International Professional Urban Workshop

Green and innovative Kampala

Generate Synergies and Join Forces for an Urban Transition to face Climate Change

SESSION BOOK
Les Ateliers wish to thank all the partners of the workshop:

...and the structural partners of Les Ateliers:

[Logos and images of various partners]
Since 2018, the Kampala Capital City Authority (KCCA), with the support of the French Embassy and the French Development Agency, has been engaged in a joint process of reflection as part of the Kampala Climate Change Action Plan to forge a vision for a sustainable future for the city of Kampala. This process involves organizing an international workshop on urban planning in Kampala with the French association Les Ateliers de Cergy (International Urban Planning Workshops - France), taking place from the 26th of October until the 8th of November, 2019.

The workshop is organized according to the original methodology of Les Ateliers de Cergy. For 2 weeks, professionals from different countries and fields of expertise will meet in the Greater Kampala.

After a few days of discovering the territory and meeting key actors, they work together in multidisciplinary teams in order to propose strategies and project proposals for the territory.

These professionals are accompanied by a local committee of partners who will comment on and complete the proposals during various moments of exchange. At the end of the workshop, a jury chaired by local authorities highlights the best proposals from each team.

The workshop is a platform for non-commercial exchanges. All participants and persons involved in the process are volunteers and unpaid. There is no prize or contract to win. The objective is to participate in the collective construction of a vision for the future of the city of Kampala.
Les Ateliers de Cergy is a non-profit association created in 1982 at the behest of the urban planners involved in the creation of the New Town of Cergy-Pontoise. Today, it is an international network of professionals, academics and decision-makers tied to the field of urban planning. Focused on the practice of urban development, the association organizes workshops envisaged as spaces for collective design and creativity. In France and elsewhere, these workshops provide project managers with an international perspective and illustrated proposals highlighting territorial strategies and urban development projects. By bringing together different professions and cultures, they also offer the opportunity to exchange at the highest levels.

Our convictions

Creating cities is by its very nature a collective process. As true as architecture enables an individual and identifiable creation of masterpieces, developing cities cannot be ascribed to a single person who would dominate all the aspects of urban creation: this process is collective in its essence.

Based on the logic of laboratory work, urban project management should encompass the various disciplines required to plan urban areas and their interfaces. Therefore, each atelier is a place of freedom of proposal, where the aspirations of collective and voluntary work enable the development of new ideas, innovative projects and proposals for the future of urban areas which are in perpetual transition.
FOREWORD

The Green and Innovative Kampala workshop emerged in a time when Kampala’s unprecedented growth is posing huge pressure on the environment and infrastructure. In this context, the Kampala Capital City Authority (KCCA) and the French Agency of Development (AFD) invited Les Ateliers to hold a professional workshop in October – November 2019 to look for innovative ideas to address the development of the city in a way that responds to the challenge of climate change and that looks at the city in an integrated manner. In order to establish the objective and the subject of the workshop, Les Ateliers made three preparatory visits and met with local stakeholders including the Makerere University, Kira Municipality, Wakiso District, the National Planning Authority, the Ministry of Lands, Housing and Urban Development, as well as several international and local NGOs and communities.

Kampala is both a place of opportunity and constraints. The once green hills and wetland valleys have largely been taken over by urbanisation causing flooding in low-lying areas, mostly inhabited by low income households. The roads have become the stage for hours-long traffic jams that carry a heavy burden on the economy and people’s quality of life. In this context of scarcity, residents have taken the development of the city in their hands and have resorted to entrepreneurial activities that deal with some of the shortages experienced in the city. Figures speak for themselves: Only 20% of the city has been planned, 60% of the population lives in slums, and the informal economy accounts for 50% of the labour force.

The Green and Innovative Kampala workshop addresses the particular challenges that the city faces through the lenses of climate change. Low productivity crops, landslides, floods, and other kinds of disasters threaten the city and have an impact on the everyday life of its inhabitants. The intention of the workshop, therefore, is to come up with responsive strategies to mitigate the effects of climate change as well as pro-active ones to reduce Kampala’s contribution to this phenomenon.

The objectives of the workshop can be summarised as follows:

- To emphasize Kampala’s Green & Innovative potential. The workshop is an opportunity to bring together bottom-up and top-down initiatives and approaches. The spirit of the workshop, therefore, is to build cross-cutting visions that provide a direction to address sustainable development in the city.

- To look at the city as an urban ecosystem and suggest ideas to fill the gaps and assemble projects, strategies and initiatives that are currently taking place in a fragmented and isolated manner. The workshop looks at ways to generate synergies and join forces for a sustainable future that addresses climate change concerns in a context of scarcity.

- To instill a new dynamic to tackle urban issues in a frugal way that is based on existing assets and can do more with less.

- To turn Kampala Capital City in Kampala Champion City in urban resilience and sustainability.

The workshop offers an opportunity to look beyond the administrative boundaries of the city and engage with the territory and different challenges faced by its inhabitants in an integrated and holistic manner. The workshop is also an opportunity to bring different actors together from the grass-roots, public, private and academic sector to envision together the future of Kampala. In this regard, one of the aims is to create a platform that will last beyond the workshop.
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PART 1: Topic of the workshop
**Kampala’s territory**

**Kampala and the Metropolitan Area**

Kampala is the capital and biggest city in Uganda. It has a total area of around 195 km², with 33 km of shoreline on Lake Victoria. Kampala has an estimated population of 1,610,500. The population under 30 years of age represents 77.8% of the total. Kampala is a district and a city. It is comprised of five divisions: Central, Nakawa, Makindye, Lubaga and Kawempe. The central division is the economic heart of Kampala, concentrating most of the jobs in the whole metropolis. The colonial city started to develop there, on the Nakasero hill, first planned district in 1912.

At the wider picture, Kampala Capital City is surrounded by the district of Wakiso, which is welcoming a large part of the incoming inhabitants. The Wakiso District and a little part of the Mukono district constitute the Greater Kampala Metropolitan Area.

In 2010, the Ugandan government reorganized the city services, to renew the staff and to enhance the accountability of the local government. The Kampala Capital City Authority (KCCA) was then created by the Kampala Capital City Act (KCCA Act 2010), promulgated by the Uganda Parliament in late 2010. The Act introduced a new division of powers at the top of Kampala, between the elected Lord Mayor, the Executive Director, and the Minister for Kampala Capital City and Metropolitan Affairs.

The KCCA Act also stipulates the creation of the Metropolitan Physical Planning Authority (MPPA). The MPPA should handle and address planning issues within the capital city and the neighbouring districts of Wakiso, Mukono and Mpiigi. Nevertheless, the MPPA has not been operationalised yet.
A demographic tsunami

Uganda is at an early stage of its demographic transition. It is nowadays one of the countries with the fastest-growing population in the world: it has a growth rate of 3.3% every year, and the average fertility rates are estimated at 5.6 live births per woman. This increase is contemporaneous with the urbanization of the country. Uganda is still a very rural country, with more than 75% of the population living in rural areas. But this situation is changing at a fast rate: when 12.3% of the national population was urban in 2002, the urban population accounted for 23.8% of the population in 2018.

In this accretive cityscape, one urban area is predominant: Kampala, Uganda's main city. While Kampala hosts about 1.6 million inhabitants within its borders, 3.5 in GKMA and more than 6 millions if you take into account the districts around (Wakiso, Mukono, Mpigi, Buga, Luweero), the second biggest city, Gulu, has a population of about 150,000 inhabitants. It is not even a tenth of Kampala city. The GKMA's population is expected to reach 10 million inhabitants by 2040, according to the World Bank.

The existing planning in Kampala has not kept up with rising challenges associated with tremendous growth. As the Greater Kampala has expanded, employment has dispersed further from the urban core in a non-uniform fashion reducing economic density and creating a more fragmented city. In terms of jobs, Kampala has a very concentrated nucleus but the rest of the city is characterised by mixed land use. The CBD accounts for 11% of manufacturing jobs and 18.5% of services employment. The CBD and most of the adjacent area, where the highest concentration of jobs is located, have some of the lowest population densities in the city. 60% of the total city population dwell in informal settlements that are scattered within short distances from the CBD. These settlements receive new inhabitants every year creating pressure on the city's wetlands.
PART 1 : Topic of the workshop

The geographical assets of Kampala

The geographical features of Kampala shape a strong and singular identity to the city.

Kampala has been compared to Rome as another City of Seven Hills. Nowadays, it consists of more than 27 hills, and the topography still plays an important role. This unique topography shapes Kampala’s city structure. Since the city started to grow ignoring the natural topography, accessibility to the hills and between hills became a challenge. More responsive urban planning practices might improve accessibility and reveal the unique nature of Kampala’s topography emphasising these natural archipelagos.

Lake Victoria, also known as Nyanza, is located about 10 km far from Central Kampala. Covering a surface of 68,100 km², Lake Victoria is the largest lake in Africa and the second largest in the world. It is a fragile ecosystem that provides the city and the region with abundant natural outputs.

In direct relationship with the lake, wetlands, river system, and watercourse constitute a common thread of the city’s landscape and its infrastructure. They are opportunities for natural resources in the city, but are also threatened by human activities and settlements on fragile ecosystems.
PART 1 : Topic of the workshop

The approach of the workshop

Kampala is a survival city where the employment rate, the weight of informal activities, the risk of natural hazard, are very high. The constraints on the city are tremendous in term of use of scarce resources such as space, money, time, energy, land, food, jobs, facing high demographic pressure and climate change violent episodes. As well as threat for the social development of the country and the sustainable structure of the city, it may be an opportunity to enhance and recover these resources and turn them into assets through a regeneration process of the city. How to think each project or action of the urban daily life for regenerating and creating value more than using and spoiling scarce resources?

Kampala Capital City Authority has a wide range of studies, projects, cooperation programs and some fundings. The threat is the impossible lead because all of them cannot be financed in the same time, and even if they could be, the abundance may lead to collapse. The question of choice is prominent, where less may be more. The opportunity is to step back and think about mitigating overlaps between projects, combine them together with significant synergies in complementary ways, and coordinate the functions.

The challenge of Kampala consists of reconnecting territories, infrastructures, organizations, institutions, communities, all together in order to save costs, lever up the existing assets, avoid ruining resources, enhance the potential for development, pool common deposits, and make every resource productive or preserved.
Main issues

Obviously many topics interact and occur in fast-growing countries of the developing world. The following topics do not intend to be comprehensive but to be a selection of specific issues which have driven the preparation of the workshop regarding the peculiar context of Kampala, and/or have been tackled by the participant teams within their proposals.

Rainwater management and flooding

Flooding is an issue that affects everyone in Kampala on a regular basis: the residents of the hilltops suffer the congestion caused by flooding on the roads and those living on the low-lying areas also have their houses flooded. While it is often those who live in the low-lying areas who are blamed for causing the city to flood when they build on green open land that used to work as the natural drainage system of the city, the causes of the issue are multi-layered. The built-up hill tops cause huge volumes of water to flush down the slopes at a very high speed. The volume and the speed of the water are such that they can flood the lower areas and roads in a matter of minutes. Another contributing factor to the flooding issue is the blockage of the draining infrastructure caused by illegal dumping and littering.
PART 1: Topic of the workshop

The GKMA, a metropolis under construction

Most of the population growth is currently being accommodated outside the KCCA borders. Thanks to their higher land availability, towns such as Kira are becoming home to people who work in Kampala central areas. This separation between where people work and where people sleep is causing two major issues. Firstly, it forces people to commute long distances and concentrates the incoming traffic in the central areas. Secondly, it concentrates property rates revenue in the peripheral regions, leaving the KCCA with a smaller budget to provide services for a day population that triples the night one.

In an attempt to create a governance system that allows for the different municipalities within the limits of the GKMA to work together in cross-boundary and regional projects, there is a plan to establish an institutional structure with representatives from the different towns and districts. However, the different nature and interests of the different actors seems to be posing some challenges to how this institution should be established and operate. These institutional arrangements are necessary to implement projects such as the BRT to be rolled out at a metropolitan scale and to find strategies to address regional unbalances faced now in the metropolitan area.

Kampala as a “silo city” cannot stand anymore within its administrative boundaries. The majority of the Ugandan population is from the rural edge. New comers are arriving from the countryside and represent a large contingent of boda-boda drivers. What is occurring in the periphery impacts the city, and what is going on in Kampala influences the suburban areas.
Scarcity management

The scarcity of developable land in the central areas is one of the main challenges that the city faces. 70% of the land is privately owned and the city has failed to prevent encroachment in some of its valuable public land. As a result, there is high competition for land that is much needed for roads expansion and transport infrastructure, housing, open spaces, and other uses that have to be accommodated in the city. The budget available to implement projects is also constrained and so is the capacity that the different actors have to work in the multiple projects in the city. This resource and capacity scarcity is something that does not only affect the local authorities but also communities, NGOs, private sector and other actors that contribute to the development of the city. There is therefore an opportunity to reconsider how the city deals with scarcity and to find ways to maximise the available resources.
PART 1 : Topic of the workshop

Infrastructural and not-integrated approach: Multipurpose Utilities beyond technical Infrastructure

It appears that the municipality tends to take an infrastructural approach as a response to the multiple challenges that the city faces. Possibly the two areas where this is most obvious are the city’s response to mobility and drainage challenges. It is possible to see large infrastructural works in some parts of the city to improve the water drainage system. Concrete culverts and channels are being built and road expansions take place in land gained to the wetlands with rocks and concrete structures. There is also a plan for the city to build a new water treatment plant. The response to the current traffic jam issue follows a similar approach. Fly-overs, highways, the BRT, and other transport infrastructures are either planned or have already started to be built. Most of these projects tackle urban issues in an individual rather than a holistic manner.

The workshop is an opportunity to question this infrastructural response to urban issues and look for softer and more integrated solutions that may be able to substitute or optimise some of these “harder” infrastructural projects.

The normative ideal of homogeneity and centralism continues to significantly shape the way residents, planners, governments and academics think about infrastructure.

Despite the importance of existing power relations, networked services have also inspired new forms of collective organizing and self-built systems that offer various alternatives to formal, networked infrastructure pursued in the absence of large-scale state and market investment.

Thus while constructed as a means through which to obtain services, social mobilization for infrastructure can also generate more widely relevant “platforms of engagement”.

