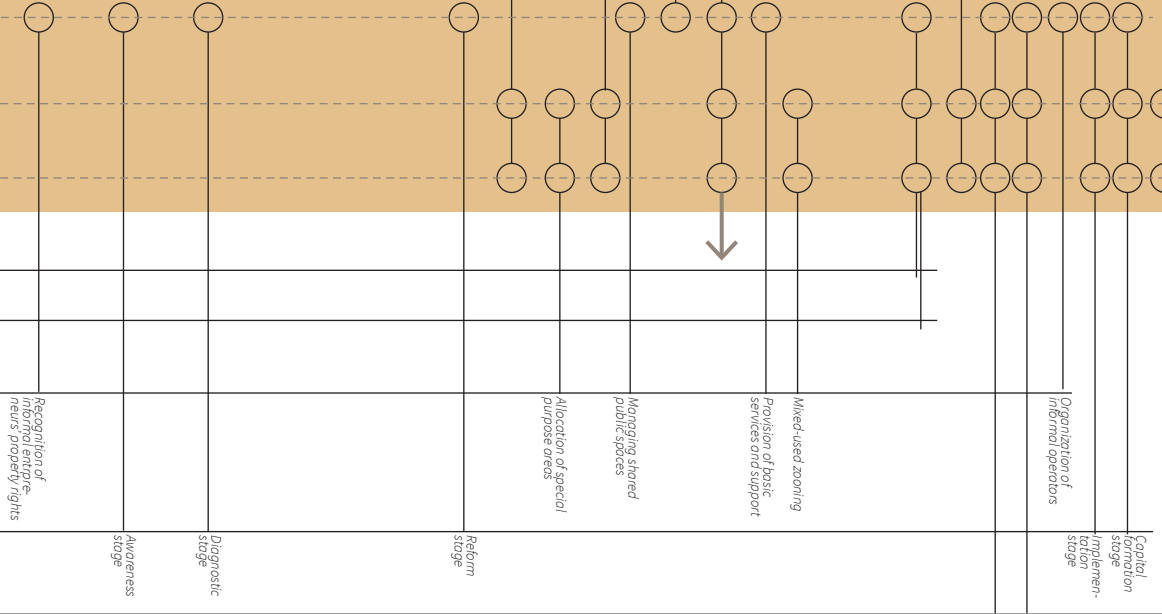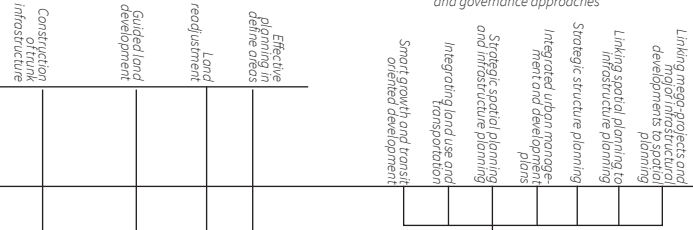**STRATEGY L. MOAMBA AIRPORT**

Adaptive governance approach - theory paper

Inclusive urbanism

Working with informal economic actors to manage public space and provide services

5 stage programme to bridge the gap between formal and informal economies

Institutional incentives for sustaining small and large scale infrastructure

Construction of trunk infrastructure

Guided land development

Land readjustment

Effective planning in define areas

Smart growth and transit oriented development

Integrating land use and transportation

Strategic spatial planning and infrastructure planning

Strategic structure planning

Integrated urban management and development plans

Linking spatial planning to infrastructure planning

Linking mega-projects and major infrastructural developments to spatial planning

Recognition of informal entrepreneurs property rights

Awareness stage

Diagnostic stage

Reform stage

Allocation of special purpose areas

Managing shared public spaces

Provision of basic services and support

Mixed-used zoning

Organization of informal operators

Implementation stage

Capital formation stage

organization of beneficiaries

invest in general institutional facilities

increasing the competitiveness of both providers and producers

72 - Collage of innovative policies

Responding to INFORMALITY THROUGH PLANNING AND GOVERNANCE

extracted from...UN-HABITAT.
PLANNING SUSTAINABLE CITIES, 2009

"a process through which urban planning and governance can gradually increase the effectiveness of its responses to informality can be identified. This involves three basic steps: "

01 - RECOGNIZE

02-CHANGE

03-STRENGHTEN
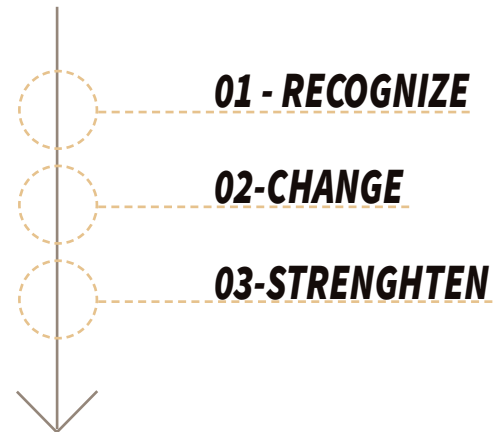
Step 01. recognize

"Recognize the positive role played by informal land and property development and economic activities, and halt official actions that hinder their operations. Responses to informality such as harassment and eviction adversely affect livelihoods,

cause inconvenience to suppliers and customers, and hinder the ability of subdividers, builders, entrepreneurs and service providers to meet the needs of urban residents and businesses."

Step 02. change

"Change policies, laws and regulations. Consider the need and potential for formalization and regularization of economic activities, land supply and housing development, while being aware of the possible disadvantages of doing this, especially for the poor and marginalized social groups, including women. Formalization and regularization need not imply that informal activities must comply with existing standards and requirements, especially if these are inappropriate and impossible to enforce. Instead, adaptation of standards and procedures is likely to be necessary, including recategorizing certain informal practices as legitimate. Justifiable motives for formalization and regularization include the desire to bring occupants and enterprises within the municipal tax net in order to generate revenue to improve services; to improve construction, health and safety standards; and to safeguard environmentally sensitive areas. Appropriate tactics can include strategic enforcement of regulations in areas where risks to the public are greatest and the adoption of differentiated regulations, which are appropriate to the income levels and needs of particular areas or sub-sectors of the informal economy. Interventions should be guided by the following basic principles:

– interventions restricted to the minimum necessary to safeguard the public;
– incremental improvements, through step-by-step changes in standards, tenure arrangements and services, requiring a flexible approach on the part of official agencies;
– methods for developing policy, preparing plans, and day-to-day management based on participation, mutual learning and cooperation between public agencies, NGOs and informal actors; and
– formalization and regularization through a mixture of incentives and enforcement."

Step 03. strenghten

"Strengthen the reach and legitimacy of the planning system to reduce the extent of informality. For planning and regulation to be effective, it must gain widespread support from informal actors, politicians, residents and businesspeople. For such support to increase, each stakeholder must perceive the benefits of planning and regulation to outweigh the costs. This can be achieved through a combination of the selective use of limited planning resources to achieve impact, approaches that do not undermine the positive contribution made by informal activities, and strategies to educate citizens on the role and benefits of planning."

PLANNING TOOLS

for regularization and upgrading of informally developed areas

v from...UN-HABITAT.
PLANNING SUSTAINABLE CITIES, 2009

*Influencing development actors by strategic use
of planning tools.*

A|Construction of trunk infrastructure

*"This can be used to attract investment to preferred locations
– for example, increasing the attraction of secondary centers
within extended metropolitan regions in order to reduce con-
gestion in the core city by improving links between them. Such
investment can be used to encourage development in planned
directions and to generate revenue for public investment.
However, without proper planning of new development and
complementary policies, the outcomes may primarily benefit
large-scale investors and developers and high-income house-
holds."*

B|Guided land development

*"Planning in advance of development is preferable and more
efficient than regularization. Where planning capacity and
resources are limited, attempts have been made to ensure an
adequate supply of land for expansion by guided land develop-
ment. This requires an outline strategic plan that identifies the
main areas for phased urban expansion, including industrial*

* https://unhabitat.org/books/global-report-on-human-settle-
ments-2009-planning-sustainable-cities/. UN-Habitat (2009). Planning
Sustainable Cities: Global Report on Human Settlements 2009. Global
Report on Human Settlements. UN-Habitat. NAIROBI.

areas and the location of urban commercial centers; reserves sites for major public facilities such as universities or secondary schools; protects the areas of greatest environmental significance; and is linked to a program of major infrastructure investment, especially main roads, drainage and water supply. For example, it has been suggested that expansion areas sufficient for 20 to 30 years ahead should be identified and defined by a grid of secondary y roads 1km apart, or within a ten-minute walk of ever y location for access, public transport and main infrastructure provision. Adaptations to the grid can be used to accommodate topography and steer development away from unsuitable areas."

