West Nile Region, Uganda - Integrated and Multi Scalar Planning (Koboko, Arua, Nebbi)

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WEST NILE REGION · UGANDA
REGIONAL - PUBLIC SPACE - ECONOMY AND FINANCE ASSESSMENTS AND URBAN STRATEGIES
CASE OF KOBOKO, ARUA AND NEBBI MUNICIPALITIES
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Arua, due to its strategic geographical position, is a rapidly growing urban centre in Ugandan West Nile region and an important base for humanitarian operations. Refugees from South Sudan and the Democratic Republic of Congo (DRC) currently form 23% of the regional population, with around 700,000 registered refugees (UNHCR, 2018) and unregistered migrants contributing to the figures. The Ugandan Government plans to upgrade Arua to a “regional city”, to include the enlargement of its boundaries and the enhancement of air and rail infrastructure among others, envisioning it as a potential logistic node for North-Western Uganda. However, no strategic framework is provided at regional, city or neighbourhood scales to promote a synergic development with neighbouring towns (Koboko and Nebbi), districts and countries (DRC and South Sudan). Although rapid urbanization is already threatening existing socio-ecological assets and increasing conflict potential related to land rights and access to basic infrastructure and services, there is a lack of appropriate assessment and strategic tools to address the complex transformation of these territories.

Moving from the results of previous capacity development initiatives in the framework of the Ugandan Support for Municipal Infrastructure Development (USMID) program, a project for a comprehensive profiling of the region across different planning scales has been initiated by UN-Habitat in August 2018 with the financial support from the Booyoung Foundation, with the aim of supporting a better understanding of the West Nile Region as a metropolitan system along the Nebbi-Arua-Koboko development corridor. Among other priorities, exploring how decision making at territorial scale would also influence city and neighbourhood level was in the focus of the regional profile. Politecnico di Milano has been selected as the implementing partner with UN-Habitat to draft a multidisciplinary analysis of the existing situation at regional and territorial scale, including development of specific metropolitan cartography, while UN-Habitat’s Public Space and Urban Economy teams have conducted in-depth research on urban economy and municipal finance, as well as a public space assessment and recommendations at neighbourhood scale in each municipality.

This report outlines the results of the research activity, including desktop research and field studies, complemented by a fact-finding mission and workshops held in the West Nile Region in October and November 2018 for the effective interaction with local experts and stakeholders, at both national and local level. The following chapters synthesize main findings with the aim of providing a set of recommendations.
Regional and neighbourhood urban studies for this project were carried out by combining desktop reviews and field studies, considering these crucial for due to the effective interaction with local experts and stakeholders, at both national and local level, as well as a large number of other local stakeholders in the West Nile Region.

**Fact-Finding Mission**

From 29 September to 5 October 2018, UN-Habitat and Politecnico - MS Lab experts conducted a preliminary fact-finding mission to the West Nile Region. The team included different experts from UN-Habitat and Politecnico - MS Lab, covering expertise on planning and governance, urban design, public space, urban economy and municipal finance. Interactive workshops with input sessions and discussions were held in the three municipalities that form the regional development corridor (Nebbi, Arua and Koboko). The workshops saw the participation of local stakeholders from the municipalities, districts, chamber of commerce, representative of NGO and civil society as well as some of the district planners. Discussions surrounded local contexts, questions and answer sessions, covering an overview of main issues and challenges. At the end of each workshop (one in each city), participants were asked to present, discuss and share official documents such as plans and development strategies that have been object of study. The last day of the fact finding mission was dedicated to meetings in Kampala to discuss some of the relevant issues that emerged during the fieldwork with national government authorities and experts involved in specific projects e.g. humanitarian crisis and land conflicts.

**Capacity Development and Validation Workshop**

At the end of November 2018, a follow-up capacity development and validation workshop hosted by the same experts took place in Arua, with the participation of the three mayors of Koboko, Arua, Nebbi, (KAN), representatives of the municipal councils, district authorities, representatives from the Ministry of Land Housing and Urban development, the USMID program (Ugandan Support for Municipal Infrastructure Development) and the National Planning Authority (NPA). The workshop aimed at discussing the first results of the territorial analysis and co-designing a vision for the socio-economic development of the region by using three potential areas for local economic development (trade, agriculture and tourism) as well as enhancing local capacity on integrated urban and territorial planning approaches. The findings and results of these initiatives will be discussed in the next chapters.
CHAPTER 2

REGIONAL AND TERRITORIAL PROFILE

INSTITUTIONAL FRAMEWORK AND PLANNING TOOLS
FACTS AND FIGURES
REGIONAL CARTOGRAPHY
FINDINGS AND OPPORTUNITIES
INSTITUTIONAL FRAMEWORK & PLANNING TOOLS
NATIONAL AND REGIONAL SCALE FRAMEWORK

NATIONAL AND REGIONAL SCALE
Uganda’s institutional framework is built on the cooperation between national government and local authorities, undergoing a progressive decentralization of powers since the late 1980s. A National Urban Policy was adopted in 2016 and is currently being implemented. However vertical and horizontal cooperation among political and administrative authorities is often still a challenge and institutional and human capacity on urban and territorial planning need to be enhanced, especially at local level. Also, municipalities often lack financial means for implementation.

At the national level, the following government authorities are responsible for decision making in relation to planning issues:
- National Planning Authority (NPA)
- The National Physical Planning Board
- Ministry of Local Government
- Ministry of Lands, Housing and Urban Development
- Ministry of Water and Environment
- National Environment Management Authority
- The Uganda Wildlife Authority
- Directorate of Water Development
- The Uganda Land Commission

And the main laws that guide physical planning activities in Uganda are:
- The Physical Planning Act, 2010
- The Local Government Act, 1997
- The Uganda Land Act Cap 227, 1998
- The Public Health Act Cap 269
- The Forest Act, 1999
- National Environment Statute, Cap 153, 1998
- Water Act Cap 152
- Waste Management Regulations, 1999
- Investment Code Act Cap 92
- The National Policy for the Conservation and Management of Wetland Resources, 1995

In discussing future scenarios for sustainable development, a crucial relevance is set in the strategic perspective given by the action of the National Planning Authority (NPA). The aim of the NPA is to build the national capacity for visionary and long term planning, ensuring a sustainable and balanced national development by integrating economic, social and political dimensions of development with spatial and environment aspects.

The main strategic tool provided by the NPA in consultation with other government institutions and other stakeholders is the Uganda 2040 Vision based on the National Vision Statement, “A Transformed Ugandan Society from a Peasant to a Modern and Prosperous Country within 30 years”. The vision is operationalized by three 10-year plans; six 5-year National Development Plans (NDPs); Sector Investment Plans (SIPs); Local Government Development Plans (LGDPs), Annual work plans and Budgets.

At the regional level there is no institution mediating between the national and local government authorities and contributing to facilitate the coordination of local initiatives in fulfilling the national strategies. Under British rule (before 1962), regions existed as functional administrative units and were called provinces, headed by a Provincial Commissioner. Uganda’s constitution from 1962, when the country became independent, established a decentralized system combining federalism with semi-federalism and unitary. The constitution was abrogated in 1966 and replaced by a new constitution, in which centralised power was enacted. Lately, due to the evolving political situation, a progressive decentralization of powers has been pursued since the late 1980s, but no intermediate regional institution was re-established. Four regions, Central, Western, Eastern and Northern Uganda, are only identified for census purposes, while the country is divided in 121 (Number of) districts, according to the Ministry of Local Governments.

A first attempt to address regional issues has been done with the Albertine Graben Physical Development Plan 2014-2040, which was adopted in 2014. The Albertine Graben is one of Uganda’s most important and dynamic regions, due to the emergence of the petroleum industry, its prime role in Uganda’s tourism sector, important agricultural production and strategic location sharing borders with Rwanda, DRC and South Sudan.

According to the Ministry of Land, Housing and Urban Development, as a Regional Development Plan, the Albertine Graben PDP is the first of a series of Regional Physical Development Plans that will fall under a future National Physical Development Plan. It is also the guiding framework for currently developed and urgently needed “District Plans” that begin to fill in specific development details, and, in turn, serve as the integrating framework for supporting Local Government Plans.
UGANDA VISION 2040

Uganda Vision 2040 identifies key core projects that need to be started including:

- A Hi-tech ICT city and associated ICT infrastructure;
- Large irrigation schemes in different parts of the country;
- Phosphate industry in Tororo;
- Iron ore industry in Muko, Kabale;
- Five regional cities (Gulu, Mbale, Mbarara, and Arua) and five strategic cities (Hoima (oil), Nakasongola (industrial), Fort Portal (tourism), Moroto (mining) and Jinja (industrial)), which have been identified as part of the urban corridor development. Government is in the final stages of formulating a National Urban Policy which will provide a framework for the management of urban areas.
- Oil Refinery and associated pipeline infrastructure;
- Multi-lane paved national road network linking major towns, cities and other strategic locations;
- Globally competitive skills development centres;
- Nuclear power and hydro power plants (Ayago, Isimba, Karuma, and Murchison Bay);
- Science and Technology parks in each regional city;
- International and national referral hospitals in each regional city.