The threefold main stake of utilities delivery is to fill the gap (of void, inexistence of provided structured service), assemble (the existing know-how, the ways to access to services even partially; there digitization play a significant role even within bottom of the social pyramid), partly based on human sensors (belonging to the informal sector potentially, able to be a significant link within the formal chain of utility delivery.

How to design circular, green, and holistic infrastructure?

A user centric approach may help to assess the requirements of the place and match the demand and global: accommodate rain fall water, move people, mitigate heat, offer space for feeding the population, deliver environmental activities as composting, enable area premises for activities (street vendors), produce or store energy at a micro-scale, provide recreational areas, ensure road safety and street security, with embedded city life and civility...

All those requirements take place in a context of imperative scarcity with a significant lack of money, space, time, energy, building materials, land,... Shared-use of means and solution might be thought about. All the aforementioned concerns partially overlap. They are linked together, one feeds into the other.

The Use of marginal materials for building and road construction: recycled and secondary materials such as recycled tyres, recycled plastic may create a new sector providing jobs and sustainability to the communities.

How an efficient single and simple infrastructure design may solve numerous issues in the same time?
The Space – Time synchronization producing volatile networks

Space-time activity planning is another important issue. The location, the duration, the intensity of diverse activities such as street vending, markets, Boda-bodas, varies significantly all day long depending on the time-slot, and from day to night. They responsively adapt to weather conditions, to the traffic flows, local rules, the widespread demand, the customer profiles, the security issues,… All these “instant activities” provide space-time cartography layers of the city, overlapping all together and show volatile networks of activities. Then it is an important insight to take into account in the city planning and in the way of organizing public space. Space-time management of the infrastructure may bring flexibility providing more capacity and effectiveness.
Global and Indigenous Innovation

Innovation on the ground (bottom-up) is disseminated all over the Kampala City. Innovation is related to the local situation constraints. In most of the case it is an answer at the grassroot level to fix a specific problem then the solution scales-up. These bottom-up initiatives tackle concrete issues and their addition may significantly provide improvement for local communities. There are locally brewed for neighbourhoods and deal with diverse matters and are fully grounded within the survival city in informal settlement providing frugal innovation solutions to fix various problems such as solid waste management, sanitation, plastic stuff invasion,... This subject is also about the reuse process closely linked to circular economy. Second hand refurbishment, repair (cars, cloths, phones) are part of the land through car yards, shops, markets.

There is a lot to learn from African countries dealing with a high level of constraints to provide efficient solutions. Their know-how enables the country to have leapfrogging effects in many fields, mostly within the information technology sector, computer sciences, coding.

The global and fashionable topic of smart city is seriously tackled by East African countries, mainly Rwanda and Uganda. Within the Smart Africa project, Uganda is head of 23 countries network for the topic: Big Data & Data measurement for Development.

Innovation in the process (top-down) deals with global innovation trends through incubation centres and innovation labs. KCCA is exploring through 4 pilots in the city, a new scrutiny planning tool at district level. Precincts are neighbourhood plans with land use proposals at the plot level. It is not innovative in the sense that it is already a current way of planning deeply cities in many countries, but in the fact that KCCA is launching this process, and moreover names it “pilot”. It demonstrates that KCCA is eager to implement experimentation, trial, in the city.

Kampala has chosen four central parishes to develop these precincts: Nakasero, Kololo, Makerere, and Mulago. Public meetings have been held to present different scenarios for the population.

As first opening, it considers project at micro-scale and offer a distinctive way of looking at the city development taking into account local needs for space to accommodate specific activities.

Innovation provided by KCCA is coming as well from the capacity building they implement through their various training centres such as the One Stop Youth Centre in Kabalagala, the Kyanja Agriculture Resource Centre, Demonstrations, the Sunday Market weekly institutionalized,...

A key issue of scaling-up innovation is the lack of space, to be part of urban planning and project vision to develop the city.
Identity & Model: towards a contradiction?
Many ways of bringing awareness & behaviour change

Identity regarding attractivity of the city is at stake. Two major issues interact: uniqueness of the city and the necessity to emphasize or find a development model. How to lever-up the existing strong assets of Kampala to face the threat of spoiling the skyline of the city through intrusive necessary infrastructure? In some way uniqueness and model issues are contradictory.

A vibrant city as Kampala is defined by its positive energy, its inventiveness is due to the necessity of struggling to survive and tackling the scarcity concern, its creativity may deliver specific art related to its culture, history and its peculiar geographical situation. The question of Art is fully related to identity and awareness.

Like many other cities in Africa/post-colonised countries, Kampala seems to not have yet developed a clear identity. The broken history between the pre-colonised societies and the colonial and post-colonial society, the recent rural urban demographic transition as well as a desire for a certain idea of modernity, seem to be some of the causes behind this identity crisis.

Some of the key questions to respond are: Who defines what the city identity is? Is it necessary to develop a new identity?

Numerous local stakeholders stress the need to change the mindset and behaviour. Dissemination of Art within specific areas of the city may contribute to inform, to think about a specific issue, to indicate certain paths for children, pupils, pedestrians, to give a clear direction and in the same time beautify some areas and emphasize the character of the city enabling more attractiveness.
Focus area: The Lakefront and the Nakivubo Wetland

The Lakefront of Kampala is an area of great potential, recognized as a priority in the Kampala Planning Development Plan. The city core was traditionally not located along the lake, and the development in the area was not planned. This area is nowadays a mostly residential district, with both upscale neighbourhoods and low-income settlements. It welcomes the fish market, universities and a boat dock in Ggaba, and two important resorts in Munyonyo, which privatized the access to the lake.

The Nakivubo wetland system is the most dominant wetland of the Kampala urban area. Gradually, an informal but vibrant community arose of farmers, shopkeepers, and fishermen all hustling to raise enough money to feed their families and pay their children’s school fees, communicating in a mix of Luganda, English and words from diverse local languages from around the country. Their eventual settlement has slowly destroyed the Nakivubo wetland over the past decades, transforming the swamp into a zigzagging web of farmland and slums.

The growth of the Namuwongo informal settlement in an indirect effect of the Namuwongo slum upgrading and low-cost housing project, the first of its kind in the city in 1987-1994. In this project, a redevelopment of the settlement was planned: roads, piped water, electricity, sanitation facilities and social services like health facilities and schools are provided.

The beneficiaries were allocated land with title deeds and given loans to construct their houses. Some are trained in skills of production of building materials, house construction, and loan management.

Namuwongo neighbourhood is nowadays a neighbourhood with proper fenced houses, roads, middle-income households. But the project did not succeed in keeping the residents in the area. The poorer sections of slum dwellers who could not afford price increases created by the upgrading improvements just sold their rights and started to build another informal settlement a few metres across the road, encroaching, even more, the wetland than previously.

According to a 2015 study by researchers at Makerere University, 56% of the original wetland had been modified, mainly due to industrial development and small-scale farming.

1. Industrial area: the main industrial zone within the CBD of Kampala and a major contributor to industrial waste that ends up in the Nakivubo channel and eventually into Lake Victoria.

2. Bugolobi: a formal settlement with planned condominium housing bordering the Nakivubo wetland on its low lying fringes.

3. Namuwongo: a reclaimed area receiving an influx of slum dwellers from different parts of Uganda in increasing numbers. The southern part was upgraded while the northern is the recent settlement, putting a lot of pressure on service delivery by city authorities and encroaching further into the wetland. These slum dwellers live in uncertainty in fear of eviction.

4. Muyenga hill: an affluent residential neighbourhood, a few metres from the Namuwongo informal settlement, where inhabitants live in gated premises.

5. Ggaba: a centre of trade along the shores of Lake Victoria bustling with an open-air market, a fish landing site, active water transportation as well as the Ggaba Water Treatment plant that is responsible for the water supply to the greater Kampala. It is also a tourist centre with several private beaches and resorts.
Focus area: Bwaise, settlement in a changing city

The Bwaise area is one of the oldest informal settlement in the city, but its environment is changing drastically.

One of the most dense zone in Kampala, Bwaise is home to many dwellers. Its location on the Lubigi Wetland makes it a flood-prone area. During the rainy season, it can remain flooded from several hours up to several days, with dramatic consequences for the poor communities. Global climate model projections for Uganda indicate a 10 – 20% increase in rainfall over Kampala, leading to an increase of flood probabilities.

Bwaise is evolving a lot, with different participatory programmes involving communities in the improvement of their access to sanitation and waste management, and to encourage them to gather in saving groups.

The settlement is surrounded by numerous structural projects that may transform greatly the area:

The Northern bypass, 23 km urban highway, is part of a plan to complete the East African Northern Corridor linking Rwanda, Uganda and Kenya. The bypass is expected to be fully operational in 2021. Its urban character made the process of land acquisition especially slow and controversial: some discontented landowners have either rejected the money offered or gone to court. The road is becoming a 4-lane dual carriageway during the current second phase, which will be fenced and act as a barrier for the settlement.

On the south of the bypass, one may find the Makerere University area and the settlements whose economy are linked to the campus. The Makerere and Mulago hills are the areas of the “the Knowledge Precinct”, proposals of neighbourhood plans with land use at the parcel level.

A : Makerere area : the Knowledge Precinct
B : Bwaise high-density informal settlement
C : The Northern Bypass
D : The Lubigi Channel
E : The car junkyard. It hosts many activities (garage, repair, trade...)
PART 2 : Process of the workshop
PART 2: Process of the workshop
A long-term process

From the first contact until the workshop and its outcomes, two years have elapsed.

Key events
- Exploratory field mission
- Strasbourg/Kampala Seminar
- Mission
- Partner committee mission
- Workshop in Kampala
- Africa-France Summit Bordeaux

Documents
- Topic Document
- Context document
- Session book
- Synthesis report
Open moments

Exploratory mission

Les Ateliers team met KCCA team in Kampala during a field mission in February 2019, in order to discuss on the topic of the workshop.

Partners Committee

The partners committee meeting held on 23rd August 2019 was a forum for dialogue and consultation between local stakeholders, institutions, researchers, private stakeholders and representatives of civil society around the topic of the workshop.

The Partners committee was intended to get reactions, to enrich the topic through input, and to create a momentum for the process of the international workshop.

Partners and representatives of local, regional and national authorities were present to support and exchange about the topic of the workshop, Green and Innovative Kampala.

Exchange Forum

The exchange forum is the heart of the method of collective production of Les Ateliers. Local partners, stakeholders, professors and guests come together to follow the teams’ progress and comment on their proposals. Each team presentation is followed by a debate and recommendations which contribute to enrich their projects. The exchange forum held on 1st November 2019 enabled the discovery of diverse proposals with different approaches from the three
PART 2: Process of the workshop
Visits

Saturday 26th October 2019: Kampala’s green infrastructure

This was the first day of the programme of visits with on trip discussions, two presentations at Makerere University, the first about Kampala, its governance and institutional framework. The second was about Plans of Kampala city and their evolution as well as the planning perspective in the city highlighting green spaces and how they have changed over time.

We made stops in different locations in the CBD and beyond in Kawempe division. This included a discovery of the open green spaces that have limited access to the public (Kololo airstrip, The golf course, The Sheraton gardens and the Constitutional square) as well as the shift from the formality in the CBD to the informality in the surrounding areas of Mulago and communities around the largely green Makerere University.

At the Bwaise settlement resource centre, a dialogue ensued where participants and the community from the settlement discussed challenges especially flooding and waste management and the expectations the workshop is likely to contribute to better livelihoods in the settlement that is now permanently located in the Lubigi wetland.

The team spent a productive time at the KCCA Kyanja Agricultural Research Center that started in 2013 to demonstrate farming technologies on limited spaces to the public that has access to the farm twice a week.

Our final visit destination on Saturday was at the Kisaasi Primary School that showcased its circular economy projects. From a bio-fill toilet to gas production for cooking student’s meals as an alternative source of energy among others. The drive at the end of the day exposed the participants to the character of the city at night.
**Sunday 27th October 2019: Existing energies and synergies in Kampala**

We kicked off Sunday with rich presentations. One presented a good case of frugality in the informal sector as a huge contributor to Kampala’s economy and the other introduced to the participants the infrastructure projects and urban development plans by the Ministry of Lands Housing and Urban Development.

Atop the grand Gaddafi Mosque on Old Kampala hill, we had a vast view of the city and its hills. “All major roads in Kampala seemed to radiate from the Old Kampala hill”. The origin of Kampala is from the British earliest description of the city as the ‘Camp of hills’ that was locally translated as ‘Kampala’

Immersion in the downtown experience on foot along the NMT (Non Motorized Transport) road that is under construction via the Sunday market and the old taxi park that ended at the Nakivubo Settlement Primary School. The school had an innovative and new sanitation project that has increased enrollment of children, especially girls while facing challenges from the neighbouring market community.

Most of the afternoon was spent in the 6 zones of the Namuwongo settlement area. With activities like a demonstration on briquettes making and use, interactions on innovative community initiatives, and engaging walk through the entire settlement and along the Nakivubo channel that traverses through the city to Lake Victoria (where we had a boat ride to Portbell in the industrial part of the city)
Monday 28th October 2019: Opportunities for a growing metropolis

With tidbits about areas and projects traversed on the trip from the accompanying experts during the visit we explored the Northern Bypass Road and the Lubigi wetland and channel before heading into the greater Kampala.

At the Proteen-Kabanyolo project, we witnessed a ‘circular by design’ process to transform city waste into feed and fertilizer using a black soldier fly insect.

Kira municipality hosted us and we had successfully deliberations with it’s Mayor and planners representing the GKMA.

‘Kira, the fastest-growing municipality in Uganda, with a myriad of challenges that spill over from Kampala city’

‘Day time population in Kampala is 3 million and 1.5 million at night, the GKMA strategy seeks to minimize this kind of movement by bringing services and jobs closer to places of aboard’

Discovering urban agriculture practices and demonstration projects at the Gudie Leisure farm that emphasizes zero waste.

Frugal and informal innovations in urban agriculture, recycling and environmental conservation at the Ghetto research lab in Kampala showed the potential of scaling up at a micro-scale.

To complete the visit days, a dialogue on the role of culture and art in creating a creative and resilient city was held at the Alliance Francaise Kampala. Issues of heritage, artists role in urban planning and possible linkages were discussed.
Monday 29th October 2019: Opening ceremony

The opening ceremony that took place on 29th October 2019 was an opportunity for all the elected representatives, partners and stakeholders of Kampala to present their challenges and expectations for the international workshop.