C|Land readjustment

"The first challenge for public authorities is to assemble the land and finance for infrastructure investment and acquisition of sites for major public facilities. In many cities, there are no longer extensive areas in public ownership and public agencies must work with private or customary owners and private developers, both formal and informal, to ensure that phased development occurs.
Land readjustment is a market-led approach that provides plots for middle- and upper-income housing – it rarely provides low-income housing. A few examples of public–private partnerships for subdivision to produce low-cost plots are available, although much more experimentation is needed.
One innovative way of financing infrastructure is through

transferable development rights, in which a certificate is issued to the owner who cedes land, which can be traded for a roughly equivalent land area or floor space in the new building, or sold to a developer who may be able to use it to build additional floor area above the standard floor- space index.
Partnerships with informal or low-income landowners or groups are unlikely to work if unrealistic standards and cumbersome procedures are imposed. Flexible attitudes to standards and participator y approaches to decision-making by planners and other professionals are therefore essential. Emphasis should be on 'working with' those who provide large volumes of affordable land and housing, through advice and advocacy rather than heavy-handed regulation."

D|Gradually extending effective planning in defined areas

"In low-income and many middle-income countries, limited governance capacity and lack of support for planning and regulation limit what conventional planning and development regulation can achieve. Before detailed planning and development control can be successfully applied to all development, there is a need to demonstrate that the benefits outweigh the costs to landowners and developers. It can be argued that limited planning and financial resources are best used by concentrating efforts on the public realm and areas where development has major environmental and safety implications, while limiting intervention, especially detailed development regulation, in other

areas, particularly middle and low-density residential areas.
Areas of concentration include city and town centers, special
economic zones, industrial estates, environmentally import-
ant or hazardous areas, and major buildings used by large
numbers of people such as shopping malls, cinemas, meeting
halls and schools. In urban expansion areas, much subdivision
and construction would not be subject to detailed regulation.
Planners can, however, work with developers in these areas
when opportunities arise and resources permit, either through
regulation or through advocacy and advisory work, to encour-
age good layout planning and compliance with basic stan-
dards. Not only does this selective response mean that planning
resources are available for strategic planning for the city as a
whole, but it can also be used to build developer and public
support for planning."

Working with **INFORMAL ECONOMIC ACTORS** to **manage public space and provide services**

extracted from...UN-HABITAT.
PLANNING SUSTAINABLE CITIES, 2009

"Innovative approaches are based on an acknowledgment of, first, the important contribution that informal activities make to the urban economy and their vital role in household livelihoods, and, second, the right of informal entrepreneurs to operate in the city."

A|Recognition of informal entrepreneurs' property rights

"As with informal land and housing development, public agencies all too often harass and evict enterprises to restore physical order, enforce health and safety regulations or serve the interests of formal entrepreneurs who regard informal operators as competitors.
The right of entrepreneurs to operate in the city should be recognized, the property rights they already have respected, and improved property rights negotiated. This may be done through managing the use of urban space and an appropriate regulatory system, as discussed below."

B|Allocation of special purpose areas

"City authorities which accept that forced eviction fails to recognize the positive contribution made by informal operators often attempt to remove them from areas zoned for other uses, land unsuitable for development or public spaces to sites designated

* https://unhabitat.org/books/global-report-on-human-settlements-2009-planning-sustainable-cities/. UN-Habitat (2009). Planning Sustainable Cities: Global Report on Human Settlements 2009. Global Report on Human Settlements. UN-Habitat. NAIROBI.

for markets or industrial estates. Relocation to planned areas is frequently associated with enforced compliance with official licensing and other regulatory requirements. This rarely works well. Planned markets are often less well located and are unpopular with both vendors and customers, relocation disrupts established economic networks, and the increased costs associated with relocation to planned markets or industrial areas, or licensing and regulation may threaten the viability of informal businesses.

In some cases, however, it is desirable and feasible to provide dedicated spaces for informal economic activities in markets and industrial areas. Markets are successful where their location, the facilities provided and the management arrangements are agreed by trader organizations and the public authorities. Often historic market sites or markets developed informally on undeveloped land are the most economically viable and successful. Regularization and upgrading are the most appropriate approaches in these situations.

Traders are generally willing to pay license fees or user charges if they feel that they are getting good value for money (e.g. in the form of security of tenure, access to water and sanitation facilities, and public transport access). Once markets are recognized, services may be provided by the market association independently or in collaboration with the municipal government."

C|Managing shared public spaces

"Informal operators, especially vendors, commonly share public space with other users, especially vehicles, cyclists and pedestrians. Because of their dependence upon passing customer traffic, they are reluctant to relocate. Often, innovative solutions can be devised to ensure access to civic spaces by both traders and other social groups. The aim should be to clarify the rights of users of public space in order to give vendors more security of operation, while safeguarding health and safety.

The absence of a regulatory environment can be as costly to informal operators as excessive regulation, so regulation is needed; but it should be streamlined to increase the likelihood of compliance. The incentives to comply must at least balance the costs of doing so.

If licenses are tied to a particular location, traders have an incentive to promote good management of the area, while membership of an association provides traders with a means of expressing voice and negotiating with municipal councils."

D|Provision of basic services and support

"Informal operators are both users and providers of basic services. Whether located in designated areas or shared public space, the provision of services to informal operators (e.g. electricity, water and sanitation) can support their operations, increase the likelihood of compliance with official hygiene standards, and improve the working environment for the operators themselves.

An important element of a comprehensive approach to formal service provision is to work with informal operators through

licensing, capacity-building, the enforcement of appropriate regulations and the development of alternatives when current livelihoods are damaged by policies.

The provision of business support technical assistance also needs to be considered when developing responses to informal economic activities. Such support services are likely to include savings and credit arrangements, and technical assistance to realize productivity gains."

E|Mixed-use zoning

"Many informal economic activities, especially those of women, occur within residential areas and buildings. Often, conventional plans are based on single-use zoning and mixed uses are forbidden.

In many countries with effective planning systems, the limitations of single-use zoning have long been realized, and more emphasis is now placed on mixed uses to produce vibrant and convenient living environments.

However, extending effective planning and building control to home-based enterprises and mixed-use areas in low-income countries is unlikely to be feasible for some considerable time."

F|Organization of informal operators

"Effective organization enables informal operators to interact effectively with public agencies and strengthens their own ability to solve problems. It provides a channel through which their needs and priorities can be identified and presented to public authorities and appropriate approaches negotiated.

In summary, it is clear that for approaches to work well, local governments need to develop a good understanding of the economics of informal enterprise operation, adopt a flexible approach to the management of urban space and regulation of operators, and be prepared to use participatory and collaborative approaches to policy formulation and day- to-day management.

The key elements of policy to facilitate and manage informal enterprises include:
• supportive regulation and licensing;
• modest financial contributions by operators to pay for regulation, space allocation and management and services;
• traffic, public transport and road management;
• planning and design of civic spaces;
• provision of sites for markets and small producers in appropriate locations;
• provision of basic infrastructure and services;
• encouragement of traders' associations;
• municipal capacity-building to improve understanding of the economics and operation of informal trade;"
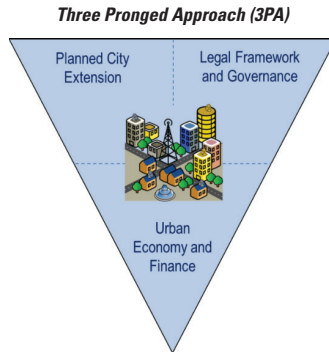
INCLUSIVE URBAN PLANNING

"International Labour Organization estimates suggest that half or more of the urban workforce in developing countries operate informally."