SECOND NATIONAL DEVELOPMENT PLAN

“NDP II - 2015/16 - 2019/20

The Vision 2040 guides on the establishment of four regional cities namely Gulu, Mbale, Mbarara and Arua and five strategic cities: Hoima (oil), Nakasongola (industrial), Fort Portal (tourism), Moroto (mining) and Jinja (industrial), which have been identified as part of the urban corridor development. Government is in the final stages of formulating a National Urban Policy which will provide a framework for the management of urban areas.”

“The sector will also promote comprehensive physical planning for urban development; improve urban infrastructure services and utilities; create an inclusive policy and regulatory framework for urban development; develop of environmentally resilient cities in Uganda; and increase availability of and access to land for urban expansion and investment.”

“Government will control urban sprawling through preparation and approval of Integrated Development Plans which encourage increasing density of settlement by construction of high rise buildings, and by strict development control. Government will also develop and ensure implementation of Regional Physical Development Plans, District Physical Development Plans, and Sub-Urban and local Physical Development Plans to guide the establishment and development of Urban Corridors, regional and strategic cities, and other urban centres.”

ALBERTINE GRABEN PHYSICAL DEVELOPMENT PLAN 2014-2040

“The Albertine Graben is one of Uganda’s most important and dynamic regions. The emergence of a new petroleum industry, combined with its prime role in Uganda’s tourism sector, important agricultural production and strategic location sharing borders with Rwanda, DDRC and S. Sudan are all reasons prompting preparation of the country’s first Regional Physical Development Plan (PDP).”

“The Albertine includes 25% (68,000 km2) of Uganda’s land, 25% of its population, produces 30% of the nation’s food crops, accounts for over 70% of the country’s tourism revenue and contains an estimated 6.5 billion barrels of oil destined to boost Uganda’s economy for the next 25 years or more. The Albertine also contains some of the country’s and region’s most valued and varied landscapes including a number of world-class national parks and wildlife populations, major Rift Valley lakes, a section of the Nile River and the spectacular Rwenzori Mountains."

“Arua will be a transport, cross-border trade and agro-processing centre when additional power resources reach the area and when rail transport is extended from Nebbi. Most important commercial, institutional centre in the West Nile.”
INSTITUTIONAL FRAMEWORK & PLANNING TOOLS
NATIONAL AND REGIONAL SCALE FRAMEWORK

Figure: Proposed Economic Zones and Trade Areas, Uganda Vision 2040

Spatial Representation, NDP II

*Spatial Representation for Albertine Graben PDP 2014-2040
The local government system is based on the district as the main unit under which there are lower level administrative units. Local government councils in a district are:

- the District or City Council
- the Municipal Council
- the City Division Council
- the Municipal Division Council
- the Sub-County Council
- the Town Council

Administrative unit councils in a district include:

- the County Council
- the Parish or Ward Council
- the Village Council

Local government and administrative units are collectively known as local councils. Local councils are further classified as either rural or urban.

- Rural Local Councils: District Council - County Council - Sub-County Council - Parish Council - Village Council
- Urban Local Councils: City Council - City Division Council - Municipal Council - Municipal Division Council - Town Council - Parish or Ward Council - Village or Zone Council

Horizontal and vertical cooperation and synergies are foreseen, but not really practiced and the insurmountable nature of administrative borders is highly conditioning decision making, collaborative approaches and physical planning.

The actions of districts are to be guided by District Development Plans. Municipalities are required to produce a Five Years Development Plan and a Physical Development Plan in coordination with the general planning framework.

During the fact finding mission in September 2018, local institutions of the three districts and towns of Nebbi, Arua and Koboko shared their planning tools, when available, to build a deeper understanding of the state of the art. A list of the consulted documents is provided below:

**Koboko**
- Koboko District Local Government Development Plan 2010 - 2014
- Koboko Municipal Council 5-Year Development Plan 2015 - 2019
- Koboko Town Council Structure Plan 2008-2018
- Koboko Municipality West Division and Nyangilia Parish Urban Physical Development Plan 2017-2027

**Arua**
- Arua Municipal Council 5-Year Development Plan 2015-2019
- Arua Municipal Development Strategy 2016-2040
- Arua Municipality Physical Development Plan 2015
- Arua Municipal Urban Physical Development Plan 2016-2026
- Arua Municipality Central Area Detailed Plan 2016 - 2026
- Arua Municipality Organic (Satellite) Urban Growth Centres

**Nebbi**
- Nebbi District Local Government Development Plan 2015 - 2019
- Physical Development Plan for Nebbi Municipal Council 2016-2026
- Nebbi Municipality Urban Physical Development Plan 2017-2027
- Akworo SubCounty Five Year Development Plan 2015/16-2019/20
FACTS AND FIGURES
MAIN ISSUES AND CHALLENGES IN THE REGION

1. Urban and Territorial Planning

Existing planning tools are often impeded from constraints due to administrative boundaries and lack of information sharing between actors, leading to non transparent or effective decision-making processes. In some cases, municipalities express their administrative boundaries restrict their development, even though the current low density and grain of settlements could be included in the strategy for urban development. There is the need to communicate more effectively across the different planning scales: local planning levels and national levels might not be informed of priorities of each. Moreover, this integrated approach needs to be extended to collaborate with sub-counties to link rural and urban areas in a synergy system and avoid the sharpening of growing inequalities and the integration of all relevant stakeholders, including civil society organizations, private sector and academia (where applicable).

Recommendations:
• The opportunity to develop a strategic vision for the West Nile Region in terms of urban metabolism and advanced capacities for integrated territorial and metropolitan planning
• Enhanced dialogue/communication/coordination across the different planning scales and for the inclusion of different sector representatives into territorial planning processes, aiming at vertical and horizontal coherence;
• Change of mindset regarding participatory and inclusive processes in planning approaches, by including all relevant stakeholders
• Alternative and more appropriate tools to visualize spatial data to be used for decision-making platforms and to inform the public on the impact of projects and how they benefit from them.

Moreover, at the local scale, existing physical planning tools mainly deal with basic development issues, acknowledging the struggle with scarcity of resources and land tenure conflicts. As local authorities are reaching out to national government for additional resources, they need to provide a clear statement of their priorities who are tailored towards long-term inter-scalar responses, to face challenges, such as existing humanitarian crisis or potential. Affordable housing is also not mentioned as an issue, unlike urban basic services.

Recommendations:
• Framing local challenges at a wider scale to investigate potential territorial synergies for alternative solutions;
• Stressing the role of local governments in addressing regional and national crucial issues.

2. Migrants and Refugees

The West Nile region has 3 million inhabitants, and hosts around 0.7 million registered refugees, concentrating in the districts of Arua, Koboko, Yumbe, Moyo and Adjumani (UNHCR 2018). The attitude towards refugees and migrants is generally inclusive due to cultural and tribal reasons (“we are the same people”). While many migrants from South Sudan and DRC are officially registered as refugees and access aid structures in camps, many others have moved into urban areas, using the cities’ services, renting houses and working in both the formal and informal sector. Uganda recognizes this fact and the term “non-citizens”, instead of refugees, is often used, but there is rarely any formal data on the numbers (apart from some figures in VNG International’s report “Self-Settled Refugees and the Impact on Service Delivery in Koboko Municipal Council”).

As the number of urban refugees immigrating without formal registration or migrating into urban areas is growing, this poses serious challenges and potential conflicts with hosting urban communities including the following:
• No budget from the National government is allocated to the hosting municipalities for providing additional services for urban refugees and migrants
• Housing prices and rents have gone up rapidly due to increased demand by urban migrants that have sufficient financial means;
• Overcrowding in schools and medical services compromises standards in delivery of quality education and health as municipalities maintain an inclusive attitude offering any social services aside from the official legal framework;

Aerial view from Arua Airport, 2018
**FACTS AND FIGURES**

**MAIN ISSUES AND CHALLENGES IN THE REGION**

- Solid waste disposal and hygienic conditions get critically worse and conflicts start to occur for basic infrastructure/services
- Self-sustenance is difficult to attain for many migrants opting to live out of the camps even though there is a strong solidarity within the region. Youth unemployment is critical and threatens social cohesion.