There was a presentation of the topic by the pilots of the workshop and the official unveiling of the participants. It aimed at involving local and national actors of Kampala in the workshop’s productions as well as stimulating a debate and a constructive dialogue between those actors and the participants of the workshop. They talked about possible forces for an urban transition to face climate change.
Local experts

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PART 2 : Process of the workshop

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Kasanvu Environmental Group

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Director of Alliance Française Kampala

And Esther Nakibuuka (Landscape, KCCA), Isaac Mugumbule (KCCA), Prisca Auma (KCCA), Margaret Joy Semwanga (KCCA), Faisal Biwewa (Bayimba Foundation), Samson "Xenson" Ssenkaba, Boby Ogwang (ProTeen), Sirezi Bulenza (Actogether), Melodi Tamarzians (Mango Tree), Verity Ramsden (Cross cultural foundation Uganda)...
“Uganda has one city, its identity comes from all the country”

“I don’t want the city as it was twenty years ago”

“Efforts of cooperation are not enough regarding magnitude of climate change”

“Coexist with the nature”

“It is difficult to turn brown into green but it is very easy to keep the green”

“The city has failed to develop its uniqueness”

“We have to see a mind-set and behavioural change”

“Informality is very energetic, but innovation at micro-level needs physical and financial support to provide sustainable capacity building”

“Cities have no capacity to enforce the law and maintain its infrastructure”

“What is affecting Kampala is affecting the suburban areas; what is affecting the suburb is impacting Kampala”

“Inclusive identity encompasses different dynamics”

“The workshop is to stimulate thinking for urban development issues”
PART 3 : Team Projects
From left to right : Chamsiddine Afraitane, Genaro Alva, Caroline Raes, Ibrahim Nyaburi, Paul De Chatelperron, Pamella Akora
‘Ssizibwa Kkuba’
My Path can never be blocked

According to a traditional legend of the Baganda people, a woman named Nakkungu Tebatuusa, whose husband was Nsubuga Sebwaato, gave birth to twins in the form of water. These twins were River Ssezibwa and River Bwanda.

The name Ssezibwa is derived from the Luganda phrase “Ssizibwa Kkuba”, which translated into “my path can never be blocked” because people living along Sezibwa believed that no obstacles could stop the flow of the River Ssezibwa along its 150Km journey.

As a team, we were inspired by water, which is a lifeline through Kampala City, thus our team name - Amazzi! As Kampala, Uganda’s Capital is located within the territory of Buganda Kingdom, we are inspired by the connotation in the dialect of Luganda.

Just like the Baganda people, we strongly believe that nature in general, and water in particular, cannot be blocked or controlled. In the end, it always wins.

How can this ancestral knowledge be leveraged to plan a greener and more innovative Kampala? How can we shift from water as a threat to water as an opportunity in the context of a growing population and changing climate?
The Evolution of Kampala

A city of hills and wetland valleys

Kampala is uniquely characterised as a city of more than 20 rolling hills interlinked by wide wetland valleys, located next to Lake Victoria. The city, which served as the capital of the Buganda Kingdom for close to a century before the arrival of colonialists, was initially built on hilltops which served as defence landscape for the King, or Kabaka. Wetland valleys surrounding hills were left as open spaces dedicated to agriculture, pasture fields for grazing animals, as well as a barrier against vermin, reptiles and mosquitoes.

The segregated Garden City

This original settlement pattern was maintained throughout the colonial era (1894-1962); first with the introduction of the 1919 Planning Scheme which segregated Europeans, Indians and Africans by a large green belt which neither community could encroach on, then with the application of the Garden City concept which organized Kampala city as a group of nine separate mixed-use settlements, each established on a separate hill.

Today’s Survival City

Today, Kampala is a metropolis of 1.6 million inhabitants which is expanding at a staggering 3.9% rate per annum, making it one of the fastest growing cities in the world. Rapid population growth is placing tremendous pressure on the provision of jobs as well as basic infrastructure and services, such as housing, transport, water and sanitation. The balance between developing on the hills and protecting the integrity and functions of wetlands is gradually being lost as a growing number of residents and activities move from the hilltops into low-lying areas, exposing Kampalans to increasing social, economic and environmental threats which have become part of their daily struggle to survive.
Kampala’s challenges and opportunities

CHALLENGES

- **Rapid population growth**: 5.2% urban population growth rate (2017).
- **Environment degradation**: Only 8% of original wetland areas remain highly functioning.
- **Flooding**: 40% of natural hazard events are floods.
- **Water-borne diseases**: 10,230 cases of typhoid during last outbreak (Feb-Jun 15).
- **Fragmentation**: Social, territorial, and institutional.

OPPORTUNITIES

- **Green city**: 53,257 trees including more than 300 species
- **Lake Victoria**: 33 Km of shoreline along Victoria Lake
- **People**: Proactive youth and community-based saving groups
- **Innovation**: Frugal innovations (circular urban farming, Safe Boda, energy briquette and pavers...)
- **Project pipeline**: Numerous ongoing and planned projects by KCCA

*Source: KCCA, Kampala Context document les Atelier 2019, Ministry of health*
The Vision: Harnessing water to co-create a livable and inclusive city

Key principles:

- Multifunctionality: Build multifunctional infrastructure to maximize co-benefits
- Ecosystem Services: Integrate nature-based solutions into existing and future grey infrastructure
- Scalability: Scale-up frugal innovation and local know-how
- Sustainability: Embed sustainability and circularity practices
- Inclusivity: Foster a stronger culture of collaboration and partnerships across stakeholders
**Hilltop**

**Existing Situation**

- Medium scale water harvesting tank
- Big scale water harvesting tank
- Afforestation

**Proposal**

- Communal/individual water harvesting tanks
- Bioswale along the road
- Sponge walking and cycling path
- Bioswale in open spaces

**Cost saving**

- US$ 230 Mn. ongoing budget for roads improvement project
- US$ 2* per meter bioswale drain
- US$ 21* per meter french drain
- US$ 71* per meter trench drain (most popular in Kampala)

*Source: SWRPC (1991)*
PART 3: Team projects

**Wetland**

*Existing Situation*

- Urban agriculture
- Street made with recycled bricks
- Communal space / Wetland champions
- Community groups harvesting biomass and aquaculture
- Toilet & water tank
- Innovative Center for the Built Environment

*Proposal*

- Bioswale along the road
- Multifunctional water park
- Communal space
- Communal space harvesting biomass and aquaculture
- Incremental / resilience housing typologies
- Circular urban farming
- Communal sorting waste and recycling
- Floodable Landscape
- NMT path
- Floodable Landscape
- Upgraded slums
Lakefront

Existing Situation

- Improved facilities for fish processing
- Street made with recycled bricks
- Community groups harvesting biomass and aquaculture
- Green boata boata fleet

Proposal

- Co-built structure KCCA + Lakefront Community
- Self-built canopy restaurants/market
- Phytoremediation/productive landscape (Cattail, papyrus, Water hyacinth and Duckweed)
- Public path

Additional features:
- Fishing center
- Fishing/boata boata dock station
- Community center
- Communal plaza
- Multimodal transport hub
- Lake boardwalk
- Bioswale in wetlands
- Bioswale along the road
- Victoria fest
- Parking Lot
- Natural remediation buffer
- Multifunctional water park
- Co-built structure KCCA + Lakefront Community
- Phytoremediation/productive landscape (Cattail, papyrus, Water hyacinth and Duckweed)
- Public path
## Strategies for achieving the Vision

<table>
<thead>
<tr>
<th>Setting</th>
<th>Proposed interventions</th>
<th>Cost</th>
<th>Stakeholders</th>
<th>Project alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road verges</td>
<td>• Develop standards and guidelines</td>
<td>C: Low</td>
<td>KCCA, community groups, Residents, NEMA, NWSC, GKMA, donor community</td>
<td>Road improvement project (US$ 240 MN), KIIDP II (US$ 175 MN)</td>
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<tr>
<td></td>
<td>• Stakeholder training</td>
<td>O&amp;M: Low</td>
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<tr>
<td></td>
<td>• Mobilize KCCA &amp; community groups for construction</td>
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<td></td>
<td>• Scheduled inspection + partial / full restoration, if needed.</td>
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<td></td>
<td>• Awareness raising activities for all stakeholders and residents</td>
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<tr>
<td>Public open spaces</td>
<td>• Identify pilot locations + engage with community on needs and preferred functions</td>
<td>C: Low, Medium, High</td>
<td>KCCA, community groups, Association of water parks users, Residents, NEMA NWSC, GKMA, donor community, local artists</td>
<td>Slum upgrading project (US$40 MN), Wetland conservation and management project (US$ 10 MN), Disaster Risk Reduction project (US$ 6.7 MN),</td>
</tr>
<tr>
<td></td>
<td>• Stakeholder training</td>
<td>O&amp;M: Low</td>
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<tr>
<td></td>
<td>• Involve community in building water parks using natural, low tech and low-cost</td>
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<td></td>
<td>materials for neighbourhood parks</td>
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<td></td>
<td>• Create an association of water park users responsible for O&amp;M + dedicated online</td>
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<td></td>
<td>platform</td>
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<tr>
<td></td>
<td>• Organise livelihood, cultural and social activities</td>
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<tr>
<td></td>
<td>• Awareness raising activities for all stakeholders and residents</td>
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<tr>
<td>Residential units, Public or private institutions</td>
<td>• Develop standards and guidelines</td>
<td>C: Low</td>
<td>KCCA, real estate developers, water tank manufactures, residents, NEMA, NWSC, GKMA, donor community</td>
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<tr>
<td></td>
<td>• Stakeholder training + sensitisation of benefits</td>
<td>O&amp;M: Low</td>
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<td></td>
<td>• Introduce economic incentives for low-income households to acquire water tanks</td>
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<td></td>
<td>• Introduce regulatory incentives targeting upper-scale housing developments</td>
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<td></td>
<td>• Awareness raising activities for all stakeholders and residents</td>
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<tr>
<td>Streets, sidewalks, driveways, parking, markets, schools, etc.</td>
<td>• Partner with construction industry &amp; university to identify appropriate materials &amp; technologies (waste material, concrete, etc.)</td>
<td>C: Low, Medium</td>
<td>KCCA, Community groups, District Committee, Universities, GKMA, NWSC, construction industry, donor community</td>
<td>NMT pilot project (US$ 4 MN), Kampala Parking Tower/ TRP terminal (US$ 20 MN)</td>
</tr>
<tr>
<td></td>
<td>• Stakeholder training</td>
<td>O&amp;M: Low</td>
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<tr>
<td></td>
<td>• Incentivize creation of community groups which will build and install permeable</td>
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<td></td>
<td>pavements</td>
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<td></td>
<td>• Establish a district committee (incl. community groups and leaders, KCCA, etc.) to</td>
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<td></td>
<td>monitor and maintain the infrastructure</td>
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<tr>
<td></td>
<td>• Awareness raising activities for all stakeholders and residents</td>
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</tr>
<tr>
<td>Wetlands, Lake shore</td>
<td>• Mobilize community for terracing and planting of water remediation buffer.</td>
<td>C: Medium</td>
<td>KCCA, Wetland champions, Community groups (e.g. Ghetto Lab), fishing community, Residents, GKMA, NEMA, NWSC, local artists, donor community</td>
<td>Wetland conservation and management project (US$ 10 MN), Kampala Urban Forestry (US$ 5 MN)</td>
</tr>
<tr>
<td></td>
<td>• Establish Wetland Champions – a network of active citizens responsible for</td>
<td>O&amp;M: Low</td>
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<tr>
<td></td>
<td>protecting the buffer and wetland</td>
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<td></td>
<td>• Train community groups on urban farming using resources from the buffer</td>
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<td></td>
<td>• Scale-up circular urban farming training for community</td>
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</tr>
<tr>
<td></td>
<td>• Awareness raising activities for all stakeholders and residents</td>
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</tr>
</tbody>
</table>

**Flow control, Infiltration, Filtration**

**Water Parks**

- Detention, Infiltration, recreation, economic activity

**Water Harvesting**

- Retention, Infiltration

**Permeable Surfaces**

- Infiltration

**Natural Remediation Buffer**

- Treatment, Recreation, Economic activity
Implementation timeline

<table>
<thead>
<tr>
<th>Within one to 3 years</th>
<th>3 to 7 years</th>
<th>7+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public institutions pilot water harvesting</td>
<td>Pilot bioswales integration in one neighborhood</td>
<td>Scale up bioswales across Kampala</td>
</tr>
<tr>
<td>Upgrade market and fish processing facilities</td>
<td>Pilot 2 water parks (large scale by KCCA, 1 small scale by community)</td>
<td>Scale up water parks across Kampala</td>
</tr>
<tr>
<td>Parking lot opening</td>
<td>Scale up sponge streets (phase 1)</td>
<td>Scale up sponge streets (phase 2)</td>
</tr>
<tr>
<td>Water remediation buffer along Ggaba</td>
<td>Water remediation buffer along GKMA shoreline</td>
<td>Water remediation buffer along Uganda, Kenya and Tanzania shoreline</td>
</tr>
<tr>
<td>Pilot permeable pavers on access road to lake front</td>
<td>Launch Boata boata service within GKMA</td>
<td>Open Boata boata line to Jinja and expand service to neighborhood countries</td>
</tr>
<tr>
<td>Build canopy and board walk</td>
<td>Multimodal transport station</td>
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<tr>
<td>Launch Victoria Festival</td>
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</tr>
</tbody>
</table>
PART 3 : Team projects

From left to right: Anna Juliet Bukirwa, Eloise Rousseau, Garret Gantner, Justine Audrain, Denis Tugume, Olawale Olusoga
Reconnecting the Metropolis: the Node Project

The Node project presents realistic, incremental and scalable interventions to address the challenges faced by the average Munakampala.

The story of Ms Bee

Ms Bee typifies the Munakampala. She is a single mother living in Bwaise slum with her five children, maintaining a small vegetable garden which provides her income selling at Owino Market in the city center.

To save money, Ms Bee walks to the market on most days. When she works late, she worries about her safety, as there are no street lights along her route back home. When the produce she sells is too heavy to carry, she takes a taxi, but it costs her time and money when she gets stuck in the jam.