"Most urban informal workers are linked in some way to the formal economy: buying from or selling goods to formal firms, selling goods for formal firms on a commission, or selling goods to individuals who earn their living in the formal economy."
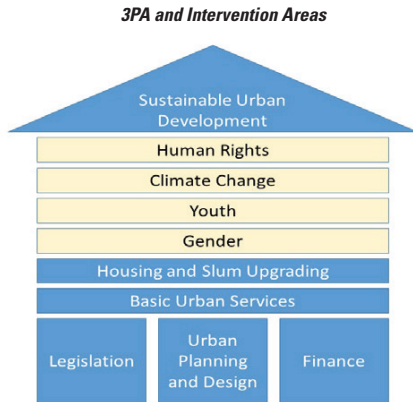
*"Urban planners and municipal officials should acknowledge that the **urban informal workforce is here to stay**, that it contributes to the city economy in many ways (creates employment, produces and distributes goods and services at affordable prices), and that reducing urban poverty is not possible without supporting the working poor in the informal economy. Second, they should **promote inclusive urban planning**, including participatory planning processes, to address the key constraints and needs of different categories of urban informal workers. Third, they should **recognize the right of urban informal workers to live in central urban areas and provide basic infrastructure**."*

"inclusive urban planning is not only desirable but also feasible."

* Chen, M 2007. Inclusive urban planning. Forum Habitat Debate 13(2): 6

Three Pronged Approach (3PA)

Planned City Extension

Legal Framework and Governance

Urban Economy and Finance

Source: UN-HABITAT (2015)

3PA and Intervention Areas

Sustainable Urban Development

Human Rights

Climate Change

Youth

Gender

Housing and Slum Upgrading

Basic Urban Services

Legislation | Urban Planning and Design | Finance

Source: UN-HABITAT (2015)

* UN-Habitat. (2015). Sustainable urban development in Africa.

THE THREE PRONGUED APPROACH

extracted from... UN-Habitat. (2015). Sustainable urban development in Africa.

This theory was a compliment for the theoretical framework of sustainable urban development of this thesis. Section E07.

"The three-pronged approach places emphasis on three principles: urban legislation, urban planning and design, and urban fnance and economy. These three principles are seen as levers for transforming cities and human settlements into centers of greater environmental, economic and social sustainability. The first principle is 'Planned Urban Design'. The areas of spatial layout, design of the open space, and the importance of a well planned street pattern are essential for sustainability in the long run. The second principle is "Rules and Regulations". Rules and regulations have the power to shape the form and character of the city. Within this principle, three specific areas are of essence: regulation of public space, building rights, and building codes which regulate the quality and standards of buildings. The quality of public space is what is ultimately going to determine the quality of the rest of the city. The third principle deals with "Economy and Municipal Finance". Basic concepts such as proper financial management and sustainable revenues such as land value capture, private participation in local investment, property taxes, titling, should be incorporated in the financial plan from the start. The 3PA recognizes that urbanization is a powerful tool for transforming production capacities and income levels in developing countries. Also the challenges experienced by cities and human settlements today like youth unemployment; social and economic inequalities; unsustainable energy consumption patterns; urban sprawl; and increasing emissions of greenhouse gases are often caused by inadequacies in urban legislation, design, and financial systems."

Regulatory policy framework for informal economies and complementary development policies.

extracted from...NETO, F. HA, Y. & WELIWITA, A. 2007. The urban informal economy - New policy approaches. Forum Habitat Debate 13(2): 4-5. About the final report, *Innovative policies for the urban informal economy* (UN-Habitat 2006)

"Complex and stringent regulatory requirements on the establishment and operation of micro enterprises have contributed to the growth of the informal economy, notably in developing country cities."

"The above-mentioned UN-HABITAT report proposes a menu of regulatory and incentive policy options focused on two broad objectives: (i) the formulation of an appropriate regulatory and policy framework to set up and operate businesses and (ii) complementary developmental policies required to maximize the benefits of streamlined regulation. It is clear that appropriate regulation must combine with developmental interventions to maximize the economic benefits of regulatory reform. The proposed policy options can be summarized as follows:

(i) Appropriate regulatory framework and policy

- Measures to ensure simpler registration, operation and reporting procedures;
- Greater policy coherence and harmonization at national and municipal levels;
- Differentiated regulatory and incentive measures specifically

* UN-Habitat (2006). Innovative Policies for the Urban Informal Economy. Nairobi.

* Neto, F. Ha, Y. and Weliwita, A. 2007. The urban informal economy - New policy approaches. Forum Habitat Debate 13(2): 8

targeted on different segments of the informal economy;
- Proactive measures to provide advisory support to informal operators and businesses.

(ii) Complementary development policies

- Improved access to workspace, markets and urban infrastructure;
- Improved property rights and security of tenure;
- Better access to credit and finance;
- Enterprise development and capacity building;
- Reduced tax burden, including municipal fees;
- Policies to promote macro-economic stability and urban economic development.

This proposed policy framework is not meant to be a "one-size-fits-all" strategy, as any practical policy must be context-specific and take into account the unique urban (and national) socio-economic dynamics."

5-STAGE PROGRAM

INSTITUTE OF LIBERTY AND DEMOCRACY
extracted from...FORUM HABITAT DEBATE,
2007. 13(2):8

"Comprehensive approach to bridge the gap between the informal and formal economies that exist in many countries"

"Awareness stage"
makes the integration of the poor and their assets a top priority on the government's agenda.

"Diagnostic stage"
"analyzes the problem and determines its causes"

"Reform stage"
"by using extra-legal practices as a basis, eliminating institutional obstacles and generating consensus and feedback among stakeholders. This stage concentrates on designing laws that are applicable to all citizens."

"Implementation stage"
"Puts the reforms approved into practice."

"Capital formation stage"
"Establishes the bases for the development of new products and government actions."

* http://www.ild.org.pe. Summary from Camaiora, Ana Lucia 2007. Legalizing property rights - unleashing the economic potential of the urban poor.Forum Habitat Debate 13(2): 8

Contemporary approaches to **LINKING SPATIAL PLANNING TO URBAN INFRASTRUCTURE**

extracted from...UN-HABITAT.
PLANNING SUSTAINABLE CITIES, 2009

"While the detailed and static land-use planning associated with tradi-tional master planning has generally been discredited, and there are questions as to the relevance, feasibility and possible influence of large-scale city-wide spatial planning, strategic spatial planning that is able to give direction to major infrastructure development is an important part of the new approach to planning."

A|Smart growth and transit oriented development

Smart growth supports the intensification of urban develop-ment and attempts to limit growth beyond the urban edge. It encourages increases in density; mixed-use and cluster devel-opments; a variety of housing types beyond detached units; protection of open space, agricultural lands and ecologically sensitive areas; the reduction in use of private and motorized forms of transport; the promotion of public transport systems; and the design and redesign of areas to support such use. Mechanisms to promote such growth include both regulations and tax incentives, but also rely on urban plans linking land use, transport and other aspects of infrastructure development. Transit-oriented development occupies an important place within the smart growth movement. It posits the restructuring of regions towards greater use of public transport by improving or creating light rail or rapid bus transport systems, and gener-

* https://unhabitat.org/books/global-report-on-human-settle-ments-2009-planning-sustainable-cities/. UN-Habitat (2009). Planning Sustainable Cities: Global Report on Human Settlements 2009. Global Report on Human Settlements. UN-Habitat. NAIROBI.

ating dense mixed-use nodes around transit stations. Retail, public facilities and office and other work spaces are created around these stations, along with relatively high-density residential development, within a radius of 400m to 800m. The intention is to create human-scaled, walkable spaces, encouraging the use of public transport.