According to a local NGO (South Sudanese Refugees Association), refugees are filled with vengeance in response to the political conditions that caused their displacement. There exists an emphasis to rebuild positive and peaceful ties to their countries of origin before they return, while providing adequate care towards addressing trauma. This is essential to avoid the rise of crime, child prostitution, drug and alcohol abuse. Among host communities there is little doubt about the future voluntary repatriation of refugees and migrants, based on the prior conflict situations in Uganda resulting in Ugandans being refugees themselves and voluntary returnees once the conflicts were settled. Thus, the assumption is that this situation is temporary despite the progressive processes of consolidation of camps.

There are several NGOs, UN agencies and development partners that have worked in the West Nile Region, however it has been without a territorial approach, and only in specific camps, under the coordination of UNHCR and on refugee movements. Among the actors dealing with this issue are REACH, a consortium of international organizations promoting a collaborative approach among aid actors and supporting established inter-agency coordination mechanisms at the global and country levels, and Humanitarian Open Street Map, an international organization dedicated to humanitarian action and community development through open mapping.

In Nebbi, there are no official camps for refugees and there are only few unregistered urban migrants especially from the DRC, mostly coming for business or using social services e.g. to attend schools. In Arua, according to estimations by the municipal council, urban refugees represent 6% of households and there are growing numbers in education and health service delivery to non-citizens (i.e. around 10% of hospital outpatients). However, these “non-citizens” are well integrated in the population and difficult to map or have their needs addressed. There are informal and sometimes formal ways for “non-citizens” to obtain land. The impact on municipal finance needs to be better studied and considered.

In Koboko, the highest pressures from self-settled urban refugees are present, constituting 26% of the total population according to VNG surveys, with problems occurring in service delivery, adequate housing and employment opportunities. The mayor and municipal council still defend an inclusive approach towards urban refugees, as most come from the same ethnic group (Kakwa) and speak the same language. As an example of emerging conflicts, the mayor mentioned the distribution of mosquito nets against malaria provided by a governmental program and the choice to distribute it evenly to refugees and host communities despite the scarcity of provisions.

The other associations working in Koboko district include VNG International (planning scenarios with 10-year perspective, empowering actions to strengthen social cohesion and deliver public services; surveying self settled refugees). South Sudanese Refugee Association (SSURA), an independent, non-political, non-partisan, non-religious, non-tribal organization taking care of immigration processes, and Associazione Centro Aiuti Volontati (ACAV), an Italian NGO involved in cross-border development projects in Koboko, and also in the DRC, and in the counties of Morobo and Yei, Central Equatoria State (South Sudan).

**Recommendations:**

- Clarify the status, figures and settling patterns of the different migrant population with special focus on urban migrants;
- A regional strategy should be pursued to address humanitarian crisis, seeing migrants as an opportunity and not only as a social cost.
- Further studies carried out on the correlation between cultural issues and self-settling refugees patterns of urbanization.
- A discussion at the national and regional level should be opened on the future of refugee camps, with different timeframe scenarios, including planned city extensions instead of camps in rural areas or finding alternative durable solutions.
- Investigate a potential explicit urban response to the humanitarian crisis in physical planning terms. Surveying and servicing urban land for refugees could benefit future urbanization.
3. Cultural Heritage

West Nile is a region with strong traditions and growing socio-cultural diversity. In recent years, district borders were adjusted to better suit ethnic and cultural patterns. Kingdoms and chiefdoms, according to Ugandan constitution, play a relevant social role as cultural institutions with the main mandate of preserving heritage and culture of people, dealing with conflicts resolution and peace keeping in the community and resolving customary land issues. However, their mission to ease social tension sometimes fails due to their inclination to act beyond formal laws, generating confusion and conflicts between governmental and tribal systems.

Nebbi is mainly inhabited by Luo tribes referring to the Alur kingdom. According to a discussion with local stakeholders, land issues are particularly critical, as the Kingdom land board gives land without considerations to physical development. On the other hand, the physical development plan does not take into consideration customary tenure boundaries, requiring better coordination.

Arua is becoming a cosmopolitan city, open to multi-cultural influences. The main ethnic group in the district is Lugbara (46.3%), but diversity in the city is high, including Aringa (17.6%), Madi 14.0%, Alur 11% Kakwa 8% and Baganda, Basoga Banyakole, Banyoro at 2%. Cultural leaders are involved in decision-making processes, including the budget conference responsible for defining the allocation of the municipality’s resources. In terms of religion, the majority of the municipal inhabitants are Muslims (44.9%), followed by the Catholics with 31.1%, the Anglican protestants comprise of 16.8%, born-again-Christians at 4%, while the Seventh-day-Adventists at 1.1%. Other religious groups include the believers in the African Tradition and the pagans comprised of 2.1%.

Koboko is experiencing a particular situation as it used to be as ethnically homogeneous as Nebbi (with the main tribe in Koboko being the Kakwa), but is currently changing to become a multicultural town such as Arua. Integration and diversity are considered positive drivers due to the inclusive attitude of Kakwa people, which goes beyond administrative country borders. However, the loss of traditions is felt as an issue within the community (such as the loss of traditional languages, changing food patterns that disregard storage of supplies in informal/low standard housing, changing family patterns with looser parental ties, diffusion of borrowed cultural behaviors (perceived as inappropriate and lazy) and lack of consideration towards the environment and its ecosystems. Once, Chiefs were responsible for water, trees, land to be managed sustainably, whereas nowadays, preservation of natural assets are not taken into consideration by planners or communities.

Recommendations:
- Diversity patterns should be better investigated especially with regards to their subsequent spatial implications which impact land-tenure, agricultural, and economic systems.
- The role of culture and heritage affecting humanitarian response should be studied in greater depth.

4. Land Tenure

Land tenure has emerged as one of the most critical issues of physical planning within the region and municipalities. There are four types of tenure in Uganda - Mailo (registered and owned in eternity under the 1900 Buganda Agreement), freehold (for Ugandans buying land converting customary land rights), leasehold (anyone leasing land), customary (for Ugandans owning land by tribal customary rights) as per the 1995 Constitution. Around 80% of the land is held under customary tenure. Different tenure patterns correspond to various cultural roots across Uganda.

Land rights under customary tenure are mostly unregistered and lack any formal documentation. In absence of a cadaster of such land rights, visualizing and considering ownership boundaries is a challenge and a cause for conflict when local leaders and communities are not consulted.

According to the Ugandan law, land is vested in the citizens. Therefore, conflicts between physical plans and land ownership patterns should be solved by monetary compensations or resettlement, however scarce resources or cultural differences make compromises difficult and cases are negotiated individually. For example, it is common to allow for the temporary use of land for agricultural production against the development plan while waiting for a proper investor, after which compensation will precede.
Kingdoms, chiefdoms and clan heads can also support customary owners in negotiations for compensation. As the land market in Uganda is becoming increasingly active, speculative dynamics are creating complications. Selling land has an increased appeal especially among young generations, which often is their only asset. In some cases, private investors buy available land and develop it without respecting development plans, and then resell the land before the illicit development would be contested, multiplying the levels of conflict.

To avoid these problems, a nationwide government driven systematic demarcation and registration drive should be undertaken. However, as for now, customary ownership would require the owner himself to register his land, paying surveying and administrative costs, that are generally unaffordable, making it difficult to be a priority for most.

The Ministry of Land, Housing and Urban Development together with UN-Habitat’s Global Land Tenure Network (GLTN) team are piloting specific tools for Fit-for Purpose land administration and land tenure regularization through aero-images, community participation and GIS platforms such as Social tenure Domain Model to demonstrate alternative cheaper way to survey and register land for an entire district. One of the pilot projects was implemented in Pakile and Ciforo Sub-counties, Adjumani district. Completing a local cadaster is crucial to plan for a more appropriate tenure-responsive land use and to foster sustainable development. Potential synergies should be pursued to propose Nebbi, Arua and Koboko as further scale-up cases for this governmental program.

Socio-economic transformation due to land tenure issues - Selling land in order to obtain cash leads to a high fragmentation of properties, conditioning socio-economic development and making, in example, extensive commercial farming more difficult. Young people sell their land, to buy a motorbike for starting a transportation business (boda boda), but in few years they remain both without motorbike and land, with few savings that are not enough to start any other economic activity. Being landless is socially considered an issue in Ugandan society. According to local cultural organizations (clans, chiefdoms and kingdoms), land should remain a commodity for poverty alleviation and recognizing and securing land rights could improve awareness and socio-economic resilience for young generations.

Recommendations:
- Secure customary ownership to overcome conflict related to urban development.
- Improve planning tools to be responsive to existing land tenure patterns.