After heavy rains, she does not go to the market as she first needs to attend to the flood damage flooding in her house and garden. Her children help her out by vending vegetables on the street.

Ms Bee struggles to predict her income, especially as the flooding occurs more frequently, and she feels she lacks the necessary skills to effectively manage her small business.
Kampala: a disconnected metropolis

The population of Kampala is growing by 5.6% annually, due to external and internal migrations, and high fertility rates as shown by Ms. Bee’s story. This makes Kampala the fastest growing city in Uganda and one of the fastest in Africa.

As a consequence of this growth, the metropolis is facing a number of issues. One of the most striking for Ms Bee and other Banakampala is the time spent in traffic jams: on average, 40% of the time spent on a journey is at a standstill. This has important economic impacts: it is estimated that GDP loss due to traffic is over US $890 million, according to a World Bank study.

Although investments in public transport systems are being investigated, the affordability of such projects are affected by Kampala’s complex land tenure system, making land compensation an expensive component of public works project budgets. For people like Ms Bee, the resulting underinvestment in transport means that walking is an important and common means of mobility. Pedestrian routes also play an important role in the informal economy: a 2017 World Bank report estimates that 84% of informal businesses in Greater Kampala sell to customers within a 30-minute walk.

While Kampala’s city center concentrates jobs and services, the difficulty of access caused by traffic makes it more relevant for people like Ms Bee to live as close to the centre as as possible. Nevertheless, rapid urbanization and scarcity of land in the city has forced her to settle on the remaining available space informally, as roughly 1 million Banakampala do.

This does not go without consequences on the natural environment, as the remaining spaces are often in wetlands or flood-prone areas.
While wetlands regulate the flow of water naturally, the increased impermeability of ground surfaces due to urbanization exacerbates the risk of flooding. Furthermore, the development of settlements without access to basic services, such as waste management or sewage systems, puts the wetlands and downstream water bodies (e.g., Lake Victoria) at an even greater risk of pollution. As a consequence, it can be said that Ms Bee’s pit latrine impacts fishermen living by the Lake.

“Interconnectedness” as a solution: the “Node” as the project

The problems faced by Ms Bee at a local level take root at the metropolitan scale, where myriad challenges can be clearly seen and tackled. These challenges can be described in three categories:

- **Urban**: Settlemens including residential, facilities, commercial buildings, etc.
- **Infrastructure**: The basic services and systems to link the settlements, such as roads or power supplies.
- **Natural**: The physical environment present naturally outside of human interventions.

Because these three categories are tightly intertwined, “interconnection” thus offers a possibility to address the issues faced by Ms. Bee in a more systemic way, thus finding more efficient solutions. In the interconnection between these three systems lies the solution embodied in the Node project.
The Node: an interconnection point

The Node project is at the intersection of the 3 main challenges observed at a metropolitan scale, finding its most acute expression locally (as experienced by Ms Bee): flooding, informality and mobility.

As a way to answer these pressing challenges, the Node project offers a flexible solution that can be implemented incrementally, following the fast-changing needs of the community.

Although a Non-Motorized Transport (NMT) route is not formally constructed as part of the Node, a clock tower increases the visibility of each Node, thereby reinforcing the use of NMT routes which ultimately lead to larger transport hubs. It thus enhances the intermodality transportation as part of a larger scheme to improve mobility at a metropolitan scale.

A rainwater harvesting system, along with a green space to absorb as much rainwater as possible, is part of a strategy aiming at facilitating natural infiltration of water into the soil (the “green sponge” effect). The Node will thus be located at the intersection of natural drainage channels, pedestrian paths, and spaces with available land, creating small green areas to increase the “green sponge” effect and offer opportunities for urban agriculture.

A community space is created in the Node, where community organizations can implement their projects and tap into the possibilities for innovation already present in informal settlements.

Module programming possibilities:
- large toilet block
- police post
- elec. boda charge
- water storage
- marketplace
- market storage
- post boxes
- etc.

"Green sponge" goals:
- water absorption
- slowing of runoff
- urban agriculture
- greening of the city
- open space
- protected space
- food security
- etc.

Mobility enhancement:
- node network as implied NMT route;
- encourage designated assembly points;
- promote future rapid transit;
- link transport to economic opportunities

Conceptual intent of the node
Implementing the Nodes

For the project to improve Ms. Bee’s livelihood, it has to be implemented. Three factors for success have been highlighted. These factors are illustrated by the following examples: a proposed “scalar impact assessment,” the “Twezimbe” project, and the “Bukirwa” project.

**Factor 1: assess**

<table>
<thead>
<tr>
<th>Impact Area</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatibility with initiatives</td>
<td>Working with existing &amp; planning initiatives of all actors</td>
</tr>
<tr>
<td>Shared vision</td>
<td>Acceptability, communication potential, mindset change, awareness of systems &amp; roles</td>
</tr>
<tr>
<td>Inclusiveness</td>
<td>DIY potential, affordable, youth-friendly, informality-friendly</td>
</tr>
<tr>
<td>Livelihood</td>
<td>Income generation, public benefit, indirect job creation</td>
</tr>
<tr>
<td>Harmony with natural systems</td>
<td>Permeability, erosion control, greenery, promotion of closed-loop systems, carbon footprint reduction</td>
</tr>
<tr>
<td>Viability</td>
<td>Optimal land use, protecting green assets, investment in closed-loops systems</td>
</tr>
<tr>
<td>Investment in sustainability</td>
<td>Management capacity, operational affordability, accountability, replicability, usability</td>
</tr>
</tbody>
</table>

**Factor 2: fund**

“Twezimbe” is conceived as an intermediary programme that will connect community saving groups with existing sources of funding to assist small-scale businesses to grow into SME’s which can employ others. To access public funds, community groups would be required to undergo the “Twezimbe” trainings, focusing on business management skills.

**Factor 3: maintain**

The (Bukirwa) toilets project

FREE = MISUSE

CONTRIBUTION = MANAGED USE

GOAL

Criteria
- Accessibility to the service provided
- Capacity for low income families to pay
- Easy and broadly available

PPP between KCCA and a private collector for maintenance and recycling

The *toilet business model* for maintainance and improvement
- Fees: 200 Shillings
- Bottles: 500 Shillings
  - 300 Shillings per users for maintainance and other activities

A maintenance system for management; recycling in exchange for use of toilets.

Assessment of scalar impact of interventions according to criteria.
Bwaise: connecting to the metro area

The selected study area is Bwaise, the oldest informal settlement in Kampala. Bwaise is representative of the city-wide challenges identified in the diagnostics.

Lubigi Wetland forms the southern boundary of the study area, which is intersected by two parallel north-south elements, namely the canal and the Kampala Gulu Highway (becoming Kampala Masindi and Bombo Road further south). This road is of importance as it is one of the proposed Bus Rapid Transit (BRT). The study area presents the opportunity to illustrate different types of Nodes based on different transport infrastructure - both planned and existing.
The choice for the project location within the community is based on the following, replicable principles:

- Availability of land within a densely built informal settlement;
- Convergence of points of natural water bodies and/or runoff and drainage;
- A locus forming part of a network of pathways promoting NMT, and nearby a point with easy access to transportation.

In the zoomed area presented on the map beside, the project creates a network of Nodes accessible within walking distance.

For Ms. Bee, she would be able to arrive at a transport Node and attend the “Twezimbe” training. She can then continue safely on foot within the community and connect to the next Node, where she might find a place to buy recycled goods, and move along to another Node, at which she can use a toilet and water tap.
Scaling the Node

All physical interventions are based on modular designs which can respond to the local contexts, especially in informal settlements where needs are diverse and change quickly.

The Node’s location requirements can be met in many areas of Kampala. It enhances NMT routes and promotes links to public transport, thereby mitigating GHG emissions contributing to climate change. It is intended to focus on enhancing the “green sponge” by being the locus where the networks of green spaces meet. Though each Node may be small, it is conceived as a network of green spaces, restoring some natural flows and ultimately leading to a drainage channel in the valley. Interventions emphasising green space and urban agriculture near the channel aim to protect the wetlands from further encroachment. In this way, the project taps into existing practices and seeks to adapt to the new weather conditions affecting people like Ms Bee.
Ms Bee mobilizes community members to form a savings group. A local Councilor informs Ms Bee that if her savings group takes part in the “Twezimbe” initiative, they can access government funds.

After attending the Twezimbe initiative at a newly constructed Node, Ms Bee can access funds through the savings group. The Node is easy to find, and despite meeting late at night, everyone feels safe as the Node area is well lit. At the Node, Ms Bee also sees advertising of a Community Based Organisation (CBO) that supports urban agriculture. Ms Bee wants to get the most out of her vegetable garden and takes a pamphlet to see what they can offer.

After the construction of two more Nodes, one of which has a small market, Ms Bee decides to move her stall to a new location closer to home. Since the introduction of the Nodes, more people are walking past the Node where Ms Bee sells her goods, on their way to the transport Node. She believes the increased footfall will be beneficial for her business.

She is also involved in managing the urban agriculture at the Node and, based on the operational duties, she has been offered a performance-based lease. This allows her to store some of her produce in a secure space at the Node.

Ms Bee still lives and works in an informal settlement, but she has been able to scale up her business with the new influx of people using the BRT and stopping at the Node on their way back home. Following her example, her friends in the community have been developing their own farming business, and the area is now known even in Wakiso for the nice vegetables sold in Bwaise. As a consequence, flooding has decreased as farming activities have increased the infiltration capacity of the soil. Ms. Bee’s children do not miss any school days anymore, and she is hopeful that they have a bright future.
From left to right: Bathilde Millet, Nelson Tuyambaze, Tejas Joshi, Bongani Tshidiso Ikaneng, Samuel Mabala, Alessandro Elli
To achieve a modern, green, resilient Kampala metropolis with a clear, unique identity, we analysed the existing situation and made operational proposals.

We the undersigned:

a. Noting that Kampala city has grown in unplanned manner beyond the administrative boundaries,

b. Aware that KCCA is the only responsible for the core capital city inspite of the existence of the Ministry of Kampala Capital City and Metropolitan Affairs,

c. Recognizing that Kampala’s identity is unclear,

d. Realizing that informal economy plays a major role in the labour market, and

e. Observing that the informal settlements have mushroomed and encroached on the wetlands with serious effects of flooding and pollution.

Propose that:

1. Kampala is identified as a modern, green and resilient city of the lake endowed with hills and valleys, social and enterprising people, and untapped cultural and tourism potential,

2. The planning of Kampala be restructured to achieve integrated mixed neighbourhoods for each hill, emphasizing concentric road networks, lined with trees in the reserves and hilltops, and functional public open spaces in the low-lying areas, and

3. A transformational model that enables the integration of informal sector activities into the formal economy be implemented to increase household incomes and achieve sustainable social-economic transformation.
AN UNEXPLOITED ECONOMIC POTENTIAL

As a country with significant natural resources and growing population, Uganda has improved its economic performance. Over the last three decades, the economy has moved from recovery to growth based on short-to-medium term planning and the country implemented a number of economic policies. For instance, Uganda Vision 2040 provides development paths and strategies to operationalize the ambition to transform a low-income country (506 USD average income per capita in 2010) into a modern a prosperous upper-middle country within next 30 years (9,500 USD average income per capita in 2040).

In 2017, Uganda is the 17th highest GDP growth in the African region and represents 0.04% of the world’s GDP value. The economy of Uganda is driven by high value services sector, representing more than 51% of the overall national GDP while agricultural sector concentrates almost 66% of the labour force. The population existing age structure is heavily concentrated in the working age group, reflective of a potentially active workforce.

<table>
<thead>
<tr>
<th>Sectoral contribution of GDP</th>
<th>Services</th>
<th>Agriculture</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour force distribution</td>
<td>51.2%</td>
<td>22.4%</td>
<td>22.6%</td>
</tr>
<tr>
<td></td>
<td>26.8%</td>
<td>65.6%</td>
<td>7.6%</td>
</tr>
</tbody>
</table>

However, there are also challenges in ensuring growth of Uganda due to several factors which are low competitiveness, weak public sector management and administration, low industrialization and value addition, corruption and inadequate human resource. In 2018, Uganda had a population of 38,823,100 people and they concentrate greatly near the capital city of Kampala, which continues to extend west towards Entebbe and Mbale.

This unique settlement pattern is a result of infrastructure development such as roads, highways and airport as well as job distribution and concentration area. Here where metropolisation dynamics are at work, creating the condition for uncontrolled urban growth and sprawl, especially the Greater Kampala Metropolitan Area (GKMA).

The GKMA is one the fastest growing African urban area, with an annual population growth rate of over 3.9%. It is home to approximately 4 million people, with Kampala City home to about 2 million people in 2016.

The GKMA also makes a huge contribution to the Ugandan economy, hosting 9.5% of all jobs in the country. While GKMA represents over 10% of Uganda’s population, it contributes over a third of the national GDP, due to the concentration of non-agriculture related manufacturing, such as chemicals and machinery. Further, it is estimated that 70% of the country’s manufacturing plants were clustered in GKMA.

An agglomeration economy is a complex system composed by many parts interconnected in an irregular way, having a different behaviour when working together as a whole. When observed from a deeper perspective, the components of this complex system are more or less complex entities linked with one another and organized within an ordered structure of mutual interaction.

Introducing complexity to understand how agglomeration economy works is very important. This approach creates the conditions to develop a broader framework of understanding, overtaking sectorial approach (and basic analysis) while fostering strategic thinking.

Today the economy of the GKMA is mostly driven by activities focused on local consumption, which tend to benefit the most from consumption linkages and daily needs. Most of the informal business are concentrated within this group and represent a strong driver of innovation as far as people are trying to apply new ideas and products to respond at the daily needs of the city inhabitants.

The industrial base is small but robust. Its capacity to create a sufficient number of jobs at reasonable wages is not enough to absorb the demographic growth and immigration dynamics into productive employment. The negative externalities created by metropolisation dynamics (e.g. traffic jam, lack of space, value land increasing, flooding, etc.) represent a threat for the local economy, pushing industries to relocate outside the city of Kampala, within the metropolitan area or even further.