Successful implementation therefore requires consistent policies between plans at various levels, and the coordination of various methods and agencies. Critics argue that while many cities have adopted forms of transit-oriented development, it is often implemented in narrow and partial ways.

Whether these concepts have purchase in developing country contexts is open to debate: both smart growth and transit-oriented development depend upon high levels of coordination and integration, as well as consistent programs and policies. These conditions may be difficult to achieve in contexts where administrative capacity and finances are scarce, and there is a dominance of political decision-making. Concepts of smart growth and transit-oriented development also need to be carefully adapted to local contexts and to be based on an understanding of conditions there.

B|Integrating land use and transportation

While transport is generally acknowledged to be the key element of infrastructure shaping urban form, and the importance of linking land-use and transportation planning is widely accepted, the links between the two are often poor. In part, there are varying discourses and logics of these forms of planning and institutional divides, and the traditional modeling approaches often used by transport planners were subject to many of the criticisms of large urban models: overly comprehensive and data hungry, too aggregated to be useful and too distant from actual behavior. More recent models, using more sophisticated technology, geographic information systems (GIS), and new theoretical approaches enable a better understanding of transport–land-use relationships, but remain very data intensive, and are still moving towards usefulness in policy terms.

C| Strategic spatial planning and infrastructure planning

Integrated approaches linking land- use and infrastructure planning, funding and delivery are relatively recent; but early findings from these initiatives suggest the importance of a well-supported long-term strategic plan leading the process. The involvement of a wide range of stakeholders is key to the development of a shared and consistent approach; but the plan itself also needs to be based on credible analysis and understanding of trends and forces. The strategic plan identifies the expected economic base, drivers for change and major factors affecting the spatial distribution of population, employment and services. It considers the influence of technology and social change on patterns of development, and on the demand for services and infrastructure. Plans, however, cannot be old-fashioned master plans. They require regular review, consideration

of sequencing, reinforcing funding and pricing, and institutional coordination. The importance of internal champions and special agencies for coordination are stressed. Although several plans attempt to coordinate across a range of sectors, it is argued that transport/land-use links are crucial, and that other forms of infrastructure can follow.

D| Integrated urban management and development plans

A movement towards integrated urban management and development plans was based on the argument that 'unless an integrated and holistic approach to urban development and infrastructure development planning is applied, the current sectoral and segmented planning and urban management practices will continue to result in haphazard and unplanned development'. Proponents argue that while the logical route is for government to plan for future development, acquire land and provide bulk/mainline infrastructure, which then provides the framework for the private sector to subdivide and connect to services,

One influential approach arose from action planning and proposed the development of strategic structure plans focused on guiding urban infrastructure development in combination with multi-sectoral investment planning. This approach departs from master planning, both in the methodology used for spatial planning and in the strong link to planning for infrastructure investment.

Considerable attention is also paid to institutional and capacity issues, and community consultation is included in the process. Multi-sectoral investment planning is preceded by a 'physical and environmental development plan', which includes a <u>rapid analysis of key spatial and environmental profiles, problems and trends, and then develops scenarios and strategy, and a broad spatial framework for urban development</u>. A long-term view is developed, coupled with a shorter five-year action plan, which links to the multi-sectoral investment planning. The physical and environmental development plan provides a phased program for expansion of the city. This approach excludes detailed land use and zoning, and operates at a broad level associated with structure planning, but with a focus on infrastructure development. Planning for infrastructure needs is linked to the spatial plan so that the multi-sectoral plan includes the location, timing and type of infrastructure development. The intention of spatial planning in this context is to help manage urban growth, particularly through improving the coordination of the supply of infrastructure and facilities in time and space. Recognizing that it is <u>unrealistic to expect spatial plans to replace political decision-making,</u> or to expect a simple movement from plan to implementation, it is argued that the plan nevertheless can be brought into decision-making at various stages. It is not therefore conceived as a single driver or a static plan, but rather provides information and approaches that can be used throughout the development process.

E| Strategic structure planning

These plans provide an integrative framework and a long-term vision of development, based on analysis and engagement with stakeholders and communities, but also a focus on key strategic projects to address immediate problems. Enabling conditions to facilitate long-term success are addressed. This kind of planning does not only focus on infrastructure – rather, it deals with problems in a multifaceted way, but will generally also include infrastructure development and service delivery within localized projects.

F| Linking spatial planning to infrastructure planning

Spatial development frameworks, which provide the spatial component of integrated development plans, are also cast as broad-ranging strategic spatial visions. In reaction to critiques of master planning and blueprint planning, they have tended to focus on indicating the main areas for growth and development, the major 'corridors and nodes' that are intended to structure the city, major areas for intervention, and spaces for conservation. Compact city ideas have been influential, with the intention of concentrating <u>development around nodes and corridors</u>, and containing growth, often through the use of an <u>urban edge.</u>
In part, housing policy has tended to encourage detached units in peripheral locations, in contradiction to plans, and transport policy has not been able to give effect to public transport

systems supporting corridors. Although spatial frameworks avoided the detailed land-use zoning associated with master planning, this nevertheless exists. Decisions on site-level developments – often dominated by the demands of the market, and in many cases in contradiction to spatial plans – exert a powerful influence on spatial form. Housing and private developments have tended to lead, while infrastructure development and spatial planning have followed. Spatial planning has also been too broad and conceptual to give direction to infrastructure planning, which has taken its cues from elsewhere.

G| Linking mega-projects and major infrastructural developments to spatial planning

Finally, it is critical to link mega-projects and major infrastructural developments to spatial planning. Previous sections have shown how these are often contrary to spatial plans and are frequently contributing to fragmented and sprawling developments. Yet, in many instances, mega-projects provide support for long-term planning, and they have proved a powerful driver of urban form in many cities. Such success is often linked with their ability to build cooperation between various sectors and agencies. One major problem with mega-projects is that they are often politically driven and one-off. If political interests take center stage, these may obstruct cooperation between the various stakeholders.

Institutional incentives for sustaining SMALL-SCALE infrastructure

extracted from...Ostrom, E., et al. (1993). Institutional Incentives and Sustainable Development. Infrastructure policies in perspective.

Pespectives and recommendations for design and investment in small scale infrastructures development towards a sustainable urban development approach.

"Consider the general approach that could be used to design small-scale irrigation projects in a developing country. We advise donors and national governments interested in enhancing investments in sustainable, small-scale irrigation projects to invest in the financing and construction of infrastructure projects only when there is firm evidence that those who are supposed to benefit from a facility:

1. Are aware of the potential benefits they will receive
2. Recognize that these benefits will not fully materialize unless facilities are maintained
3. Have made a firm commitment to maintain the facility over time
4. Have the organizational and financial capabilities to keep this commitment
5. Do not expect to receive resources for rehabilitating the facility if they fail to maintain it.

This can be accomplished by investing in infrastructure projects that meet the following conditions:

* Ostrom, E., et al. (1993). Institutional Incentives and Sustainable Development. Infrastructure policies in perspective. United States of America, Westview Press.

1. The direct beneficiaries are willing to invest some of their own resources up front.

2. The direct beneficiaries are willing to pay back a substantial portion of the capital costs (perhaps at subsidized interest and over a long time, if necessary) and to undertake maintenance.

3. The direct beneficiaries are assured that they can:
- participate in designing the project
- monitor the quality of the work performed
- examine the accounts that form the basis for their financial responsibilities
- protect established water rights
- hold contractors accountable for inferior workmanship that is discovered after the system is in operation.

4. The granting agency is assured that:
- Farmers commitments to repay costs will be enforced by appropriate legal action, if necessary.
- Farmers have an effective organization with demonstrated capabilities to mobilize resources, allocate benefits and duties, and resolve local conflicts.

5. All donors and the host government are firmly committed to these principles and will not provide funds to bail out those beneficiaries who fail to perform their responsibilities.