5. Infrastructure and Mobility
5a. Roads
According to local authorities, most of national level funds are invested in improving roads or tarmacking, but an extra-effort is needed to make rural areas accessible in every season and connect agricultural producers with potential processing industries as well as connecting producers to markets. Uganda has still a low rate of motorization, but collective transportation is an important business and can contribute to the economic development of the region. The road connecting Nebbi and Koboko towards the south Sudanese border is the only larger scale road in the West Nile Region, and as there is no alternative means of transport, there is a high vulnerability to trade and commerce (at regional scale). Also, the only bridge crossing the Nile is in the southern part of the West Nile Region, near Pakwach, reducing the regions connectivity with other major urban centres in North Uganda, such as Gulu.

Recommendations:
- Conceptualize the West Nile Region as an integrated system of cities, connectivity is crucial for economic growth. Planning this connectivity through scales will better link territorial and urban actions allowing e.g. to properly decide about city extensions or special economic development zones.
- Overcome connectivity gaps through adequate planning considerations.
- Connectivity, road design and non-motorized transport concepts should also be major aspects to be considered for large scale development projects e.g, Eco-city in Arua, city infill or planned city extensions.
- Enhancing non-motorized transport in physical planning and a strong consideration of the high number of pedestrians moving around the urban areas to reduce congestions, casualties
- Conceptualizing roads including bus, cycle and pedestrian lanes, and including urban fauna and green buffets into planning, improving air quality apart from beautifying the overall city conception.

5b. Air
The project to upgrade Arua airport seems to have been delayed due to a change in priorities leading to a revision of plans, and while the Arua airport will be postponed, a new international
FACTS AND FIGURES

MAIN ISSUES AND CHALLENGES IN THE REGION

An airport will be constructed in Hoima, in support of the future oil and gas industry, in the southern part of the Albertine Graben. During discussions, the lack of information on a possible upgrade as well as the lack of understanding the economic opportunities of having an international airport – and its impact at city level (e.g. space needed for storage and airport services, employment, business opportunities, but also environmental impact etc.) – became obvious and capacity at local level would urgently need to be enhanced. Koboko has shown interest in upgrading its airstrip, but its effective potential would need to be evaluated.

Recommendations:
• Increased sharing of information between the different planning levels, national to local, is needed to bring clarity to this (unforeseen) development, which will strongly impact Arua’s and the region’s economic and social development.
• As the Arua airport extension would not be within the Arua municipal boarders, a close cooperation with the surrounding local institutions and the district is crucial.
• At territorial scale, decision making on the expansion of the airport should be done across different sectors including transport (for ensuring connectivity e.g. to industrial areas, and linking of different transport modes (rail), environment for protection of natural assets;

5c. Railway

Local level authorities do not have clear information on upcoming railway projects, even though access to rail and the location of a railway station would strongly impact physical planning at local, city level. Local plans include generic indications from upper planning levels (indicating that a railway station would be planned south of Arua), but without any specification on timing or governance process.

Recommendations:
• A stronger collaboration between the different government levels, including NPA, would enable the local planners to take sound decisions for the further development of their cities and influence the decisions on city extensions, public space concepts, including green corridors, and economic zones, thus the economic and social development of the West Nile Region.

5d. Public Transportation

The provision of public transportation by government is absent in all three urban areas in the West Nile Region. However, the transportation industry is quite developed in the area with private buses, taxis and motortaxis (bodaboda) operating in the main cities and in the region. License and taxes on this business represent one of the main revenue for local municipalities. Bus and taxi parking, for enhanced revenue collection, are under construction or planned in Arua, Koboko and Nebbi.

Recommendations:
• An integrated plan for regional transportation could help in solving conflicts in revenue collection and improving the service, supporting private entrepreneurship to cover public transportation gaps.
• Efforts could be made to plan transportation in participatory processes, considering governance, finance and socio-environmental aspects.
• In order to ensure that possible transport nodes or connectivity hubs do not impact traffic, a larger scale planning for connectivity should be developed to then influence city level planning;

5e. Water Transportation

Water transportation according to local stakeholders has a high unexploited potential. Water systems can increase connectivity and therefore support economic development as can bridges across the Nile, adding to the connectivity of the West Nile Region.

Recommendations:
• The section of river Nile bordering the region could be a water-highway serving for touristic and commercial purposes.
• In Nebbi district port facilities could be developed on Lake Albert shores, enhancing regional trade opportunities.

6. Infrastructure and ICT

Mobile data coverage is good in the three towns, along the main road and in the refugee camps. Yet, coverage in the rural areas has to be improved to reduce spatial inequality.

> Better investigations on data coverage and cellphone ownership should be performed.
> Specific studies should be carried out to investigate the potential of mobile data to support planning decisions and to remotely deliver public services.
FACTS AND FIGURES
MAIN ISSUES AND CHALLENGES IN THE REGION

7. Electricity

The region is not connected from the national high voltage grid and is experiencing frequent power cuts, even though different projects are on the way for enhancing the access to electricity. The insufficient supply of electrify leads to decreased interest of investors in the region and reduces urban and industrial development, while also negatively impacting people's lives. Moreover, the main energy source still remains charcoal, with relevant environmental implications, even though this being a source of income to rural population. Current provision to the main municipalities is granted by a privately owned small hydro-power plants in Zombo district, with 3,5mw supplies power to the entire region.

Karuma dam, under construction, will provide electricity to the whole north-west Uganda by 2020 and high voltage line connected to the national grid is under planning/realization. In Nebbi, preliminary works for the realization of high-voltage substations are triggering conflicts between central governments and local communities as no negotiation for land compensation is occurring. In this conflict the municipality is taking the part of citizens in claiming and consulting for negotiations.

The high voltage line will run along the main regional corridor, yet districts that are far from it, are working with private investors on alternative off-grid solutions. In particular, new projects for solar power plants have been recently kicked off or planned.

8. Water

The provision of water and sanitation installations (and the management of waste water) needs to be improved in the West Nile Region, but there is a high inequality in access to those services between urban and rural areas. National Water and Sewerage Corporation infrastructure has a good coverage in towns, providing water from boreholes and rainwater harvesting. However, some people still need to buy water at kiosks. In rural areas the main water source are rivers, where mostly women are charged with carrying amounts needed for the household and farming.

In Nebbi, water is distributed by gravity, which is not working for most of the municipality areas due to local topography. National water and sewage corporation is drilling boreholes, but the local authorities are still requesting to the National Water and Sewerage Corporation the realization of a tap water infrastructure for the urban area to reduce the use of potentially contaminated water (as any sort of sewage management systems are absent). In the subcounties, instead, the main water source are rivers, flowing into Uganda from DRC. Water levels, which have been a constant worry in prior years, have improved as specific measures have been taken such as upspring afforestation and buffers protection. Sensitization of the local population is still needed against encroachment on riverbanks.

Arua Municipality has a piped water system supplied by the National Water and Sewerage Corporation (NWSC). River Enyau flows along the periphery of the municipality and the water is abstracted at Niva, which is located within the municipality. Piped water distribution covers part of the municipality (which comprises of Arua Hill division and River Oli division), but over 41.8 % of the Municipal dwellers still have no access to it. Moreover, in some cases the unaffordability of the water tariff makes people resorting to other water sources as boreholes or open wells, which sometimes are contaminated due to inadequate activities.

Koboko lacks a piped water system and adequate surface and ground water resources. The available water is contaminated due to the big population within the town. Three seasonal streams run through the municipality and are affected by human activities like farming, settlement and poor waste disposal.

9. Sewage and Waste Water Management

Sewage systems are poorly diffused and waste water management is mainly through septic tanks and pits. Open air defecation is still an issue, in Arua with over 25% of the households lacking latrines. Some areas in the three municipalities are planned for lagoons for waste water management. Arua is the only city with a water treatment plant, that has been recently completed. In Nebbi and
Koboko, on the contrary, there is no sewage system. Improving sewage systems and waste water management is a crucial priority for the improvement of the quality of life of people and the sustainable development of the region.

10. Waste
Waste and garbage management needs to be improved throughout the whole region. In Nebbi, garbage is only collected in the Central Business District (CBD), but only the 30% can be brought to the existing landfill and the rest has to be managed within the municipality. The existing landfill is only apt for non-degradable waste and sensible waste (from the hospital).

In Arua, solid waste management is under the municipal authority (Aruna Municipal Council, AMC) as far as collection and disposal is concerned. AMC authorities collect and dump solid wastes generated in the town at their waste composting plant located at Nyaunyau village, Yivu Parish of Pajulu Sub-County. However, Arua Physical Development Plan mentions that there is a drainage channel at the point where solid wastes are offloaded at the composting plant. Leaching generated thereof flows offsite and winds up into Adumini stream, located in the valley below the composting plant. This poses danger to the communities downstream as local people use stream water for home use including drinking. It has to be noted that there's an interest from private investors for establishing a solid waste management company.

Recommendations:
• Basic infrastructure services could really profit from an integrated territorial approach. In particular, waste and water management could be better addressed by a combination of policies, actions and physical plans that distribute duties and benefits across the region and among different stakeholders (including private companies).