The lack of attractiveness of the city represents another important threat for the future, diminishing the capacity of the GKMA to attract new firms from outside. The less attractive it is, the more difficult it will be to develop and diversify the industrial base, and therefore the economy.

Kalama needs to reinvent itself through the mobilization of its human resources, infrastructure assets, but also relying on its historical role of engine of the regional development. It is therefore important to create the indispensable conditions for the consolidation and the development of the industrial base but also for the transformation of informal activities, specialized on local consumption.
AN URBAN ECOSYSTEM IN DANGER

1. **Erosion**
   Roads and developments along hillslopes leading to less vegetation and more erosion

2. **Wetland encroachment**
   Informal settlements reduce the drainage capacity of the wetlands to filter storm water, causing flooding

3. **Diffused waste pollution**
   Unadapted systems of waste management cause negative impacts on the environment and human health

4. **Flooding**
   Climate change, soil erosion, wetland encroachment and poor waste disposals increase the flooding in the low lying areas

5. **Air pollution**
   Created by vehicular modes of transport that go up and down the hill, fostering fossil fuel consumption and increasing emission of GHGS

6. **Water pollution**
   The uncontrolled destruction of the wetlands coupled with the increased inflows of storm water and the effluent waste into the lake leads to water pollution

7. **Water hyacinth**
   Due to water pollution, we observe a growth of water hyacinth having an impact on fish stocks and water transport

8. **Disfunctional institutions**
   Overlapping mandates create negative externalities affecting the performance of the city. Silo organisation and mentality leads in a lack of synergies

After observing the functioning of the whole system, we deconstructed the physical environment into different layers. Using topography as the base of the system, we overlayed different layers to establish the relationships between the natural assets and the urban structure.
FROM A SYSTEMIC ANALYSIS TO A STRATEGICAL APPROACH TO ECONOMIC AND URBAN DEVELOPMENT

The analysis of the economic and physical environment has revealed different issues that are affecting the orderly and sustainable development of Kampala. It has also revealed that Kampala is a metropolis and therefore has to be considered beyond the confines of Kampala city boundary. The gaps relating to the planning and management of the metropolitan area are undermining the potential of Kampala metropolis to play its pivotal role in driving the national and regional economic development.

Furthermore we discovered the following issues that the city is grappling with: ineffective planning, urban sprawl, informality, high poverty levels, unemployment and under-employment, poor sanitation, environmental degradation and inadequate institutional capacities amongst others. In addition it was noted that Kampala has unclear identity in spite of its unique physical, social and cultural characteristics.

In order to clarify the identity of Kampala and define the future that can make Kampala modern, green and resilient city, we addressed ourselves to the following three questions which will help in causing the necessary transformation of the metropolitan area.

I. How do we make Kampala modern?
II. How can we work with nature and not against it in order to reinforce the identity of Kampala?
III. How do we create synergies between top-down and bottom-up initiatives to foster innovation and development?

To address these issues, we adopted a development strategy that relies on two major pillars both of which are underpinned on good governance.

1. **Economic**
   - Urban
   - Agriculture
   - Population
   - Informality
   - Innovative services

2. **Environment**
   - Planning
   - Topography
   - Water
   - Waste
   - Roads and traffic

We propose the following actions;
1) **Investing in people**: give the opportunity to people to express their talents through entrepreneurship and capacity building in order to increase household income and achieve sustainable economic development.
2) **Investing in space**: this calls for institutions to review their planning practices to be responsive to the natural environment, and creates conducive conditions to enhance the identity of the city and make it attractive.

The two actions complement each other and have to be implemented at the same time as they form a complex chain of events that reinforce themselves through a feedback loops.
INVESTING IN PEOPLE: A TRANSFORMATION MODEL FOSTERING COMMUNITY DEVELOPMENT AND INNOVATION

In order to integrate informal activities into formal economy and increase household income to achieve sustainable economic transformation, we propose the following transformation model which will be applied to informal activities such as waste management, transportation, greening, urban agriculture, retail and house construction.

It is premised on the following:

- Leveraging the power of numbers: the slums and informal settlements account for 60% of the urban population in Uganda; by organizing and mobilizing them to save daily, they can collectively generate sustainable financing that will enhance access to affordable credit for business development and housing development.

- Creation of a Business Support Centre (BSC) in KCCA to train & instill financial literacy among the dwellers of the slums and informal settlements; the BSC will be supported by KCCA and have Community Development Officers, Trade Development Officers, Commercial Officers, Agriculture & Agribusiness Officers, and Business Development Officers.

- Leveraging daily household savings to create a Community Innovation Development Fund (CIDF) for sustainable financing of the business enterprise development.

- Formation of Business Firms to carry out formal business ventures & create employment through value addition, import substitution, services, & export promotion, etc. The firms will engage in recycling of solid waste, agro-processing, construction, manufacturing, etc.

- Formation of Housing Cooperatives by employees to mobilize housing finance for home ownership through partnership with the real estate developers; the housing cooperatives will facilitate access to land for housing development for their members.

- Engagement of a public Financial Institution such as Post Bank, or Housing Finance Bank (HFB) to manage the CIDF on an agency basis.

- Partnership with the real estate developers to build mixed use development for sale to the Housing Cooperatives, Employees, Business Firms, and some individuals. HFB will provide mortgages for purchase of the housing units. The buyers are free to rent out their units to the majority of the community members who may not afford to buy.

A Program Steering Committee will oversee the implementation of this program in KCCA. It will be composed of the following stakeholders:

Central Government Agencies:
- Ministry of Kampala Capital City and Metropolitan Affairs: KCCA: Directorates of Engineering & Technical Services; Physical Planning; Treasury Services; Gender & Community Services
- Ministry of Science, Technology and Innovation: Directorates of Techno-Preneurship; Science Research & Innovation;
- Ministry of Lands, Housing and Urban Development: Directorates of Housing; Physical Planning & Urban Development; & Land Management; NHCC;
- Ministry of Water and Environment: Directorates of Water; and Wetland Management; NEMA;
- Ministry of Finance, Planning and Economic Development:

Local Governments: Wakiso District, Mukono District, Mpigi District

Private sector: Real Estate Developers: AREA, Enterprise Uganda, Skilling Uganda, Private Sector Foundation Uganda

NGOs, Associations/Unions, Community Based Organizations: Actogether, Habitat for Humanity, Uganda Global Business Association, Uganda Small scale Industries Association, Uganda Women Entrepreneur Association, Uganda Housing Cooperative Union, National Slum Dwellers Federation

International and local financial Institutions: Post Bank; Housing Finance bank; International Development Partners: World Bank; European Union; African Development Bank; AFD; JICA; Cities Alliance; UNCDF

The plan for the implementation of the pilot informal settlements is reflected here below:

<table>
<thead>
<tr>
<th>Description of the Activities</th>
<th>Yr. 1</th>
<th>Yr. 2</th>
<th>Yr. 3</th>
<th>Yr. 4</th>
<th>Yr. 5</th>
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<tbody>
<tr>
<td>Project Set-up:</td>
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<td>Consult key stakeholders, identify funding or development</td>
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<td>financing strategy, and identify financing Institution</td>
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<td>Set up the Program Steering Committee, Project</td>
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<td>Implementation Technical Committee, &amp; Project Implementation Unit</td>
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<td>Preparation Phase:</td>
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<tr>
<td>Mobilize Communities and form Settlement Level Forums</td>
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<td>Form savings groups</td>
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<td>Conduct household enumeration, house numbering,</td>
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<td>slum mapping and profiling of the settlements.</td>
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<td>Identify land owners and engage them on land sharing / readjustment</td>
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<td>and consolidation process</td>
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<td>Set up a Business Support Resource Centre</td>
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<td>Identify Trainers of trainees in every settlement</td>
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<td>Identify vacant sites for transit housing</td>
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<td>Form and register Business Firms</td>
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<td>Implementation:</td>
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<tr>
<td>Savings Mobilization</td>
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<td>Business Firms and Enterprise Development</td>
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<td>Training in Financial Literacy, Business Planning &amp; Management,</td>
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<td>Entrepreneurship, Marketing,</td>
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<td>Establishing housing cooperatives and house development</td>
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<td>Monitoring and Evaluation</td>
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</table>

63
PLANNING WITH THE NATURAL ASSETS OF KAMPALA

- Hills + Trees: controlling erosion
- Landuse: Mixed use at neighborhood level
- Water + wetlands: Revealing the water
- Roads: Reorganization of Mobility

VERTICAL GUIDELINES

Guidelines for an operative, reliable and successful system of governance at metropolitan scale

Recommendations to create an operative and autonomous authority for the planning and the management of the Greater Kampala Metropolitan Area:
- Review of the existing legal framework to create the Greater Kampala Metropolitan Authority
- Restructuring the current Ministry of Kampala and Metropolitan Affairs to create the Ministry of Metropolitan Affairs which will be responsible for the planning and the management of the GKMA
- Rationalize the legislation pertaining to the Kampala capital city and their respective district local governments within the metropolitan area

How to operate at Metropolitan scale under a temporary and unclear conditions?

Reinforcing the inter-agencies steering committee under the Ministry of Kampala Capital City and Metropolitan Affairs in order to implement the guidelines at metropolitan scale

Overall condition: in order to facilitate the implementation of these proposals, a strong political will is mandatory

Diagram:

- Ministry of Metropolitan Affairs
- Greater Kampala Metropolitan Authority
- Kampala District
- Wakiso District
- Mukono District
- Mpiigi District
Team C_Nsozi

GUIDELINES

1. Public open spaces
2. Concentric roads + trees
3. Peripheral road + transport hub
4. Business support center
5. Front line premises for business firms
6. Commerce + services
7. Variation in land uses and size of plots

CASE 1_KABULENGWA HILL_WAKISO

CASE 1

CASE 1

CASE 2

Typology of hills

Existing Plan

Proposal section

Proposal Plan

Public open spaces
Concentric roads + trees
Peripheral road + transport hub
Business support center
Front line premises for business firms
Commerce + services
Variation in land uses and size of plots
PART 3: Team Projects

Development of Informal settlement

- Bugolobi
- Kitintale
- 1990
- 2005
- 2019

Encroachment and reduction of wetland

Existing section

Proposal section

CASE 2_BUGOLOBI HILL & KITINTALE_KAMPALA

GUIDELINES

1. Creating savings groups, settlement level forums for community engagement
2. Business support center: formation of firms for employment creation
3. Setting up housing cooperative
4. Construction of houses on vacant sites by the cooperative
5. Restoring of the wetland with ponds, water reservoirs and public spaces
6. Developing peripheral roads
7. Establishing front line + employments
8. Planting trees along the roads and hilltops to control erosion
URBAN ECOSYSTEM RESTORED_A NEW IDENTITY FOR KAMPALA

1. **New institutional framework**
   Create the institutional conditions to enable synergies between top-down and bottom-up initiatives

2. **Re-organization of Mobility**
   Increasing efficiency of mobility
   Promoting green traffic into hills and public transport in low-lying areas

3. **Enhancing greenery on the hilltop and the slopes**.
   Making hilltops public spaces and recreational areas + trees along the concentric roads to reduce erosion

4. **Better liveable neighborhoods**
   Upgrading informal settlements through self-reinforcing social-economic mechanisms
   Transforming the physical environment

5. **Better drainage system**
   Improving drainage system to achieve sustainable flood management, including rainwater harvesting

6. **Wetland restoration**
   Giving a social and economical value to them. Creation of public spaces, ponds, and recreational facilities

7. **Waste for wealth**
   Fostering separation of waste at source to reduce, to recycle and recover organic waste developing market opportunities to create wealth from waste

8. **Mixed use neighborhoods**
   Increasing the functionality of urban spaces, integration of informal activity into formal economy
   Will reduce the distance between living and workplaces

9. **Restoration of the ecosystem**
   Restoring the quality of water and aquatic life
   Sustainable management of floods
PART 4: Jury
**International jury of the workshop**

**Co-presidents of the jury**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hon. Erias Lukwago</td>
<td>Lord Mayor</td>
<td>Kampala, Uganda</td>
</tr>
<tr>
<td>Eng. Andrew Kitaka</td>
<td>Ag. Executive Director</td>
<td>Kampala Capital City Authority, Uganda</td>
</tr>
<tr>
<td>Mr. Pierre André Périssol</td>
<td>President, Former Minister, Mayor of Moulins</td>
<td>Les Ateliers de Cergy, France</td>
</tr>
</tbody>
</table>

**International Partners**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Role</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Jules-Armand Aniambossou</td>
<td>Ambassador</td>
<td>Embassy of France in Uganda</td>
</tr>
<tr>
<td>Mr. Hatem Chakroun</td>
<td>Country Director</td>
<td>French Development Agency</td>
</tr>
<tr>
<td>Mrs. Djamila Ioualalen-Colleu</td>
<td>Project manager for sustainable and smart cities</td>
<td>Paris, France</td>
</tr>
<tr>
<td>Mr. Julien Chiappone-Lucchesi</td>
<td>Commissioner for European and International Affairs, Diplomatic Advisor to the Mayor of Strasbourg</td>
<td>Strasbourg, France</td>
</tr>
</tbody>
</table>

The jury of the workshop gathered a large panel of experts, from international partnerships led for the workshop, experts from all over the world, local governments from East Africa and representatives from Kampala and Uganda.