Individuals who are willing to make initial investments to obtain capital goods demonstrate their own recognition of future benefits. Furthermore, the higher the proportion of the capital investment that beneficiaries are willing to repay, the higher the likelihood that these beneficiaries are not seeking rents but

rather are attempting to make economically sound investments to enhance productivity. If the infrastructure is really going increase the well-being of the supposed beneficiaries, they will have increased resources to devote to repayment in the future. Furthermore, if they know that they have to repay capital costs, the beneficiaries are likely to insist (if they have the institutional autonomy to do so) that the project has a high likelihood of producing net benefits in the future. Under these conditions, donors or national government funds are thus enhancing projects that the beneficiaries believe are of real value.

This means that direct beneficiaries or their representatives must be involved in the design and financial planning of an infrastructure producing highly localized benefits and that they must have the right to say no to a project that they do not think worthwhile. If they cannot say no, they cannot make a commitment that is considered binding because they can always assert that they were forced to agree. In addition, to make enforceable commitments, the beneficiaries need to be

- organized in a legally recognized form prior to the creation of financial and construction arrangements; beneficiaries can then participate in the design and financing of the project, as well as in the approval of a contract to eventually assume ownership of the facility and responsibility for its maintenance
- confident that government officials are also making enforceable contracts -that beneficiaries can hold public officials accountable, as well as being held accountable themselves
- assured that future conflicts over contract enforcement will be

resolved fairly and that impartial conflict resolution arenas exist if needed

The policy implications of our analysis in regard to small-scale infrastructure projects relatively straightforward:

- encourage the beneficiaries to organize themselves into provision units that can mobilize resources to acquire ownership of small-scale infrastructure over time and assume full responsibility for operation and maintenance
- invest in general institutional facilities that enhance the capabilities of such provision units

Some readers may respond we are simply recommending privatization. Such an observation, however, does not capture the essence of our analysis. Strictly private provision involves individuals or family units interacting with firms to finance, design, construct, operate and maintain a facility. In Chapter 6, we examined both simple and differentiated market arrangements involved in an investment in housing. Such arrangements can appropriately be called private or market arrangements. However, if a simple or differentiated market is to function efficiently or fairly, there must be clearly demarcated property rights, fair and low-cost court systems, and effective police systems to enforce these rights. Thus, public institutions play a crucial role in the operation of markets in the so-called private sector. When groups of beneficiaries organize to provide a joint benefit by assuming mutual obligations for resource mobilization and

for joint decision making, some type of governing authority must be created to ensure that these mutual obligations are met. Such an authority is often created even if the organization technically remains a private, rather than a public one."

Institutional incentives for sustaining LARGE-SCALE infrastructure

extracted from...Ostrom, E., et al. (1993). Institutional Incentives and Sustainable Development. Infrastructure policies in perspective.

"Pespectives and recommendations for design and investment in large scale infrastructures development towards a sustainable urban development approach."

"The task of enhancing investments in facilities like roads that yield benefits to a set of less easily identifiable beneficiaries scattered over a larger spatial area is much more difficult. It is further complicated by the fact that the benefits generated by the road that are enjoyed by any one individual are often quite small relative to the benefits enjoyed by the set of all road users. Even when the principal beneficiaries are local residents, the incremental benefit of decreased transportation costs for a single user may be small enough to substantially weaken the individual's incentives to contribute to road improvement efforts. Under these circumstances, it is difficult to rely on efforts by individual or small groups of consumers to maintain a road.
Our advice to donors and national governments facing such conditions is similar to that given earlier: Opportunities to assist in such an investment should be foregone until there firm evidence that the intended beneficiaries will contribute substantially toward the costs of developing and maintaining this investment. However, in this instance, it is much harder to specify a set of principles that should guide project design. There are several reasons for this.

* Ostrom, E., et al. (1993). Institutional Incentives and Sustainable Development. Infrastructure policies in perspective. United States of America, Westview Press.

When the beneficiaries of a road project form a large, relatively amorphous group, mobilizing and allocating resources to forestall free riding is extremely difficult. The relatively small observable benefits currently enjoyed by local residents as a result of maintenance efforts may make it difficult to rely on contributions of in-kind resources to finance maintenance. Instead, monetary resource mobilization instruments are likely to be necessary. But monetary instruments commonly entail considerably greater opportunities for rent-seeking activities and the possibility of corruption. Furthermore, the services generated by rural roads are such that charges directly linking payment with benefits received may well be impossible to implement; instead, broader resource mobilization tools must be used. In such cases, the degree of accountability that can be exercised by beneficiaries over service provision is minimal. This suggests that increased accountability of the actors involved in the provision and production of road services is a key to improved sustainability. In this regard, we concur fully with Harral and Faiz (1988:32) in their review of road deterioration in developing countries, where they concluded that "inadequate maintenance in developing countries has various cases, but only institutional failure can explain the extent of the inadequacy. At the heart of this failure is the absence of public accountability. All activities to strengthen institutions, enhance incentives, and improve the internal workings of road agencies should judged by their ability to increase accountability"
We do not presume to have the solution to the accountability problem, but we do believe that the approach to institutional analysis proposed in this volume is suggestive. At the heart of any institutional reform must be a concern for increasing the competitiveness of both providers and producers and ensuring that commitments are credible.

First, with respect to the provision of facilities like roads, provision units should be organized in ways that facilitate the communication of preferences between users and providers. Multiple provision units for different types of roads (for example, localized units for minor collector roads primarily serving local residents, larger units for roads connecting market centers, and even larger units for regional highways) permit more efficient preference aggregation.

Again, decisions on funding infrastructure investments should be contingent on the up-front investments by users who are also required to repay at least some portion of the capital costs. But the requirement to repay loans implies, as well, that the provision units must have some general revenue-raisin powers of their own. At the local level, such revenues can be mobilized by using local fees and taxes that reflect the benefits received from having passable roads –property-based levies or local marketing fees, for instance. Where roads are provided by regional or national authorities and predominantly serve motorized vehicles, indirect taxes associated with vehicle inputs such as petroleum and tires are more likely to be feasible. Where such taxes are already imposed by national governments, tax sharing based simply on use-level differences, such as vehicle miles

based on accurate traffic counts, may be most appropriate. Again, specific mobilization techniques must be tailored to the particular situation.

Although local or road provision units must have revenues available to arrange for road services, their commitments must be credible as well. If local units soon learn that deteriorated roads will be replaced through additional grant or loan funds even if they have not maintained them, maintenance is unlikely to be done. This means that the national government must hold them to their commitments; at the same time, the national government must also be credible in its commitment (if made) to transfer revenues to local jurisdictions.

Finally, on the provision side, those who are using and paying for the infrastructure (for example, through indirect taxes on vehicle use-related activities) must have the wherewithal to communicate their preferences to the providers and to hold the providers accountable for their decisions. This requires an open decision making process at all levels in which taxpayers realize that they are contributing resources to support road services and have some ability to influence decisions that affect the quality of those services. Interest groups such as bus and truck owners' associations and even towns or villages served by regional roads must therefore be given the opportunity to voice their preferences in allocation decisions. When multiple groups are allowed to participate in open arenas to determine outcomes and when multiple jurisdictions control decisions about their own revenues for roads, the ability of any single group to secure rents can be limited. Similarly, when public

sector decision makers are forced to compete for their positions, the quantity and quality of services can be expected to rise as these decision makers respond in ways designed to increase their likelihood of remaining in power.

Competition and the ability to enter to into credible commitments are also necessary for effective production of road construction and maintenance services. Again, production contracts are only likely to result in well-built facilities if producers can be held accountable both directly by provision units and as directly as possible by users. Although competition can be facilitated by multiple private organizations, nothing should preclude public bodies or private voluntary organizations from also engaging in the competitive process. [...] The key is that the process is genuinely competitive; the exact legal structure of all units that participate in the surface transportation industry is less important.

The preceding chapters also suggest, however, that the competitive process will work efficiently only if contracts between providers and producers give both parties equal access to independent dispute adjudication services. Contractors must be unequivocally informed that failure to carry out the promised work will result in penalties that will harm them both the present and in the future (through decreased likelihood of winning subsequent contracts). Public decision makers must also recognize that actions on their part that impede the ability of contractors to carry out the promised tasks effectively will also make them liable for some type of penalty or punishment, as determined by an independent judicial body."