11. Public Space
Public space issues are covered in detailed in another chapter of the report.

Public space planning is integrated in the physical development plans of the three cities, but no specific strategy or policy is provided. Canonical public space for local physical planner includes: open grounds, markets, parks and gardens, golf course and sport facilities (even when not properly public). The availability of quality public spaces, instead of being in the process to be widened in future plans, seems threatened by temptations of privatizations, due to their difficult economic sustainability.

Recommendations:
• The importance of public space should be stressed as it could be a driver of a better quality of life increasing local economic development and as a potential for the integration of migrants. Participatory initiatives to decide on, design and maintain new public space are wished for.
• Specific recommendations on public space in the dedicated chapter of this report.

12. Public Services
Education and health facilities are diffused throughout the region and supported by specific national government programs; as well as civil society and religious organizations. (In refugee camps, those services are often provided or supported by UN agencies and NGOs). Education and health facilities already are strained in their service provision due to very limited resources and in many cases they are already struggling to provide high quality services. Therefore, high pressure on social services by the migrant and refugee population is strongly impacting the quality of services provided, while it needs to be positively highlighted that Uganda includes migrants and refugees in its service provision.

Vocational training are seen as particularly important to fight unemployment and related targeted projects are supported by the national government such as Project PICT: Partners in Community Transformation (teaching carpentry, tailoring..) or Project CERID: Community Empowerment and Rehabilitation Initiative for Development as well as international actors.
Arua is considered an emerging center of academic excellence in the region, with the presence of a public university and several branches of other private universities. Among other social services, sport facilities are particularly required, with the ongoing project for a stadium in Arua (but through private investments) and the will to build one both in Koboko and Nebbi.

Recommendations:

- Within a more comprehensive city profile, e.g. the UN-Habitat city profiling methodology that maps out neighborhoods with a high percentage of migrant population and overlays them with services provided, helps to set priorities at local level and draw recommendations for local authorities and policy makers.

13. Housing

It’s possible to recognize two housing typologies in the West Nile Region: semi-permanent grass thatched houses and concrete houses. In most of the region, the latter are still the fewer. Housing demands are increasing, also due to the large influx of migrants, impacting availability and leading to a rise of rents for adequate (and even informal) accommodation. In Arua, where urbanization is high, most of the residential settlements have grown organically without any form of planning, with most of the informal settlements concentrating in Oli Division of the city. Permanent housing structures are the majority in the Municipality (45.5%), followed by the semi-permanent housing structures (32.8%), while the temporary housing structures were the least (21.8%). (The above mentioned city profiling would reveal more data and findings on the housing situation in all three urban areas.)

Real estate market is just at the beginning in the main centers and is completely absent in the rural areas. Providing access to adequate, accessible and affordable housing is a relevant concern requiring dedicated research. During the workshop in November, affordable housing projects in partnership with National Housing and Shelter Afrique have been mentioned speaking about Arua and other cities in the country. More information on this projects should be gathered and integrated in a multi-scalar strategy.

There are currently no plans for “planned city extensions” in any of the urban areas, but Arua has a concept for an infill project, that includes housing (Eco-city).

Recommendations:

- The decision on locations for planned city extensions should be informed by a broader strategy at territorial/metropolitan scale.
- The inclusion of different stakeholders and sectors in a planning process would ensure that housing is linked to employment, services are equally distributed and urban extensions are planned to be compact, well connected, socially inclusive and resilient.
- Strategies for housing projects would need to be done across administrative boundaries and in cooperation with neighboring municipalities (and even districts), as especially in Aura, city limits are quite tight.

14. Climate Change

According to local authorities, environment is degrading due to deforestation for informal charcoal production that, increases local impact of global climate change trends, and affects local rain patterns. There are specific laws and resources from the government for tree planting, but the implementation of those legal frameworks is not sufficient. Traditionally chiefs were in charge of the protection of the environment, but awareness and practice of care are declining with younger generations and economic development is often put as priority without considering long-term environmental impacts, which might be irreversible.

Recommendations:

- The impact of lack of waste and water management is not explicitly mentioned by local authorities as an environmental threat and a better sensitization of authorities and population on this is needed in a cross-scalar perspective of interdependencies. This would also require the definition of more effective patterns of protection and care of green and blue corridors.
- For the reduction of impact of climate change, territorial solutions need to be developed, e.g. larger scale reforestation projects > Systemic territorial alternatives to charcoal should be promoted to limit deforestation and environmental impact, such as the exploitation of renewable energy sources.

15. Human and Institutional Resources

In search for better livelihood opportunities and employment,
skilled people tend to leave the region to reach Kampala or other countries, a critical issue for local development. The potential role of Arua as hub of knowledge, supporting better synergies between the already valuable offer of academic educational services and incubators for social innovation and entrepreneurship could make the region more attractive for skilled persons, triggering processes of socio-economic growth with positive effects on the entire region.

**Recommendations:**
- Investing in building up capacities of local authorities on how planning can support local economic development with creation of job opportunities is key, especially in the non-farming sector, and could reduce the out-migration of skilled labor force.

**16. Transportation**
The region’s strategic location for cross-border commerce has made this sector one of the most promising economic drivers for the growth of the region and its urban areas, together with the related transportation and logistics economies. Nowadays, products and commodities are mostly brought to the markets via Kampala, but also, mostly in an informal way, from DRC (fabrics, cooking oil, bags, biscuits), South Sudan (soap, big mats) or other places in Uganda (cement from Tororo). Arua’s markets largely profit from the city being the regional hub for products sold to South Sudan, due to the ongoing crisis and low capacities. Important markets are located in the main urban areas, Nebbi, Arua and Koboko, but also close to border posts (to DRC and South Sudan).

In Arua, the core business city in the KAN corridor, a new market with appropriate facilities is under construction and specific studies could be carried on about its future impact on the existing trade structure and the municipal finance situation. The economy of Arua municipality is largely dependent on trade and business, even informally run, being the biggest source of employment (49.6%), followed by those employed in the civil service and NGOs (27.8%), family owned enterprises (16.3%), subsistence farming (4.4%), and other activities as brick making, metal fabrication and carpentry (1.9%).

Cross-border trade includes both formal and informal market activities, with informal structures also reducing the revenue collection for local authorities. The trade with DRC and South Sudan significantly influences economic activities in the region. The major commercial commodities sold in this trade include: agricultural products, beverages, scholastic materials and construction materials (cement, pipes, iron sheets and bars, etc.), fabrics, etc.

**Recommendations:**
- In order to not compete with each other, the local authorities of Nebbi, Arua and Koboko, could formulate a joint strategy, mapping out their economic potential, and explore urban - rural synergies for the economic growth of the entire region. Mapping out of assets and specific areas with agricultural production needs a territorial scale and land management. Peri-urban areas could be defined (and land reserved/protected) for city near agricultural production.

- Youth and women empowerment in socio-economic entrepreneurship would support economic growth, also increasing revenue collection.

- Local Economic development in the West Nile Region can benefit from the large influx of migrants in the area. Capacity development activities should include both host and migrant communities.

**17. Industrial Development**
Industrial development is limited due to insufficient infrastructure and electricity shortages in particular. Moreover, investors are still reluctant due to the unstable political situation and ongoing conflicts in neighboring countries, threatening to spill over into Uganda. Those conflicts, while on the one hand, put Uganda on the spot for providing humanitarian support (and hosting many international aid organizations), have increased the influx of refugees and migrants to the region, opening, if well managed and harnessed opportunities for economic and social development, especially for the urban areas. There is a potential for handicraft products in Nebbi, producing pots to keep water cool and even exported in DRC, sand mining, bricks making, stone quarrying.

Mining and natural gas extraction do not fall under the responsibility of local government authorities, but an enhanced dialogue with national level ministries would enable local government authorities to better plan for the future (service provision, housing, needs for transport and infrastructure, industrial development etc.) and
ensure that local physical plans include potential urban growth areas for accommodating additional population.

Recommendations:
- Enhancing capacities for local authorities to enable a positive business environment at the urban and territorial scales could increase local economic development opportunities for a sustainable and inclusive industrial development.

18. Tourism and hospitality

Tourism activities offer great potential for the region: due to the strategic location, international tourism is among the strong drivers for the hospitality sector, while due to the richness of historical, natural and cultural attractions, strategies for promoting regional and local tourism from Uganda could open further economic opportunities and employment options. Investments in restaurant and hotel industry are even triggering a competition between Arua, now leader in the sector, and Koboko, willing to intercept tourists flows (for leisure) from South Sudan.

However, information on tourist attractions and assets are not well organized. Some examples mentioned during the workshop include:

- for Nebbi: cultural sites related to Alur Kingdom; the smallest church in the world; traditional food (beans) and cultural dances;
- for Arua: Ajai game reserve, Nile river, various cultural and historical attractions;
- for Koboko: royal tombs, beautiful landscape, river Kochi, traditional food (beans and goat meet) and folk songs.