The three teams have presented their strategies and proposals to a packed auditorium, and the international jury had the opportunity to debate with the participants. During their deliberation and the roundtable following the deliberation, the jury members recognized the innovative character of the proposals, as well as the possibility to easily implement some of them.
## International Delegation

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Responsibilities</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Lee Maiyani Kinyanjui</td>
<td>Honorable Governor, Nakuru County Chairman of the Council of Governors Committee responsible for Urban Development and Housing</td>
<td>Nakuru, Kenya</td>
</tr>
<tr>
<td>Mr. Isaya Mwita Charles</td>
<td>Right Honorable Lord Mayor</td>
<td>Dar es Salam, Tanzania</td>
</tr>
<tr>
<td>Mr. Davis George Mwamfupe</td>
<td>Right Honorable Lord Mayor</td>
<td>Dodoma, Tanzania</td>
</tr>
<tr>
<td>Mr. Diomande Messou</td>
<td>Elected Municipal Councilor of San Pedro Deputy Director, Real estate evaluation</td>
<td>San Pedro, Ivory Coast</td>
</tr>
<tr>
<td>M. Roland Kouassi Bini</td>
<td>Head of Planification, Prospective and Statistics, Ministry of Urban Affairs</td>
<td>Abidjan, Ivory Coast</td>
</tr>
<tr>
<td>M. Jean Yves Kiettyetta</td>
<td>General Manager of the Transportation Council for Greater Ouaga</td>
<td>Ouagadougou, Burkina Faso</td>
</tr>
<tr>
<td>Mrs. Daline Kenfack</td>
<td>Urban development Officer Direction of Investments and economic operation studies</td>
<td>Douala, Cameroon</td>
</tr>
<tr>
<td>Mr. Mamoutou Touré</td>
<td>Technical advisor, Head of Geography</td>
<td>University Félix Houphouet Boigny, Cocody, Ivory Coast</td>
</tr>
</tbody>
</table>
**International experts**

**Mrs. Rose Molokoane**
Deputy president of Slum Dwellers International
South Africa

**Mr. Hariharan Chandrashekar**
Economist, head of Biodiversity Conservation Limited
Bangalore, India

**Mrs. Florence Bougnoux**
Architect urbanist - sustainable urban development and urban integration - Member of Les Ateliers Board
Paris, France

**Mr. Pedro Ortiz**
Urban planner, metropolitan planning
Madrid, Spain
## National Jury Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Organization</th>
</tr>
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<tbody>
<tr>
<td>Mrs. Martha Mugarura</td>
<td>Principal physical planner</td>
<td>Ministry of Lands, Housing and Urban Development, Kampala</td>
</tr>
<tr>
<td>Mr. George Fred Kagimu</td>
<td>Mayor</td>
<td>Mukono Municipal Council, Mukono</td>
</tr>
<tr>
<td>Mr. Moses Atwine Kanuniva</td>
<td>Director of Physical Planning</td>
<td>Kampala Capital City Authority</td>
</tr>
<tr>
<td>Mrs. Ruth Nakatudde</td>
<td>Principal Physical Planner</td>
<td>Wakiso District</td>
</tr>
<tr>
<td>Dr Fredrick Omolo Okalebo</td>
<td>Lecturer</td>
<td>Makerere University</td>
</tr>
<tr>
<td>Mrs. Amanda Ngabirano</td>
<td>Lecturer</td>
<td>Makerere University</td>
</tr>
<tr>
<td>Arch. Andrew Amara</td>
<td>Chairman, Board of Research &amp; Development</td>
<td>Uganda Society of Architects</td>
</tr>
<tr>
<td>Mrs. Grace B Tubwita</td>
<td>President</td>
<td>Uganda Institute of Physical Planners</td>
</tr>
<tr>
<td>Mr. Daniel Bwanika</td>
<td>Principal</td>
<td>Kampala School for Urban Planning</td>
</tr>
<tr>
<td>Mr. Odwar Denis</td>
<td>Public Relations Officer</td>
<td>National Union of Disabled Persons of Uganda</td>
</tr>
</tbody>
</table>
PART 5: Annexes
Le sujet en français

« Kampala valorisant ses atouts naturels et porté par l’innovation »

L’Atelier sur le thème d’un “Kampala valorisant ses atouts naturels et porté par l’innovation » intervient dans un contexte de croissance forte mettant sous pression l’environnement et les infrastructures. L’Agence Française de Développement AFD et l’Autorité de la Ville Capitale de Kampala KCCA ont invité les Ateliers à organiser un atelier se concentrant sur les questions du réchauffement climatique à l’échelle de la ville et de sa région urbaine. Les Ateliers ont associé un comité technique à la préparation de la session, notamment des membres de l’Université de Makerere, un représentant de l’AFD, des personnes du Ministère et de KCCA.

La ville est à la fois terre d’opportunités et lit de contraintes. Soumise à des inondations récurrentes, à l’occupation humaine incontrôlée dans ses zones humides de fond de vallées, à un déficit d’infrastructures d’assainissement, ayant des zones naturelles sensibles à l’érosion telles les collines, où les déplacements de la vie quotidienne sont soumis de longues heures d’embouteillages imprévisibles.…..

Kampala est souvent décrit comme la ville de la survie, où sa population se démeure au quotidien pour assurer ses besoins basiques, pour se déplacer, pour se nourrir, se loger. Face à la sévérité de la situation elle a su développer une résilience particulière qui lui donne des atouts d’adaptation, de créativité et d’innovation très diffuse et performante. De belles réussites tel l’exemple de Safe Boda (service de moto-taxi géré par une organisation et une application), mettent en avant cette capacité de professionnalisation poussée d’un savoir-faire issu du terrain et de la débrouille. Cette capacité entrepreneuriale accentue plus encore la position de Kampala dans la plaque géographique particulière de l’Afrique de l’Est, en phase d’accélération portée par les courants d’affaires et l’innovation.

Dans un pays où la population urbaine n’est que de 24 %, la ville de Kampala a une population fixe de 2 millions d’habitants en période nocturne, mais chaque jour elle héberge plus de 4 millions d’individus. Les prévisions de croissance la portent à 15 millions d’habitants dans quelques années. 52 % de sa population a moins de 15 ans, et donc le facteur générational particulièrement jeune crée une dynamique et une exigence forte.

La majeure partie de la population qui nourrit l’activité économique de la capitale réside au-delà des frontières administratives de KCCA, telle la ville de Kira dans le district de Wakiso, qui offre une disponibilité foncière propice à l’installation des populations actives de Kampala. Un déséquilibre régional sur la perception des taxes, la concentration des richesses, les déficits localisés devrait être rebalancé par la construction de projets d’infrastructure métropolitains comme le bus à haut niveau de service, nécessitant de mettre en œuvre l’organisation administrative ad hoc.

L’activité informelle représente 90 % de l’emploi en dehors de l’industrie agro-alimentaire, et contribue à hauteur de 20% au PIB ougandais. Il est proliférant dans nombre de secteurs et représente souvent un maillon économique vital au sein d’une chaine globale formelle. 60 % de de la population de Kampala vit dans de l’habitat spontané informel.

L’optique des Ateliers veut prendre en compte ensemble des handicaps de la ville, mais surtout les considérer de manière positive comme de véritables atouts à faire fructifier tout en maîtrisant ce mouvement et le canaliser, l’organiser. Ceci dans une vision stratégique de mise en œuvre d’une transition pour la région de Kampala.

Les éléments d’orientation de l’atelier

Le défi de l’atelier est d’apporter une réponse d’ensemble en s’appuyant sur des atouts majeurs de Kampala pour apporter des pistes concrètes d’amélioration des maux endémiques de la ville. Le point focal des propositions des équipes concernera la mise en œuvre de projets pour faire face aux effets du réchauffement climatique et anticiper ses impacts avec le plus de résilience possible.

Pour cela, l’Atelier propose de prendre en compte l’ensemble des acteurs impliqués, de faire se rassembler les forces vives et contributives, de valoriser les énergies positives, de faire fructifier le capital humain et l’esprit d’entreprise ambiant, à travers des propositions basées sur des effets démultiplicateurs. Le vœu est de permettre aux partenaires ougandais d’instiller une nouvelle dynamique s’appuyant sur une transversalité horizontale et verticale, en reliant et croisant les initiatives de terrains issues de l’initiative communautaires avec les grandes mesures décidées pour assurer une mise en œuvre efficace.

La valeur ajoutée des Ateliers, outre d’offrir une tribune créative neutre à nombre d’idées et de partenaires, est d’apporter le savoir-faire d’une méthodologie ouverte et large impliquant de prendre en compte des échelles diverses de la ville et des projets. Cela garantit une définition et une intégration des propositions mûrie sur le long terme.

Dans le cas de Kampala, l’organisation administrative de la ville Capitale définit des limites qui peuvent être perçues comme réductrices face aux enjeux d’expansion de la région métropolitaine. Les synergies entre la ville centre, ses périphéries, sa région métropolitaine, et la plaque géographique de l’Afrique de l’Est sont prises en compte par les équipes. Les influences et impacts réciproques sont soulignés par nombre de partenaires.
Deux points d’accroche essentiels pour lancer la démarche

La ville de Kampala structurellement doit faire face à une raréfaction forte des ressources d’espace, d’argent, d’emploi, mise sous tension encore plus forte par les variabilités climatiques. Elle possède néanmoins le potentiel de transformer ces menaces en opportunités, en s’appuyant sur ses atouts, qui s’ils sont correctement orchestrés, pourraient permettre de régénérer la ville. Il s’agit de considérer chaque activité de la vie quotidienne comme créatrice de valeur pour le bien commun.

Par ailleurs la ville de Kampala dispose d’un nombre important d’études, d’expertises, et bénéficie de nombreux programmes de coopération, notamment avec des pays européens. Un programme portant sur les questions d’agriculture urbaine, d’éducation, de gestion d’espaces publics est en cours avec la région de Strasbourg.

Notamment la question des infrastructures routières et de transports publics est majeure. Des projets importants de voie en superstructure, de corridor de bus à haut niveau de service sur voie dédiée (BRT) sont en cours de montage et de financement. Ils semblent imposants et en décalage avec la situation présente de Kampala, tout en préparant un certain futur. Ils questionnent largement d’autres points de vue sur le développement urbain de la ville, ses emplois, son image, son identité, son efficacité,…

La mise en œuvre de ces projets dépasse largement la capacité socio-technique et financière de la ville, rendant leur hiérarchisation impérative et leur choix très tenu. Cela implique donc de coordonner l’ensemble de ces possibilités et cette orchestration nécessaire passe par une optimisation des solutions à mettre en œuvre par mutualisation maximale des ressources, l’identification des redondances possibles, le recours à des solutions technologiques frugales.

L’enjeu majeur est de recouvrir les territoires, rassembler les acteurs, les organisations pour dégager des synergies convergentes et remédier à la dissipation diffuse des efforts, mettre en capacité de faire plus avec moins à chaque niveau d’action et pour tout projet.

Les équipes s’appuient sur les atouts identifiés dans le document de contexte, et leurs propositions mettent en œuvre des leviers de développement, de changement d’échelle et de diffusion des bonnes pratiques.

Les points saillants et enjeux spécifiques de l’atelier

L’Atelier offre l’occasion de porter un regard large au-delà des limites administratives et d’enclencher des dynamiques de progrès pour faire face aux défis quotidiens des kampalais.

La situation morcelée des territoires, des organisations, des problématiques, a orienté le thème vers la recherche de solutions fédératrices, permettant un assemblage de l’ensemble des composantes de la ville dans une vision holistique. Les équipes ont cette feuille de route de rechercher des solutions frugales, de faire plus avec moins, d’utiliser et mutualiser les ressources disponibles. Il s’agit de rapprocher et relier les nombreuses initiatives de terrain avec les programmes municipaux et internationaux, pour valoriser, amplifier, développer les pratiques d’économie circulaires déjà présentes. Il est clair que l’Ouganda, comme certains de ses pays voisins, a un fort potentiel de mise en œuvre des sauts d’étapes technologiques et serviciels qui surprendront par l’amplitude de leur déploiement et deviendront des bonnes pratiques de référence.

Vers une autre configuration des infrastructures :

Les orientations du documents contexte, les visites de terrains, observations et analyses, session d’échange avec les partenaires et le comité technique, ont poussé les équipes à s’interroger sur la notion d’infrastructure. Cela leur permet de revisiter plus largement leur conception, leur intégration urbaine, leur financement, la programmation des services urbains qu’elles développent. Au-delà d’une considération purement technique, leur façonnement sur le terrain est soumis à des implications sociales, des savoir-faire indigènes, l’intégration de maillons informels. Il s’agit plus de délivrer un service adapté à l’ensemble des conditions locales que de plaquer une solution technique occidentale.

De plus, la démultiplication des enjeux, des besoins dans chaque domaine d’infrastructure (routier, assainissement, éaux pluviales, énergie, espace public, mobilier urbain…) conduit à ne pas considérer individuellement chaque projet, mais rechercher les voies de mutualisation, de multifonctionnalité et de synergie de ces éléments socio-techniques. Quels services multiples peut rendre une même infrastructure ?

La prise en compte de l’informel :

Les atouts de l’informel sont d’apporter une réponse réactive et immédiate à une situation de crise grave, de déployer des solutions efficaces, frugales, proches de l’utilisateur, de démultiplier et profiter de la moindre ressource. Dans son essence ces activités offrent un potentiel de déploiement et mise en œuvre d’une économie circulaire forte. Cela concerne les activités marchandes, l’habitat, le transport, les activités techniques.

Les activités informelles, avec comme critère l’échappement à la taxation fiscale, sont intrinsèquement, volatiles et versatiles. Elles s’adaptent en permanence au contexte changeant pour raisons météorologiques, légales, de cycles d’activités, et se rapprocher au maximum du client. Ainsi elles dessinent
des réseaux spécifiques dans la ville, variant dans la journée, selon le jour ou la nuit, avec des alignements de vendeurs de rue sur certains axes, des petits groupes de Boda-bodas à certains carrefours stratégiques, sur des terres-plein bien placés. Ces localisations sont en changement permanent.

L'habitat informel qui peut apparaître très statique, est en mutation constante, à la fois en expansion spatiale très visible sur une photographie satellite, mais aussi en flux humains y arrivant et en partant, sous forme d’une sorte de recyclage des populations et d’auto-régulation des secteurs.

**Economie circulaire, esprit d’entreprise, innovation :**

En situation de survie et disposant de moyens très réduits, les pratiques d’optimisation de consommation valorise la durée de cycle de vie des produits par la réparation et le reconditionnement. Cela touche le secteur automobile, celui des téléphones, de l’habillement, ... Physiquement cela se traduit par des garages de taille variable rassemblant des carcasses de voitures, ponctuant de nombreux quartiers de la ville, en vallée ou sur les flancs inférieurs des collines.

Face à la détérioration de l’équilibre urbain et le risque croissant d’effondrement environnemental et social, la population de Kampala fait preuve de résilience, et s’organise sur le terrain pour apporter des solutions concrète à ces maux. Un nombre important de communautés développe des savoir-faire innovants en matière de recyclage de déchets (plastiques, organiques), transformant les rebus en ressource. Cela leur permet de construire et développer des micro-activités économiques dont la viabilité reste très fragile et surtout se cantonne à petite échelle. Néanmoins la diffusion récente de ces savoir-faire, commence à créer des effets de masse mais qui restent largement inférieurs aux besoins de formation et d’incitation financière pour un déploiement à l’échelle de la région métropolitaine.