"Because the results of inadequate construction or maintenance may not show up for a long time, one institutional device that deserves greater attention is some form of independent insurer that derives small payments from all contractors or even from provision units. In the event of system failures that can be traced to contractor negligence, the insurance company would be held liable. Such an arrangement creates a third body that would find monitoring road service production in its own best interest; it could also act as an independent source of information in helping adjudicate contractual disputes. Thus, as we have emphasized throughout this volume, careful crafting of appropriate institutional arrangements that provide an opportunity for actors to ensure their own best interests can produce results that serve the best interest of all."

03|

SUMMARY OF DO'S AND SO

1.MASTERPLAN OF JOHANNESBURG [DO]

REFERENCE FOR THE CORRIDORS STRATEGY

Source - Todes, A. (2012). Urban growth and strategic spatial planning in Johannesburg, South Africa. CITIES, 29, 158-165.

2.MASTERPLAN OF KINSHASHA, CONGO [DONT]

TO HIGHTLIGHT THE ROLE OF LOCAL LEADERS

Source - Perea, L. (2015). Hacia un análisis cuantitativo de la Ciudad Informal. Una aproximacion desde la Habitabilidad Basica y la experiencia en Makeni (Sierra Leona). UPM. http://oa.upm.es/39873/.
Beeckmans, L. (2010). A critical analysis of the French Urban Planning Missions in Post-Independence Kinshasha. Oase, 82, 055-076.

3. XIKHELENE MARKET CONSOLIDATION [DONT]

THE CONSEQUENCES OF DESTROYING THE INFORMAL CITY

Source - Ulset, A. (2010). Formalization of Informal Marketplaces - A case study of the Xikhelene market, Maputo, Mozambique. oslo university. Retrieved from https://www.duo.uio.no/bitstream/handle/10852/15916/3/ulset.pdf(references for corridors strategy)

4. ALTO TRUJILLO, GUIDED OCCUPATION [DO]

SUCCESSFULLY IMPLEMENTED GUIDED OCCUPATION

Source - Gesto, b. (2015). LOS PROGRAMAS MUNICIPALES DE OCUPACIÓN GUIADA: INSTRUMENTOS PREFERENTES DE HABITABILIDAD BÁSICA VERSUS LA URBANIZACIÓN INFORMAL FUTURA. El caso de Trujillo (Perú). http://oa.upm.es/39714/.

5. BURNING MAN FESTIVAL, SPONTANEOUS CAMP [DO]

SIMPLIFYING THE CONCEPT OF GUIDED OCCUPATION

Source -   https://burningman.org/

6. WARWIJCK JUNCTION, SOUTH AFRICA [DO]

HOW TO IMPROVE DANGEROUS POINTS OF INFORMALITY

Source - Skinner, C. (2007). bringing the informal economy into urban plans - a look at warwick junction, South Africa. Habitat Debate, 13(2), 11.

7. MICHAEL ECOCHARD GRID, CASABLANCA [DO]

FLEXIBLE URBANISM THAT ABSORB THE CHANGES

Source - Avermaete, T. (2010). Framing the Afropolis. Michel Ecochard and the African City for the Greatest Number. Oase, 82, 077.
Perea, L. (2015). Hacia un análisis cuantitativo de la Ciudad Informal. Una aproximacion desde la Habitabilidad Basica y la experiencia en Makeni (Sierra Leona). UPM. http://oa.upm.es/39873/.

8. FRANCIS KÉRÉ CONTEXTUALIZED ARCHTECTURE [DO]

INCLUSIVE ARCHITECTURE AS A PROCESS OF TRAINNING.

Source - http://www.kere-architecture.com/projects/school-library-gando/

Map legend:
- Major Road
- BRT Route
- Gautrain Route
- Rail
- Gautrain Station
- Peri-Urban Management Areas/UDB
- Expansion Areas
- Marginalised Areas
- Consolidation Areas
- Public Transport Management Areas

N
5300 2650 0   5300 Meters

Map labels: Diepsloot, Midrand, Fourways, Cosmo City, Mogale City, Sandton, Alexandra, Rosebank, OR Tambo Intl. Airport, JHB CBD // Hillbrow, SOWETO, Ekurhuleni, Westonaria, Midvaal, Emfuleni, N1, N3, N12, N17

1 | MASTERPLAN OF JOHANNESBURG, SOUTH AFRICA

year | 2008   **POSITIVE | NEGATIVE REFERENCE**

Brief description |
The masterplan in Johannesburg was proposed as a solution for the emerging trend of urban sprawl that divided the city by the linking of infrastructure and spatial planning. The main strategies were developed in parallel to the creation of a common institution ' Central Witwatersrand Metropolitan Chamber', negotiating forum between the different stakeholders involved: political parties, civic organizations, unions, business, NGOs and others.
The masterplan proposes the creation of public transport corridors between mixed use nodes together with a densification of the surrounding areas of these corridors. At the same time, it promoted the containing of urban sprawl by the use of an urban edge and sustainable management strategies.

How is it applied in [3MK - CBD] vision&strategy MMA 2040|
This masterplan was the main reference for the proposal of 'The Corridors strategy'. It represents a successful masterplan in a context related to the Mozambican one where a shift in the policy perspective together with an understanding of the dynamic of the city helped to improve the dualism of the city.
It was an essential reference to change the focus from the city centres to the informal nodes in the 3MK-CBD and the necessity of creating limits to avoid the sprawl and priority areas of densification as starting point of a longer process. The final objective would be the complete densification of the city, something that can only take place in a phasing approach.

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Todes, A. (2012). Urban growth and strategic spatial planning in Johannesburg, South Africa. CITIES, 29, 158-165.

Masterplan Kinshasha 1975. Source: Perea, L. (2015).

Development of Kinshasha. Source - Beeckmans, L. (2010).
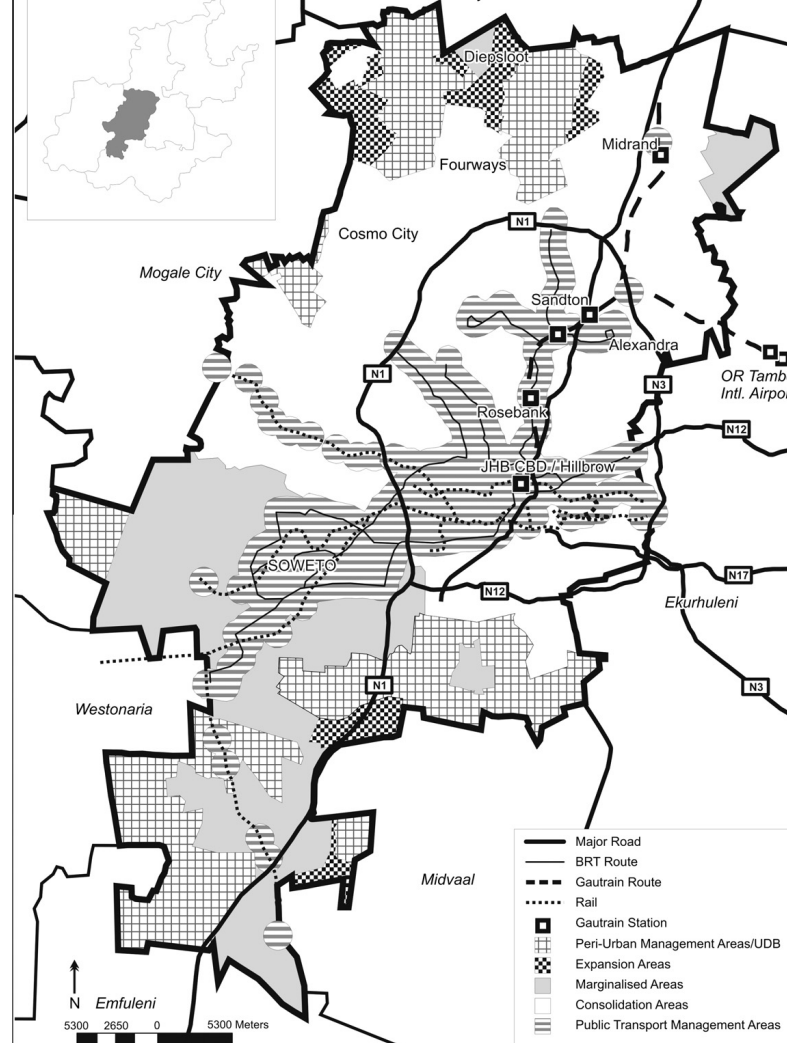
2 | MASTERPLAN OF KINSHASHA, CONGO