Recommendations:
- A joint strategy to organize information and to promote tourism at regional scale would be one possibility to join forces across the territory without the need to change or review national level legislation. A specific effort in revealing attractions and assets in a comprehensive regional map of touristic offer should be pursued.
- Promoting regional tourism would require investing in dedicated infrastructure and communication and marketing strategies (e.g. this could lead to a cooperative West Nile “brand” for local products or branding tourism activities in a joint “West Nile tourism promotion strategy”).

19. Agriculture and Food

There are large agricultural production regions in Uganda. On the other hand, industrialized agriculture and value adding by agricultural processing and investments in those processing industries for increased employment opportunities are insufficient. Moreover, exportations are currently limited, even within the regional boundaries, with Arua’s traders having developed close business ties with DRC on food supplies while not considering joining forces with traders from Koboko.

In Nebbi, there are cultivations of coffee (Arabica) in the highlands and cotton in lower areas, plus cassava (with the potential to become a cash-crop for the national market, if larger production could be achieved, e.g. by revitalizing local cooperative systems). Rice production has even attracted workers from other parts of the country. Additional agricultural products in Nebbi and its near-by rural areas include vegetables, cereals, mangoes and fruits, sisal, and sugar cane. Food processing facilities include some maize and cassava milling plants, bakeries and distilleries producing local gin. Potential economic zones and industrial areas have been identified, but investors are needed and services provided. Moreover, fishery and meat industry have a high potential for Nebbi district. There are also national programs for fostering entrepreneurship and small businesses and women empowerment programmes, focusing on supporting the potential honey industry or small scale cassava milling.

In Arua, there are cultivations of fruits and vegetables contributing to the regional food basket. Moreover, tobacco is one of the most important cash crops. Honey and beer are two main products sold even outside municipal boundaries. If commercialized and locally processed, shea butter products could also be an additional field for economic development.

In Koboko, farmers are particularly proud of their production of vegetables, cassava and groundnuts – with surplus suitable for
export. Fishfarming and poultry are also important economic activities. 

Recommendations:

- In order to promote local products, a regional marketing and promotion strategy could be developed, based on a sound assessment of capacities, market research and specific branding proposal. The West Nile Region’s local authorities could work together on a joint strategy, in strong dialogue with the region’s private sector players.
- An improved formalized import/export system and fostered transnational trade could increase revenue collection for the region, boosting agriculture and food industry.

20. Safety

The West Nile Region is considered to be safe, even if some political turmoil has recently occurred in Arua, and despite its proximity to neighboring countries in conflict situations. There are district security committees where police and politicians discuss common strategies.

Recommendations:

- Further research is needed to understand main urban safety/security issues and their spatial correlations.

21. Gender

In the last decade, the level of gender awareness has generally improved in Uganda and the West Nile Region. Gender imbalances still do exist especially regarding land ownership and access to productive assets. At household level, women’s participation in decision making is still low and Gender Based Domestic Violence (GBV) is also common. Although there are no precise statistics on this matter, the crime rate report of Arua Municipality for 2010 indicates that assault, defilement and rape have been common and most of the assault cases were directed towards women. According to reports on educational levels in the region, just one third of the girls who enrolled in primary are still in school at the age of 18, compared to half of the boys.

Recommendations:

- An in-depth investigation on the spatial implications of these gender issues should be carried on and specific recommendation about gender aware planning should be discussed. For reverberations on public space design (see dedicated chapter).

22. Municipal Finance

Planning expenditures, collection of revenues and availability of sound data for prioritizing how to allocate resources is not easy for municipalities in the region. Revenues collection is low and the municipalities rely heavily on distribution of funds from the central government, making it difficult to plan as priorities at national levels are bound to change.

The most important source of revenues in the urban areas of the West Nile Region come from:

- Land income paid by developers as they come to register to get a title;
- Markets: market places are procured to private investors (easiest collectable revenue);
- Trading license;
- Bus park/taxi park, even where there is still no parking (project existing) a fee is due;
- Tourist tax (difficult to be collected).

A section of this report is dedicated to municipal finance and provides further details. From a spatial planning point of view what’s relevant is that municipalities point out as priority projects that relates with the easiest revenue collections known such as markets and taxi parks.

Recommendations:

- An enhanced dialogue and information sharing between the three municipal authorities, as proposed for an integrated territorial (metropolitan) approach, could enhance sharing successful projects for revenue collection as well as projects that have improved the lives of the population even with small investments, as well as lessons learned.
During the workshops, what came out clearly is that better data are needed to support local authorities in making informed decisions on prioritizing actions and focusing on strategic assets.

Drafting a sustainable vision and overcoming the communication gaps among different stakeholders and between authorities and population require appropriate tools.

As a first step, with the aim of spatializing the regional assets, issues and challenges and the correlations with the existing conditions, an innovative approach to cartography has been elaborated by the Politecnico team as experimental methodology to support strategic evaluations. In particular, the issues investigated through data elaboration and mapping in this first exploratory phase have been:

- urbanization patterns and population growth over time;
- access to basic infrastructure in urban and rural areas (energy, water, ICT);
- green and grey infrastructure and natural resources;
- natural, cultural and historical heritage;
- natural risks related to droughts, floods, landslides;
- spatialization of the humanitarian crisis.

The Metropolitan Cartography selects and puts few data in relation according to an interdisciplinary path of reading the urban phenomena and presents the stakeholders’ narrative in a transversal and multi-scalar way. Visualizing these issues in maps, can help to understand specific patterns of correlations among spatial, socio-economic or cultural issues to support decision making.
Urban Density along the West-Nile Highway

Cities with high population densities are connected to each other in a network. This is more evident in the northern part of West-Nile region and observing relations with border cities in DRC and South Sudan. This relationship is possible because of the geography defining the direction of the Koboko-Arua-Nebbi corridor. Geography also determines the position of the main infrastructures, considering not only the morphology, but also the distribution of natural resources. Cities with a density of more than 15,000 inhabitants per square kilometer are showing evidence of growth along the road infrastructure that connects them.

An increase in urbanization was evident between the 1990s and 2000. In particular, growth has affected the cities of Arua and Koboko and the villages between these cities and the border with the DRC.

### districts

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**NORTHERN HIGHWAY**  
(ARUA-MARACHA-KOBOKO)

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### municipalities

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Urban Growth in Nebbi, Arua, Koboko
Green and Grey Infrastructure in West Nile North and South

Rapid urbanization is threatening existing socio-ecological assets. The entire region is characterized by a high index of coverage of live green vegetation, but the demand of growth of the urban system is transforming the territory. In particular it’s possible to notice:

- loss of vegetation in protected areas and increasing agricultural areas should be managed;
- the abundance of mineral resources and the presence of mining licenses on very large areas could boost urbanization in relation with their exploitation;
- the potential impact of hydroelectric power could improve access to electricity to ensure the growth of the region.

This information could help in defining the most suitable socio-economic patterns of development for the different areas of the region.
Cultural and Historical Heritage in West Nile North and South

The relationship between cultural and historical heritage and the territory can be read through the relationships with the natural environment, protected areas and the provision of tourist facilities. The density of biological occurrences contributes to defining the high potential for developing sustainable tourism outside protected areas. This information could help in kicking off a specific strategy to boost tourism as regional economic driver.
Natural Risks in Urban Settlements and Refugee Camps

The physical exposure of the inhabitants to natural hazards defines the areas where the risk is highest. As a result, the areas most affected by climate change, between floods and droughts, are highlighted.
Access to Basic Infrastructure: 
Arua versus Refugee Camps

The location of basic infrastructure or its physical accessibility affects the development of urban areas. Specifically from an intersection between water access points, energy and telecommunications.
West Nile Region does not exist as an institutional body. It was a recognized administrative unit in the 1950s, 60s and 70s, but currently lacks any formal status according to the present institutional framework. However, due to geographic, historical and cultural issues it still functions as a regional system aggregating the districts of Arua, Zombo, Nebbi, Pakwach, Maracha, Koboko, Yumbe, Moyo, Adjumani. Among these only Koboko, Yumbe and Moyo actually have an updated District Development Plans. Nebbi, Arua and Koboko district host the three main urban centres, which will be the engines for sustainable development of the whole region through territorial synergies.

At the national level, the West Nile Region, approximately 500 km from Kampala and accessible from the rest of the country by land by currently only one bridge crossing the Nile river near Pakwach, is often considered peripheral in the national scenario. Moreover, cultural diversity and the political historical link with Idi Amin's biography, have kept the relations with the region complex over time, feeding this sense of peripheral separateness.