L’esprit d’innovation doit être considéré comme un atout majeur car il concerne un panel d’activités majeures : construction, recyclage, énergie, agriculture, mobilité. 55% micro-entreprises du pays se trouvent à Kampala.

Il s’agit de renforcer et d’accompagner ces savoir-faire locaux, indigènes qui permettront de développer de nouvelles pratiques d’aménagement urbain, de développer la capacité économique de ces micro-entreprises sur le long terme.

**Identité, prise de conscience et changements de comportements :**

La question de l’identité et du modèle de ville a été souvent soulevé par nos interlocuteurs. La question qui en découle est de savoir comment renforcer l’attractivité de la ville et de la région pour le tourisme de loisir, d’affaire, religieux. Comme beaucoup de villes Kampala n’a pas encore développé d’identité forte mais possède un patrimoine architectural colonial et post-colonial significatif. Associé à sa topographie, son paysage, sa flore, quel type d’identité est-il possible de construire ? La position de l’art dans la ville et son rôle prescripteur pouvant amener à des changements de comportements plus respectueux de l’environnement est identifié comme un levier possible.
**Team A**

**Maîtriser et exploiter l’eau pour co-créer une ville inclusive et facile à vivre**

**Contexte**

Capitale du Royaume du Buganda pendant près d’un siècle avant la colonisation britannique, Kampala a été bâtie sur des collines reliées entre elles par de larges vallées marécageuses dédiées à l’agriculture et protégeant les habitants contre les moustiques et autres menaces humaines ou naturelles. Cette organisation territoriale fut conservée pendant toute la période coloniale, avec l’introduction notamment d’une ceinture verte encerclant les collines urbanisées et séparant les communautés européennes, indiennes et africaines qui occupaient chacune des collines différentes. Aujourd’hui, la capitale ougandaise est une métropole de plus de 1.6 million d’habitants qui croît à un rythme effréné (3,9% par an). Cette urbanisation accélérée génère des besoins croissants en services urbains (logements, eau, assainissement) et emplois, notamment pour la jeunesse. Elle met également en péril l’équilibre territorial fragile entre collines construites et vallées ouvertes, avec l’occupation progressive des zones humides par l’habitat informel et l’activité économique. En conséquence, la qualité de l’environnement se dégrade et sa capacité à fournir des précieux services se réduit, augmentant les risques d’inondations et de maladies transmises par l’eau. Pourtant, Kampala possède de nombreux atouts qui pourraient être valorisés dans ce défi :

Elles sont accompagnées par cinq principes clés qui doivent faciliter leur mise en œuvre et leurs maintenances tout en apportant de la valeur aux habitants :

1. Multi-fonctionnel pour maximiser les bénéfices éventuels
2. Utiliser les savoir-faire locaux et des solutions astucieuses
3. Utiliser des solutions naturelles “vertes” intégrables aux infrastructures existantes
4. Encourager des activités d’économies circulaires
5. Créer une culture collaborative entre les parties prenantes dans les phases de conception, construction et de maintenance.

**Vision du projet : Maîtriser et exploiter l’eau pour co-créer une ville inclusive et facile à vivre.**

Suite aux visites de terrain, il est apparu que la ville est incapable de maîtriser les avaries liées à l’eau ayant des conséquences importantes sur ses habitants, ses infrastructures et ses activités économiques. L’objectif est d’apporter une large vision, incluant les caractéristiques typologiques de la ville, sociétales (fragmentations sociales et pauvreté) et environnementales pour mieux gérer l’impacts de l’eau sur la capitale.

Pour y parvenir cinq stratégies simples, économiques et respectueuses de l’environnement sont proposées pour la gestion de l’eau (son débit et traitement) en remplacement des tranchées en béton onéreuses à entretenir :

**Fossé naturel** : pour contrôler le flux, infiltrer et filtrer l’eau grâce aux végétaux qui y poussent (roseaux, plante taro, algues, herbes…).

**Réservoirs d’eau domestiques** : pour récupérer les eaux de pluie.

**Bassin artificiel** : pour retenir et infiltrer les eaux de pluies (gravats filtrants et végétaux). Des activités de loisir et économique peuvent s’y ajouter.

**Surfaces perméables** : infiltrer les eaux de pluie grâce à des pavés poreux produits localement par des associations qui recyclent des déchets plastiques.

**Zone de purification d’eau par des plantes (bassin ou littoral)** : Traiter les eaux. Activités de loisir ou économiques peuvent se développer autour.

Le projet s’articule autour de trois zones géographiques différentes où il est possible d’appliquer ces cinq stratégies pour répondre à ce défi :

**Collines**, où l’eau ruisselle rapidement entraînant le sol avec elle,

**Marécages**, où l’eau stagne au milieu des bidonvilles,

**Littoral** du lac pollué qui possède de nombreux atouts grâce à la pêche, son marché, le transport sur eau et à l’activité touristique.

Le projet s’articule autour de trois zones géographiques différentes où il est possible d’appliquer ces cinq stratégies pour répondre à ce défi :
Le « Node project » est une solution pragmatique, réaliste et évolutique qui cherche à répondre aux problématiques que rencontre la Métropolis, Kampala.

L’histoire de Ms. Bee

Comme un fil conducteur de l’analyse et du projet, Ms Bee est un personnage qui symbolise le Munakampala (habitant de Kampala) moyen : elle vit dans un quartier informel où elle élève ses 6 enfants et subit les effets des inondations régulièrement. Les méthodes de mise en œuvre proposées doivent répondre à ses besoins afin de garantir la réussite du projet afin qu’il puisse avoir un réel impact sur la vie des habitants du quartier.

Kampala est une des métropoles africaines dont la croissance est une des plus rapide. En résulte un certain nombre d’enjeux dont les trois principaux sont : la congestion, le développement de l’habitat informel et la disparition progressive des zones humides.

Pour répondre à ces enjeux, le « Node Project » adopte une vision systémique : il s’agit de reconnecter les différents systèmes qui composent la Métropolis : l’urbain, les infrastructures et l’environnement naturel.

Ainsi, le Node est un objet évolutif composé de différents modules pouvant accueillir une variété de fonctions selon les besoins de la communauté. Le Node se situe sur un territoire à la croisée des enjeux métropolitains : entre transport, zones humides et quartier informel. Le quartier informel de Bwaise constitue ainsi un terrain d’étude privilégié, du fait de la proximité des infrastructures de transport et de la zone humide le long du canal de Lubigi.

La mise en œuvre du Node dans le quartier permet ainsi de retisser les liens entre le territoire et les infrastructures de transport tout en valorisant les ressources existantes, à savoir notamment le canal et les initiatives locales (agriculture urbaine, projet de comptes solidaires, etc.). Le Node permet ainsi de réconcilier les habitants des quartiers informels avec leur métropole en leur permettant de bénéficier des retombées des grands projets d’infrastructure et de tirer profit des ressources qu’offre l’environnement naturel du site en développant les cheminements piétons le long des drains notamment, plutôt que de subir les risques d’inondation qui vont croissant avec le changement climatique.

Enfin, pour que le « Node project » soit un succès et bénéficie aux communautés, plusieurs facteurs ont été analysés auxquels peuvent répondre des méthodes simples et réplicables : le projet doit répondre à des critères de durabilité et être évalué avant, pendant et après la mise en œuvre ; il doit par ailleurs être financé, notamment à travers des initiatives locales ; enfin, le bâtiment lui-même doit être maintenu en bon état à travers des partenariats innovants.de l’Est sont prises en compte par les équipes. Les influences et impacts réciproques sont soulignés par nombre de partenaires.
PART 5 : Annexes

Team C
KAMPALA : vers une métropole moderne, verte et résiliente, bénéficiant d’une identité claire et unique

A travers les visites de terrain, les cartes, les rapports officiels, mais aussi grâce aux rencontres et aux échanges avec les habitants et les acteurs socio-économiques nous avons pu développer notre propre analyse de la réalité de la ville de Kampala et son aire métropolitaine (GKMA).

Plusieurs menaces en ressortent, liées aux multiples dysfonctionnements écologiques et fonctionnels du territoire ainsi qu’aux potentiel économique inexploité. Mais aussi plusieurs opportunités liées au potentiel écologique et topographique du site, et aux forces vives du territoire, c’est-à-dire les habitants de la GKMA.

C’est grâce à leur vitalité, leur capacité d’adaptation aux changements à travers de multiples formes d’innovation que les habitants de la GKMA représente la plus importante ressource pour dessiner l’avenir de la métropole et de la nation.

Il nous paraît important de leur donner les moyens indispensables pour leur permettre d’exprimer leurs talents, leurs capacités entrepreneuriales mais aussi pour rendre la vie urbaine moins oppressante au quotidien. En d’autres mots, nous pensons que pour améliorer la qualité de vie des habitants de la GKMA il est indispensable d’agir simultanément sur deux plans :

**Investir dans les lieux :**

La déconnexion entre le paysage naturel et le développement urbain représente un risque pour l’avenir de la ville et ses habitants. Il nous semble donc impératif d’intervenir rapidement pour que la ville retrouve une complicité avec l’environnement naturel. Pour se faire nous proposons une nouvelle organisation de la ville qui ne s’appuierait pas seulement sur une planification horizontale mais aussi, et surtout, sur une stratification verticale. Cette nouvelle organisation permettrait, de :

- Consolider les topographies en résorbant le phénomène d’érosion par la mise en œuvre d’infrastructures et d’aménagements paysagés adéquats
- Repenser et hiérarchiser les mobilités en prenant en considération les caractéristiques topographiques du territoire
- Reconstituer à l’échelle d’une colline, “une petite ville” qui offrirait mixité et services.
- (Re)qualifier les milieux humides, constituant aujourd’hui des no-man land occupés par de l’habitat informel afin de développer des espaces publics arborés.

Ces partis-pris stratégiques ont été déclinés à l’échelle de deux sites. L’un sur un terrain faiblement construit et sujet au processus d’étalement urbain. L’autre sur un terrain situé en plein coeur de la ville de Kampala. En conclusion, notre stratégie repose sur l’idée d’aborder la ville comme un écosystème complexe et évolutif, perpétuellement en transformation. Accompagner son développement est une question de choix, ce qui implique la mise en place d’une organisation institutionnelle adaptée à la nature des enjeux urbains du XXIème siècle.

**Investir dans les gens :**

La croissance démographique, le secteur informel, les multiples opportunités de création de valeur et de richesses liées aux activités de recyclage, de l’agriculture urbaine, des transports et du tourisme représentent un potentiel de développement aujourd’hui insuffisamment exploité. Il nous semble donc prioritaire de trouver un modèle d’investissement capable de supporter l’essor d’activités informelles à haut potentiel et les communautés humaines qui les produisent. L’objectif étant d’augmenter le niveau de revenus des ménages et in fine supporter le développement économique de la métropole.
TEAM A

AFRAITANE Chamsiddine
COMOROS-UGANDA Administration, Aquaculture - Consultant at Gudie Leisure Farm
and Director of entreprises France - chamou3333@gmail.com

Born in Comoros, after getting a degree in administration, I moved to South Africa; there I studied restauration, worked with various institutions and my last one was Sheraton Hotel in Pretoria as a restaurant manager. I then moved to Miami to work for Carnival Cruise Lines. After 5 years I left to study biofuel, animals management, aquaculture and aquaponics. Since I move to Uganda where I reside.

DE CHATELPERRON Paul
FRANCE - Engineer & Designer / Innovation project manager at Renault Group
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Sensitive to innovation approaches, I had the opportunity during my projects to develop the necessary skills to provide relevant propositions on various subjects related to mobility, economic and technological development:
At Groupe RENAULT, I manage transversal, multi-actor and international mobility projects in different territories (United States (California), Africa (Senegal) and Europe). Connected to the trends of our world, I assist the Group in identifying opportunities related to innovation ecosystems.
Attached to cultural roots, I like to innovate by renovating traditional practices with technologies and by associating local actors to support activities such as agriculture or industry.

AKORA Pamella
UGANDA - Masters of Architecture - Architect - KAMPALA CAPITAL CITY AUTHORITY - pakora@kcca.ug

Educated as an architect, I am passionate about good design that integrates planning, construction and landscape. Through interest, I have previously taken on projects that include design for public infrastructure and participatory planning. Additionally, with six years’ experience as an architect in a planning department, for a government department, I have been trained in design for public buildings and infrastructure. I have also gained experience and knowledge in planning and architectural legislation, project planning and management, liaison with other agencies and professionals.

ALVA Genaro
PERU - Master in Human settlements / Master in city Management / Architect
genaroalvarezvallos@gmail.com

Lima, the city where I live, is a fragmented city where the right to be a citizen is based on how wealthy you are.

This has led to a chaotic city that has survived the absence of the state: planning, housing, public spaces, decent transportation, etc.

I believe that cities can be improved by listening to the people and we as professionals need to build solid frameworks in where life can occur as fairly and equitably as possible.
RAES Caroline

ETIOPIA - FRANCE MA in Urban and Regional Strategies/ BA in Economics / Employed as Senior Program Manager, Africa at 100 Resilient Cities  caro.raes@gmail.com

I am a highly driven and resourceful urbanist who is deeply committed to strengthening African cities into thriving, equitable and resilient places for all. With a background in Economics and Urban Studies, coupled with 8 years’ experience in urban planning in both Europe and Africa, I have deep and multidisciplinary urban knowledge. I am fluent in English, French and Amharic.

A solid team player, I bring a strategic mind, positivity and a can-do attitude to all of my work.

NYABURI Ibrahim

KENYA - Community development / project management and social work - Employed at Kounkuey Design Initiative,-Nairobi Kenya, Kibera slum , Co-founder and senior project coordinator,

I am a Co-founding member of Kounkuey Design Initiative (KDI) and co-developer of award winning community driven design process. I am a trained community organizer, and have worked with KDI since inception in 2006.