year | 1975   ~~POSITIVE~~ | NEGATIVE REFERENCE

Brief description |

In 1969 the city developed a plan orientated exclusively to the empowered social levels. In 1975, in order to present an alternative to a plan that was obsolete, there was an extensive analysis and diagnosis of the area that concluded in the plan for 1975. Despite the efforts for applying the local knowledge to the plan, it was completely disconnected from the reality. Based on a road network and modern metro too expensive for the location and a distribution between 'living areas' and 'high standard residential areas'. However, it is essential to highlight the urban development between 1965 and 977 that was in parallel to the urban plan. It did not happen in a chaotic or irregular way. The local chiefs in collaboration with authorities and land owners promoted the peripheries development extending the colonial grid and supporting the introduction of facilities and construction techniques.

### *How is it applied in [3MK - CBD] vision&strategy MMA 2040|*

It represents the power of the inhabitants when being organized in a collaborative manner. At the same time, it illustrates the lack of importance that unsuccessful plans can have when being fought by authorities and locals. The critical role of locals goes beyond plans and experts and that is why they should be included in the decision making process.

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Perea, L. (2015). Hacia un análisis cuantitativo de la Ciudad Informal. Una aproximacion desde la Habitabilidad Basica y la experiencia en Makeni (Sierra Leona). UPM. http://oa.upm.es/39873/.
Beeckmans, L. (2010). A critical analysis of the French Urban Planning Missions in Post-Independence Kinshasha. Oase, 82, 055-076.
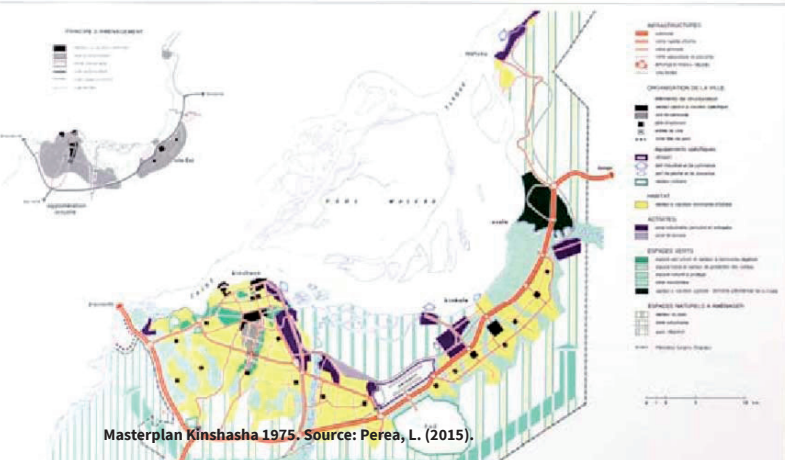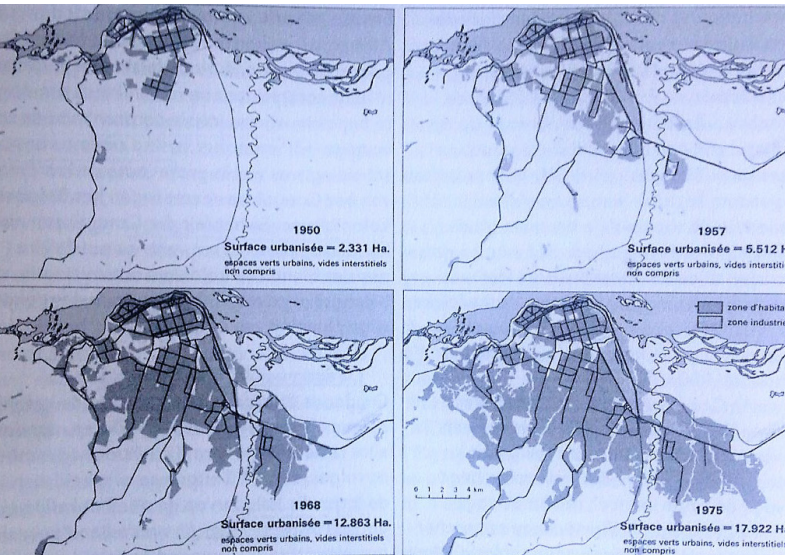
Informal market Xikhelene. Source: Ulset, A (2010)

Destruction of market in Xikhelene. Source: Ulset, A (2010)

3 | XIKHELENE MARKET CONSOLIDATION

year | 2009   ~~POSITIVE~~ | *NEGATIVE REFERENCE*

Brief description |
Market located in Praca dos Combatientes in Maputo, that suffered from a process of formalization (demolishing and new construction) in 2009 that forced the vendors to move to another location without any compensation for their lost. The formalization was proposed by municipal entities with agreements with the market association (ASSOTSI). However, this association did not fight for the rights of the sellers and they were forced to move.

How is it applied in [3MK - CBD] vision&strategy MMA 2040|
In the article, the author expresses the problematic of formalizing markets without understanding the value of the informal economies. He also provides certain policy recommendations that have been carefully understood for the proposition of 'inclusive consolidation of informal nodes'. *"When formalizing informal markets, it is important to legally empower the vendors" (Ulset, A. 2010)*
The case of Xikhelene also highlights the consequence of not consolidating the informal economies in an inclusive way: *"As two thirds of the Xikhelene vendors had to leave as a consequence of formalization, they are likely to procure new, informal strategies to generate new income and so the informality is reproduced" (Ulset, A. 2010)*
One of the most important aspects that can be understood from this case is the necessity of creating a proper organization. The main problematic in Xikhelene was the lack of mutual understanding, something that can be avoid when proposing a collaboration between the different stakeholders with a common aim.

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- A case study of the Xikhelene market, Maputo, Mozambique. (Master), University of Oslo, Institute for Sociology and Human Geography.

Guided occupation programme Alto Trujillo. Source: Perea, L. (2015).

Guided occupation programme Alto Trujillo. Source: Perea, L. (2015).

4 | ALTO TRUJILLO, GUIDED OCCUPATION STRATEGY

year | *1995-2006*   **POSITIVE |** *NEGATIVE* **REFERENCE**

Brief description |
The guided occupation programme of Alto Trujillo is one of the most successful implementations of the guided occupation housing policy. Its dimension and the level of development illustrate the viability of the implementation of these experiences. As Perea, L (2015) stated, "From a critical perspective, the definition of a unique typological model (unifamiliar) and associated the low density are some of the elements to improve. In terms of urban landscape, it can also be improved and it always requires from a local administration with certain coordination capacity. In any case, these are proposals that highlight that it is logic to propose initiatives where the formal system do not reach the poor population"

How is it applied in *[3MK - CBD] vision&strategy MMA 2040*|
The theory of 'non conventional housing policies' and specially the guided occupation strategies are the base of this project. The theory proposed by Belen Gesto on her PhD has been of great help for the overall proposal of this project. Tha case of Trujillo is the main example of the viability of these strategies and the positive impact they entail for the population living in the informal cities.
While it is true that there can be some aspects to improve, especially related to the conditions of the buildings -as stated by Perea, L in 2010- , these are aspects that can be solved in latter moments of the process, as soon as the income generation increases. In basis, the inclusion of basic infrastructures to occupied areas before they are occupied is a strategy that answers the current reality of MMA.