**Opportunities**

The region is one of the denser populated area in Uganda and its strategic location and natural resources represent great opportunities for its development. In particular:

- the geographical location close to DRC and South Sudan with their permeable borders fosters trade and tourism;
- fertile land and waterbodies allow for quality (industrialized) agriculture and fishery, suitable to promote agro-food processing and transformation industries;
- mining and oil/gas industries are under evaluation as major sources to push national economy;
- landscape and cultural heritage is a crucial resource to develop local and international tourism;
- existing settlement patterns could evolve in integrated urban-rural systems distributing densities and allocating services in a smart way, also leveraging quality small-scale agricultural;
- the high number of youth is an asset thanks to developing and potential skills in digital innovation for participated mapping, service provision and social cohesion;
- a high respect for cultural diversity and tolerance allow the peaceful coexistence of several different ethnic (Kakwa, Lugbara, Luo, Madi) and religious (Christians and Muslims) groups.

**Challenges**

Crucial challenges for economic, social and environmental development of the West Nile Region need to be appropriately faced:

- demography and migrations are leading to uncontrolled urbanization and local authorities struggle to provide adequate services, housing and infrastructure;
- youth potential is threatened by unemployment and lack of hope;
- humanitarian crisis in neighbouring countries (DRC, South Sudan) leading to a large influx of people is challenging local resources;
- connectivity and mobility infrastructure is still inadequate for a proper economic growth;
- basic infrastructure is still inadequate to sustain a dignified quality of life and economic development, particularly regarding electricity, water and sanitation, waste management and housing;
- land tenure issues due to fragmentation, cultural rigidities, and conflicts hinder appropriate planning and development;
- existing planning tools are often insensitive to relevant geographical and cultural issues and preeminent challenges;
- climate change impacts (such as flooding or drought) and environmental issues caused by inadequate urban services are threatening existing natural resources and agriculture production;
- underdeveloped institutional capacity to collect revenue and dependency on national funding determine financial fragility at the local scale;
- national projects are developed with limited consultations and coordination of and carried on with scarce information to the local population and local planning authorities.
It is in regard of the growing attention to public space that in 2011, at the 23rd Session of the Governing Council of the United Nations Human Settlements Programme (UN-Habitat), member states were at the forefront in supporting the resolution that mandated UN-Habitat to consolidate agency-wide work on public space, to develop and promote public space policy, coordination, disseminate knowledge and directly assist cities in public space initiatives.

In 2012, UN-Habitat’s Global Public Space Programme was established. Since then the Programme has grown to be active in a range of operational and normative activities in more than 30 cities in over 20 countries. A great milestone achieved in 2015 was the adoption of a target related to public space as part of Sustainable Development Goal 11, “By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities”.

In the spirit of the New Urban Agenda, adopted in 2016 during the Habitat III conference, public space has been reference to safe, inclusive, accessible, green and quality public spaces appearing no less than in ten discrete paragraphs. All this places the work of public space firmly at the center of the New Urban Agenda and achieving sustainable development. This will require that cities, local and national governments invest in public space and should take a trans-disciplinary and multi-pronged approach, and work in partnership with diverse stakeholders and organizations to ensure adequate provision of inclusive, safe and accessible public spaces for all.

“Drivers of social and economic development”
“Enhancing safety and security, favoring social and inter-generational interaction and the appreciation of diversity”
“Promoting walkability and cycling towards improving health and well-being”

UN-Habitat supports national governments in mainstreaming public space in NUP as well as local governments in developing their own public space frameworks, policies and implementation strategies. The intention is to influence cities to recognize the importance of localized city-wide public space policies, to deepen the understanding of local governments’ role and responsibilities in public space development, and to maximize public space areas at a city level. This is considered as a guiding strategy for local governments in which public space is a central axis.

UN-Habitat supports national governments in mainstreaming public space in NUP as well as local governments in developing their own public space frameworks, policies and implementation strategies. The intention is to influence cities to recognize the importance of localized city-wide public space policies, to deepen the understanding of local governments’ role and responsibilities in public space development, and to maximize public space areas at a city level. This is considered as a guiding strategy for local governments in which public space is a central axis.

UN-Habitat selects each year, a number of public space upgrading projects through an annual call for expression of interest. The spaces are geographically distributed all over the world, but with a main focus on countries in the global south. The upgrading of the public spaces is done in a participatory manner engaging the community and the users in the process.

In recent years, the role of digital technologies has become increasingly important. UN-Habitat recognizes the role of ICT and the opportunities that it can offer for citizens, particularly children and youth, to take part in decision making and governance process. The Programme uses technologies such as Kobo Toolbox for mapping spaces and the Minecraft video game as a participatory tool for upgrading public spaces.
Public spaces have long been the centre of civic life and culture for urban dwellers. However, the impacts of urbanisation have placed pressure on land for not only housing but also on other services. This has led to the privatization of public spaces. Cities need to first understand where they are to know where to go.

To be able to understand public spaces at a city scale, UN-Habitat supports cities to collect information about public space, understand their problems and potentials at city scale. It is this kind of approach that makes it possible to promote social cohesion of urban space as well as community engagement. Knowing and understanding the characteristics of the city’s public spaces network, it is possible to improve the relationships of continuity and complementarity between spaces.

UN-Habitat’s approach lets cities understand the distribution, accessibility, location, network and quality of their public spaces. This survey of public spaces brings out the possibility not only to restructure the existing spaces but also to develop new public spaces in city extensions so that they can create cohesive cities, promoting urban sustainability. The adopted data collection platform is called Kobo Toolbox which is an open source web and mobile based application.

This is a participatory tool that allows the community to map their public spaces and take part in the analysis as well as propose strategies on how to improve their public spaces at a city scale. UN-Habitat has successfully supported 12 cities to map and assess their public spaces since 2016, but there is a keen interest from other cities to use this tool for their own city-wide public space strategy work.

The results of this city-wide inventory and assessment of public space not only provides a basis for the development of a city-wide strategy/action plan on public space but also defines the resources required for its implementation. The tool can be tailored to fit any context and assess the quality, distribution as well as child-friendly spaces and a variety of public space typologies, from open public spaces, public facilities or markets.

The tool is also key in monitoring and reporting on SDG 11.7.1 as it provides an indication of the share of built up area that is of public use by all, as well as towards the implementation of the New Urban Agenda.
The West Nile Region is located in Northern Uganda at the border of South Sudan and Democratic Republic of Congo. It received its name from being located on the western side of the Albert Nile. Administratively, it had been divide into nine (9) local government districts (Koboko, Yumbe, Moyo, Ajumani, Maracha, Arua, Zombo, Nebbi and Pakwach). The region has had a history of prosperity and pride until the 1979 war and the fall of Idi Amin’s government which sent most of the region into exile in Sudan and Congo. This long span of violence has led to loss of property and lives which has hampered both social and economic development of the region thus destructed the social strata of the society. Nonetheless, the region is strategically located with the potential of trade from the neighbouring countries and cities leading to economic development.

According to the 2014 National and Housing and Population census., the Region had a population of 1,916,298 people and this is projected to reach 2,988,300 people living in approximately 500,000 households (as per 2018 Uganda Bureau of Statistics estimates). This report will focus on Koboko, Arua and Nebbi Municipalities which have their population projections as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Region</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Koboko</td>
<td>51,598</td>
</tr>
<tr>
<td></td>
<td>Arua</td>
<td>61,962</td>
</tr>
<tr>
<td></td>
<td>Nebbi</td>
<td>35,029</td>
</tr>
<tr>
<td>2030</td>
<td>Koboko</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arua</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nebbi</td>
<td></td>
</tr>
</tbody>
</table>
Notably, cities and towns play an important role in receiving a large number of displaced people. The UNHCR has recognized this fact through the provision of a new document released in 2009 that outlines an updated policy on refugees in urban areas and which commits the organization to providing secure protection spaces for refugees in urban areas (UNHCR 2009a). While there is no definition of protection space, there is a recognition that this concept is fluid and includes more than physical protection.

Since July 2016, Uganda has received over one million refugees from South Sudan. This is however not the first humanitarian response in the area. Over the past twenty years there have been three humanitarian responses to the West Nile Region. Given this protracted displacement and the likelihood of future refugee responses, the government of Uganda and UNHCR are calling for approaches to help refugees engage in sustainable livelihoods and become self-reliant by participating in the local economy.