I have experience in a variety of territories and fields of competence. Born and raised in Kibera slum, my background is social work and project management / development. I am a self-motivated person who believes in taking initiatives that are geared to bring change to vulnerable residents.
TEAM B

AUDRAIN Justine
FRANCE - Urban planner, urban resilience specialist. Bachelor in Political Science and Masters in Urban Planning and in Regional and Urban Strategies justine.audrain@gmail.com

Justine Audrain is an urban planner specialized in adaptation to climate change. Overall, she lived and worked in 5 different countries in 4 different continents: Europe, Northern America, the Caribbean and South America, and Africa. Starting her career in France, she worked for major National Agencies for several years before moving to French Guiana in 2016. In the Amazonian and Caribbean Regions, she discovered the richness and fragility of our natural environment and shifted her practice as an urban planner to protect and value these resources in development projects. She is now living between Paris and Kampala, working between both and the Caribbean Region.

BUKIRWA Anna Juliet
UGANDA - Master’s degree in Business Administration in International Business/ Employed at Actogether julietbukirwa@gmail.com

I am the Livelihoods Officer providing the technical support to slum dwellers organised under the National slum dwellers federation of Uganda (NSDFU) by to develop business plans for their income generating activities. I have experience in business, human resource and financial management. For the past 7 years’ I have worked in rural and urban development sector working directly with marginalised communities of the poor. I have worked on a number of programs empowering women and youth at different levels.

OLUSOGA Olawale
NIGERIA - Architect / Lecturer at the Department of Architecture waleolusoga@yahoo.com

I am Olusoga Olawale O., a registered architect and also a lecturer at the Department of Architecture, Federal University of Technology, Akure in Nigeria. My research interest centers on housing studies, urban design, and sustainability. My current Ph.D. research focuses on Green Infrastructure and its impacts on residents’ quality of life in deprived neighborhoods in Lagos, Nigeria. I have gained some experience in teaching and also published some journal articles and attended a few local conferences.

GANTNER Garret
USA - SOUTH AFRICA Master of Architecture / Senior Lecturer, University of the Witwatersrand - Director, Bantu Design & Research garret.gantner@gmail.com

Garret Gantner is a principal of Bantu Design & Research and Senior Lecturer in Architecture at University of the Witwatersrand in Johannesburg. He holds an M.Architecture from Yale and is a registered architect in South Africa and the USA. Garret’s extensive experience in under-resourced countries includes award-winning architectural design and participatory planning projects in Rwanda, research on human settlements of East Africa for Aga Khan University and the development of design standards for Rwandan and Liberian government ministries.
TEAM B

ROUSSEAU Eloise
SOUTH AFRICA - Master of City and Regional Planning, Master of Commerce in Development Finance/Consulting part time to the Resilient Civic Design Collective
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Eloise is an urban planner currently working as a consultant in Arup's Hong Kong office. Prior to relocating to Hong Kong, she worked in the public sector in South Africa. As a Principal Planner at the City of Cape Town, her work focused specifically on growth management and urban informality. Eloise holds a Master of Commerce in Development Finance as well as a Master of City and Regional Planning from the University of Cape Town. She is an avid traveler and looks forward to learning from the officials working in Kampala and sharing ideas with other participants.

TUGUME Denis
UGANDA - Urban planning and management / Senior planner - Physical and spatial planning-Npa
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I have worked on long and short term assignments both in Uganda and Ethiopia. Currently I am working at the National Planning Authority as Senior planner - Physical and spatial plan.

One of the key topics I am currently engaged is the delivery of the Greater Kampala Economic Development strategy (GKMA).
TEAM C

ELLI Alessandro
ITALY- MSc Local Economic Development/ MSc Applied Economics – Development manager at EpaMarne/ EpaFrance ales.elli@hotmail.it

Professional planner and economist, I'm working for EpaMarne/EpaFrance, a French urban planning agency, which aim is to plan cities thorough an integrated and sustainable approach. As a development manager my role is to create the political, economic and technical conditions essential to the implementation of innovative urban development projects. To do that I mostly work with multidisciplinary team, where I try to contribute to the creation of a good atmosphere, both studios and fun. I also need to mobilize market players and local stakeholders to guarantee project’s feasibility.

IKANENG Bongani
BOTSWANA - Bachelor of science in urban and regional planning - Employed as principal physical planner II for Kgalagadi District Council- btikaneng@gmail.com

I am from a landlocked country called Botswana and currently employed by the Botswana government in a local authority based in Kgalagadi District as a Physical Planner. I am motivated to participate in the urban workshop to exercise my accumulated experience and abilities in the public and private sector. The skills I have managed to acquire over the years has cultivated in me the need to be proactive and innovative with the knowledge I have hence why I want to participate in the international network of professionals. I have been trained on Public Private Infrastructure Partnerships through the Australian Awards by the University of Queensland and believe that the knowledge I have gained can contribute immensely to the workshop.

JOSHI Tejas
INDIA- Bachelors in Architecture / Masters in Urban Design -Partner at Prakriya Design Studio, Pune - tejas410@gmail.com

Tejas, is an Architect & Urban Designer with 10 years of professional experience. He is working with cities and their built environment through practice, research and teaching. He is one of the partners at Prakriya Design Studio based in Pune, India. His firm is currently working on ‘Place-Making’ projects in association with the urban local body of Pune under its ‘Smart City’ program to improve the quality of life of people. He is involved in design of multiple school projects as well with a vision to improve the learning environment of schools. He is also a visiting faculty at Department of Urban Design at Aayojan School of Architecture & Design, Pune.

MABALA Samuel
UGANDA - Bachelor of Statistics (MUK), PGD GIS-Urban Appl. (ITC), PGD Housing, Planning & Building (IHS)- Country Urban Adviser, samuel.mabala@gmail.com

I am the Country Urban Adviser representing Cities Alliance in Uganda. Previously, I served as the Director for Housing, and Commissioner for Urban Development in Uganda. I am a team leader, social, analytical, and problem solver. Careerwise, I am a Housing and Urban Development specialist. I am a graduate of statistics from Makerere University Kampala. I have professional qualifications in Housing, Planning and Building from IHS, Rotterdam, and Geo-Information Systems for Urban Applications, ITC, Enschede, the Netherlands.
TEAM C

MILLET Bathilde
FRANCE - Architect and manager of the practice «B Millet Architects»
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I am an architect, graduated from the School of Architecture Paris Val de Seine, manager of the practice «B Millet Architects», I have focused my activities on the social housing sector with an approach integrating a global urban vision that can be termed «micro-urbanism». This new look delves into relationships between public and private domains, and explores the conditions for social harmony based on the right distance between people «living together».

TUYAMBAZE Nelson
UGANDA - Urban forester, Conservation Forestry and Products Technology
Kampala capital City Authority ntuyambaze@kcca.go.ug

A Ugandan professional in Urban Forestry, environment and landscape designs with over 3 years of working experience currently employed by Kampala capital City Authority (KCCA). Have a demonstrated history of working in the Climate change environment, Strong professional skills in Clean Development Mechanism, GHG Measurement, Reporting and Verification systems, climate change planning with strong knowledge of remote sensing and GIS, Water Footprint -Concept and Application, Monitoring and Evaluation of Climate Mitigation Initiatives as well as Geo-Information Science and Technology.
Les Ateliers’ Team

CALVO BOIXET Blanca
PILOT - SCIENTIFIC LEADER OF THE WORKSHOP
Architect and urban planner - SPAIN
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I am an architect and urban planner from Barcelona that has been working in "socially engaged" urban projects in South Africa for the last five years. My interest focuses on the intersection between urban development, architecture (both design and construction), and socio-economic issues. I believe that the making of cities should be inclusive and everyone should benefit from the opportunities that urban life brings. As a result, my work mostly focuses on strengthening the voices of the urban poors.

GREBERT Jean
PILOT - SCIENTIFIC LEADER OF THE WORKSHOP
Architect Urban Planner and Transport Engineer - FRANCE
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Jean Grébert has been working at RENAULT for ten years. He is managing Transportation & Mobility Research activities within the Research and Advanced Studies Department. He is in charge of prospective and systemic analysis about the mobility behaviour changes in the main metropolitan regions of emerging countries in order to appraise the personal motorized mobility stakes by 15 years. He has been Deputy Director of a medium size city’s Town Planning Agency, in charge of planning and designing urban and transportation projects. He lead studies for SNCF (French railway Company) mainly railway stations renewal and improvement, and researches for the French Ministry of Transportation about...
Les Ateliers’ Team

VALENZUELA Veronique
Director of projects, Geographer
CHILE - FRANCE
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I have always been interested in the social and urban issues of large cities, first through the recovery of historical memory and the study of mechanisms of exclusion and socio-spatial segregation. My personal experience has allowed me to get to know the urban dynamics of Latin America, Africa and Europe. I work in public institutions and associations, and have been active in workshops since 2010 as an assistant manager, participant, and coordinator and project manager. Since 2016, I am a Director of projects at Les Ateliers.

NAMWANJE Priscilla
Assistant - Architect - UGANDA
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Priscilla Namwanje is a registered Graduate Architect from Kampala Uganda. She is an ardent architectural activist, passionate about using design to change communities and plan a better future for African cities. She is currently involved in multiple research projects within informal settlements in Uganda, namely; Katanga and Namuwongo in Kampala City, and Masese in Jinja Town. She is a registered member of the Initiative for Community Architecture (ICA), at Makerere University.

LEPOITTEVIN Christine
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NGOMA Jenny
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Technical committee

SILVER Innocent
Projects Coordinator - Kampala Capital City Authority
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Innoccnt is the supervisor for Public Private Partnerships at KCCA, responsible for overseeing the implementation, monitoring and reporting of Projectized Authority Work. He is trained as a Public Administrator, with specialized post-graduate training in Demography, urban management and Corporate Strategy Management. He is a certified Project Management Professional (PMP) with extensive experience in managing multi-million, transnational projects in varied disciplines and scale.

KUSIIMA Anita
Supervisor of Physical Planning - Kampala Capital City Authority
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Anita Kusiima is a trained Spatial Planner (BSc. URP-UDSM, Msc. CRP – UCT, PPM, SEA - SIDA ). She has obtained vast knowledge and experience over the last 13 years as a practitioner in Real Estate, Academia, Project planning, Regional planning, Strategic environmental assessment, SDG indicator assessment, Innovative smart technologies for planning cities and enhanced linkages for development nodes. For the last 7 years at KCCA, she has handled Spatial Planning, Issuance of development permission and Compliance within the city.

GARÇON Jean-Philippe
Programme officer - Agence Française de Développement
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Engineer and urban planner, Jean-Philippe has experiences in Africa and Asia during the past 10 years with a focus on building sustainable urban services. He has worked for NGO, private sector and multilateral organization. He is currently Programme Officer at the Agence Française de développement in Kampala, Uganda, in charge of the water and sanitation, transport and urban development portfolio.

MUGARURA Marta
Principal urban planner in the department of urban development, in the directorate of physical planning and urban development; Ministry of Lands, Housing and Urban Development.

I’m currently working in the position of principal urban planner in the department of urban development, in the directorate of physical planning and urban development; Ministry of Lands, Housing and Urban Development, Kampala.
I have served with central government for 8 years now and previously in the local government for 5 years.
Technical committee

NGABIRANO Amanda
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Urban Planner and lecturer
MSc Urban & Regional Planning & Development, Makerere University.

Local member, Move Mobility, a DASUDA Member.

Board member and Vice President - Africe for World Cycling Africa

MURUNGI Ronald
Physical Planner - Ministry of Lands, Housing and Urban Development
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I am a trained and accredited Physical Planner with accumulated years of practice as a private and public Physical Planner in spatial urban development planning in Uganda. Currently working with Ministry of Lands, Housing and Urban Development and charged with undertaking physical planning for adequate land utilization, contribute to review and development of new policy frameworks, provide technical support to Higher Local Governments & Lower Local Government, monitor and supervise Physical Development Plan formulation and implementation in the country.

KASAIJA Peter
Researcher/Assistant Lecturer, Urban Action Lab (UAL), PhD Student,
Department of Geography Geo-informatics and Climatic Sciences
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I am an urban development practitioner and researcher whose main interests include informality, housing, inequality, poverty and climate change adaptation. I have more than ten years of teaching experience at Makerere University. I am currently undertaking research on informal sanitation infrastructure which seeks to contribute to the theorization of African cities through the emerging body of Southern urbanism. Alternatively, my research seeks to trigger more radical thinking and multi-disciplinary approaches to existential urban development challenges faced by African cities.

Makubuuka Esther
Head of Landscape Unit in the Directorate of Physical Planning - Kampala Capital City Authority
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Esther is a landscape Architect with an Urban and Regional Planning background. She was in private practice as a Landscape Architect before joining the public sector with a keen interest in environmentally sustainable designs and how these can be adopted in fast growing urban areas. She is an active member of a number of key projects such as the EU/CoM SSA/KCCA Kampala Climate Change project that is geared towards enabling the city achieve its sustainable ambitions and also mainstream climate change responses in many city services with interest in greening. Being part of team that continues to transform Kampala City, she firmly believes in green cities supporting sustainable Livelihoods-Kampala is on this horizon.
Technical committee

TYABA Vanessa
Technical Officer - Integrated Urban Planning and Environment - GIZ
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Vanessa Tyaba currently works for GIZ- the German Development Agency under the International Water Stewardship Programme (IWaSP). She is currently supporting Kampala Capital City Authority (KCCA) in the development of Water Security Action and Investment Action Plan (WSAIP) for Greater Kampala which includes a prioritized list of 20 innovative, multi-stakeholder driven projects that improve water security. She developed an early interest and appreciation for natural resource ecological functions and services during her studies. Her previous experience involved coordinating environmental projects, environmental compliance monitoring and enforcement for enhanced environmental quality of Kampala city.

MUGUMBULE Isaac
Architectural designer - Kampala Capital City Authority
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Isaac Luwaga Mugumbule is an Architectural designer with over 10 years working experience in the built environment and urban landscape. He has worked for both local and international NGOs on community development projects within East and Southern Africa. He currently works with the Kampala Capital City Authority as the Supervisor Architectural services in the Directorate of Physical Planning.
Images from the workshop
Thank you

Les Ateliers would like to extend their heartfelt thanks to their public and private partners, for giving them the opportunity to plan this international workshop and provide support during the process.

To Kampala Capital City Authority and the technical committee, our deepest gratitude.

We also would like to thank the local and national institutions, civil society, and all the resource people met for their collaboration and participation.