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Gesto, b. (2015). LOS PROGRAMAS MUNICIPALES DE OCUPACIÓN GUIADA: INSTRUMENTOS PREFERENTES DE HABITABILIDAD BÁSICA VERSUS LA URBANIZACIÓN INFORMAL FUTURA. El caso de Trujillo (Perú). http://oa.upm.es/39714/.
Perea, L. (2015). Hacia un análisis cuantitativo de la Ciudad Informal. Una aproximacion desde la Habitabilidad Basica y la experiencia en Makeni (Sierra Leona). UPM.

Source: http://psytranceportal.com/burning-man-festival-2015-live-broadcast/

Source: http://viciousmagazine.com/burning-man-festival-se-juega-licencia-los-proximos-10-anos/

5 | BURNING MAN FESTIVAL. SPONTANEOUS CAMP

year | XXXX | **POSITIVE | NEGATIVE REFERENCE**

Brief description |

The burning man is a 7 days festival that takes place every year in the middle of the desert in Nevada. Apart from the nice atmosphere it entails with different scenarios and fields of interest, it is highlighted in this thesis for the process of settling people during 7 days that could be similar to what the initiative of guided occupation represents.

How is it applied in [3MK - CBD] vision&strategy MMA 2040|

In the festival camping area, the participants only receive basic guidelines about how the occupation of the space should take place. The organization includes basic infrastructures as lighting or water resources as well as garbage points and bathrooms. Once the participants arrive, they occupy the space following the guidelines, which suppose certain order and organization and help to preserve the general atmosphere of the area. This is in essence what happens in the guided occupation areas. The inhabitants are asked to keep certain guidelines for their own organization and they take care of their own living space. In parallel, the areas are facilitated with common spaces and basic infrastructures in a progressive way.

References |
https://burningman.org/

Warwijck junction before the urban plan. Source: Skinner, C., & Dobson, R. (2007). Bringing the informal economy into urban plans – a look at Warwick Junction, South Africa Habitat Debate, 13(2), 11.

Warwijck junction after the urban plan. Source: Skinner, C., & Dobson, R. (2007). Bringing the informal economy into urban plans – a look at Warwick Junction, South Africa Habitat Debate, 13(2), 11.

6 | WARWIJCK JUNCTION, SOUTH AFRICA

*year	1997*	POSITIVE	~~NEGATIVE~~ REFERENCE

Brief description |

The Warwijck junction is located in what was the first public transport crossing in Durban, South Africa. It was a strategic location for street vendors (around 8.000 per day) due to the daily flow of people and vehicles. However, during 1990, the named apartheid era, it became a focus of crimes and insecurity. In 1997 the city council launched an area based urban renewal initiative called 'the Warwick Junction Project' to examine safety, cleanliness, trading and employment opportunities and the public transport efficiency.

It was agreed with the traders that the area would be hosed down at night twice a month, while those using the area would also help with day to day cleaning. To fight crime, a body called 'Traders Against Crime' helped arrange training sessions with the police, resulting in a signifi cant reduction in both petty and more serious crime in the area.

'Th e project has shown a shift in mindset to regard the informal economy as an economic asset. It also showed how by adopting a sector by sector approach to supporting the informal economy, informed by an understanding of economic dynamics, can bring success.' (Skinner, C., & Dobson, R. 2007).

How is it applied in [3MK - CBD] vision&strategy MMA 2040|

This case illustrates the power of collaborating between municipal authorities, organization, police and informal sellers. It was an urban intervention that resulted in the organization of the different stakeholders involved to achieve the same aim: the reduction of unsafety and cleanliness conditions.

References |

Skinner, C., & Dobson, R. (2007). Bringing the informal economy into urban plans – a look at Warwick Junction, South Africa Habitat Debate, 13(2), 11.

Ecochard grid, Casablanca. Source: Perea, L. (2010)

Current situation Ecochard grid, Casablanca. Source: Perea, L. (2010)

7 | MICHEL ECOCHARD GRID, CASABLANCA

year |1950-70 | **POSITIVE | NEGATIVE REFERENCE**

Brief description |

The intervention of Ecochard in Casablanca was rather innovative for the moment but happened to be one of the most successful. He proposed a grid of 8x8 with the introduction of basic infrastructures that was established as pilot project in Casablanca. The successful aspect of it is the inner flexibility that the grid presented. Nowadays, the grid is just a basic guideline for the area and the buildings have grown in density and height. Although it is true that there are some problems of ventilation and lighting, the area present a living image, almost in movement, that adapts to the personality of the users. It is defined by different authors as a complex armony.

How is it applied in [3MK - CBD] vision&strategy MMA 2040|

This project was a big influence for the thesis. From a rather top down perspective that was wrong in essence for being based on a theory (application of a grid to an area in Africa) that has been applied to Africa several times resulting in unsuccessful projects. This alternative had an inner flexibility that combined with the character-istics of the location of Casablanca, resulted in the growth of the city with proper living conditions.
When looking at the current state of the grid, the starting structure is not so recognizable and it has diversity and representation of the different personalities of the inhabitants.
Therefore, it is possible to propose a structured tissue that results in a successful project in African context if it entails enough flexibility to allow the population to personalize it.

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Avermaete, T. (2010). Framing the Afropolis. Michel Ecochard and the African City for the Greatest Number. Oase, 82, 077.
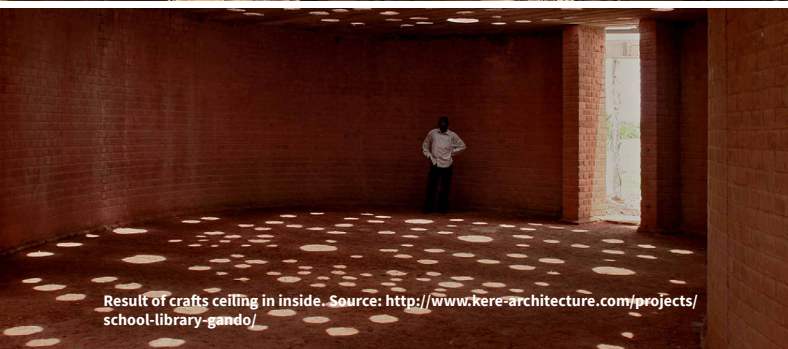Perea, L. (2015). Hacia un análisis cuantitativo de la Ciudad Informal. Una aproximacion desde la Habitabilidad Basica y la experiencia en Makeni (Sierra Leona). UPM. http://oa.upm.es/39873/.

Transport of crafts. Source: http://www.kere-architecture.com/projects/school-library-gando/

Inclusion of crafts in architecture. Source: http://www.kere-architecture.com/projects/school-library-gando/

Result of crafts ceiling in inside. Source: http://www.kere-architecture.com/projects/school-library-gando/

8| FRANCIS KÉRÉ ARCHITECTURE

year | XXXX | **POSITIVE | ~~NEGATIVE~~ REFERENCE**

Brief description |

Diébédo Francis Kéré was born in 1965 in Gando, Burkina Faso and studied at the Technical University of Berlin. In 2005 he founded Kéré Architecture. The special characteristic of his architecture is that the main aim is to reinvest knowledge back into Burkina Faso where he has developed innovative construction strategies that combine traditional building techniques and materials with modern engineering methods.

He proposes a contextualized architecture with strong training and participation of the local inhabitants. Due to his African roots, he had direct accessibility to the local inhabitants and used that advantage to propose an inclusive way of development.

How is it applied in [3MK - CBD] vision&strategy MMA 2040|

The architecture of Francis Kéré is one of the most contextualized of the architecture field. The contextualization goes beyond the inclusion of local techniques and materials in the construction process. The main value can be found in the participatory process of the inhabitants of the area and the main role of local experts and workers in the design process. In the same way, the process of construction is developed in parallel to a process of local training and workshops to be able to use the local workforce in the projects.

This is something essential in the project, specially when talking about contextualized small scale urban developments, where it is recommended to use this type of architecture process to involve the population and use the immense local knowledge to propose successful projects.

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http://www.kere-architecture.com/projects/school-library-gando/

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