This influx of refugees is one of the factors that leads to population increase in the region and thereby putting pressure on not only the land but also other sectors such as health and basic service provision within the urban areas. Therefore, as part of UN-Habitat’s response, a multi-scaler planning approach has been commissioned with a city-wide open public space and market place inventory and assessment conducted at the municipality scale. The ability for public spaces to unite communities and as a platform for cultural expression is a powerful tool in the integration of refugee communities whether returning or emigrating to a second or even third country. The place identity that can be fostered through the use of spaces in urban areas can lead to a true sense of belonging that is so important following the dislocation of social bonds often experienced by refugees and IDPs. Therefore, this assessment hopes to provide the municipalities with information regarding their open public spaces and markets as tools for social cohesion and to be able to understand both spatial and non-spatial gaps within their municipalities. This will support them in preparing comprehensive and implementable strategies for inclusive public spaces.
The pace, scale, and form of the Regions urbanization will have long-lasting effects on the social, economic, and environmental dimensions. Although the growth of urban areas provides opportunities for the poor, urban expansion can aggravate inequality in access to services, employment, and housing. Moreover, fragmented urban areas has emerged as a significant issue. Getting urban form, density, and administrative coordination right will be essential to help achieve a sustainable city/town. Ensuring a spatial match between distribution, quantity and quality of services, and mobility will foster a more inclusive city/town.

The importance of public spaces and their impact on urban development cannot be ignored. It is in this regard that density and open space should be considered as part of planning.

These municipalities are growing spatially at a fast rate and ensuring that there is proper planning should be one of the focus areas of the local government. Public spaces especially streets can be a key tool to ensure that these municipalities grow in a more compact and integrated manner.
The overall goal of the open public space assessment was to not only assess the integration of refugees and host communities, but also the typology, quality, quantity, distribution and accessibility in Koboko, Arua and Nebbi Municipality. This will make a case for the protection of these spaces as well as monitoring and reporting on the Sustainable Development Goals and New Urban Agenda. The equitable distribution of the spaces across the city is an important element of creating a cohesive city, balancing growth and revitalizing impoverished communities.

UN-Habitat trained a total of 101 data collectors (34 from Arua, 37 Koboko and 30 Nebbi) in the three municipalities including 58 government officials (20 from Arua, 22 Koboko and 16 Nebbi) on the importance of public space and how to use the Kobo toolbox for data collection. Out of all the data collector who were trained, 34 from Arua, 34 Koboko and 29 Nebbi conducted the survey in their Municipalities. The exercise was done simultaneously and took one week.
The assessment covered the municipal boundaries of 3 districts in West Nile Region. Majority of public spaces data were collected in Arua Municipality which had 162 data entries, out of these, 126 were open public spaces and 36 were markets. Nebbi Municipality which had 156 data entries, 100 being open public spaces and 56 markets and Koboko had the least number of data entries having 94 in total with 63 classified as open public spaces and 31 as markets.

A validation workshop was organised in Arua where the data that was collected was presented to the officials from each municipality. The data was validated and cleaned by deleting all duplicates, data that was collected in places that are not public spaces and the officials added other public spaces that were not in the database, see annex. Therefore, a total of 66 open public spaces and 36 markets were identified in Arua municipality, while in Koboko municipality a total of 36 open public spaces and 31 markets were validated and in Nebbi 64 open public spaces and 56 markets were identified. This has been shown in the table on the right including the different typologies of public spaces. The area for open public space were identified as follows; Arua (0.13Km²), Koboko (0.34Km²), Nebbi (0.1Km²). This data has therefore been used for analysis throughout this report.

### OPEN PUBLIC SPACES

<table>
<thead>
<tr>
<th>Typology</th>
<th>KOBOKO</th>
<th>ARUA</th>
<th>NEBBI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Area Km²</td>
<td>Number</td>
<td>Area Km²</td>
</tr>
<tr>
<td>Bus terminus</td>
<td>-</td>
<td>-</td>
<td>0.0005</td>
</tr>
<tr>
<td>Cemeteries</td>
<td>0.002</td>
<td>1</td>
<td>0.0009</td>
</tr>
<tr>
<td>Community yards</td>
<td>0.02</td>
<td>7</td>
<td>0.002</td>
</tr>
<tr>
<td>Gardens</td>
<td>0.003</td>
<td>3</td>
<td>0.003</td>
</tr>
<tr>
<td>Parking lots</td>
<td>0.007</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Parks</td>
<td>0.0003</td>
<td>1</td>
<td>0.002</td>
</tr>
<tr>
<td>Playgrounds</td>
<td>0.08</td>
<td>9</td>
<td>0.1</td>
</tr>
<tr>
<td>Plaza/Square</td>
<td>0.0003</td>
<td>1</td>
<td>0.00009</td>
</tr>
<tr>
<td>Potential public space</td>
<td>0.01</td>
<td>6</td>
<td>0.00009</td>
</tr>
<tr>
<td>Riparian areas</td>
<td>0.21</td>
<td>2</td>
<td>0.0008</td>
</tr>
<tr>
<td>Road reserves</td>
<td>-</td>
<td>-</td>
<td>0.02</td>
</tr>
<tr>
<td>Sports field</td>
<td>0.02</td>
<td>1</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>0.33</strong></td>
<td><strong>32</strong></td>
<td><strong>0.13</strong></td>
</tr>
</tbody>
</table>

### PUBLIC FACILITIES

<table>
<thead>
<tr>
<th>Typology</th>
<th>KOBOKO</th>
<th>ARUA</th>
<th>NEBBI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Area Km²</td>
<td>Number</td>
<td>Area Km²</td>
</tr>
<tr>
<td>Church</td>
<td>0.001</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Markets</td>
<td>-</td>
<td>31</td>
<td>-</td>
</tr>
<tr>
<td>Resource centre</td>
<td>0.0001</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>School</td>
<td>0.006</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>0.01</strong></td>
<td><strong>35</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>
The definition of public space differs from one city to another but one interpretation focuses on the legal and political interpretation of public space, which relates to who has a right to a space and the rights one has in that space. The purposes of the city-wide assessment in the three municipalities is to consider the ownership and management schemes over spaces intended for public use and assess how those schemes influence a space’s ability to serve the public. It is also paramount to ensure, a progressive management plan that promotes ways of maintaining and enhancing a clean, safe and lively place. This ensures that public spaces are used overtime therefore reduces derelict spaces often perceived as unsafe. UN-Habitat’s experience shows that publicly owned public spaces ensure a more long term use of spaces by the citizens. Yet, in recent years, the provision of publicly accessible spaces has been increasingly undertaken by the private sector, often at the encouragement of overstretched, fiscally strained municipal governments who attempt to meet demand for urban open space by providing incentives to the private sector in exchange for the provision and maintenance of such spaces.

Majority of the open public spaces in the three municipalities are owned by the government while out of these a large number are owned by the municipal council except for Arua Municipality where the majority are owned by the National government. The open public spaces that are owned by non-government entities are largely owned by the private sector. Maintenance of open public spaces in Koboko has also been taken up by private sector while the in the other municipalities it is the sole responsibility of the local government.
**OPEN PUBLIC SPACE ASSESSMENT**

**TYPOLOGY AND DIFFERENT USES OF PUBLIC SPACES**

**KOBOKO MUNICIPALITY**

- **Seating furniture**: 6.6m² (Per Capita open public space)
- **Monuments**: 36%
- **Artificial water bodies**: 17% of total area
- **Play furniture**: 13%

**ARUA MUNICIPALITY**

- **Seating furniture**: 2.1m² (Per Capita open public space)
- **Monuments**: 11%
- **Artificial water bodies**: 9% of total area
- **Play furniture**: 8%

**NEBBI MUNICIPALITY**

- **Seating furniture**: 2.9m² (Per Capita open public space)
- **Monuments**: 3%
- **Artificial water bodies**: 6% of total area
- **Play furniture**: 2%

**LANDMARKS PRESENT IN PUBLIC SPACES**

- **Seating furniture**: Koboko 13, 36% Arua 7, 11% Nebbi 8, 13%
- **Monuments**: Koboko 0 Arua 0 Nebbi 0
- **Artificial water bodies**: Koboko 1, 3% Arua 0 Nebbi 0
- **Artificial shade**: Koboko 17, 47% Arua 6, 9% Nebbi 1, 2%
- **Play furniture**: Koboko 4, 11% Arua 5, 8% Nebbi 0
Public spaces should not be seen in isolation but in the context of its adjacent buildings, their uses and its location in a wider network of public and private space. A space or street by itself as a public space is meaningless. Public space typology must be considered within the morphology of the city. This helps in understanding the relationship between the physical form of the public space, the function it provides and the relationship to other built form elements. It is therefore necessary to categories and define public spaces not only by theirs sizes but also by their main function. UN-Habitat has categorized public spaces broadly as open public spaces, public facilities and open public spaces. The assessed public spaces in the three municipalities are open public spaces and public facilities.

Open public spaces were categorized by size, their main functions and presence of supporting infrastructure. Majority of the open public spaces in Nebbi and Arua were road reserves while in Koboko they were playgrounds as seen in the graphs on the left. However in Arua playgrounds covered the largest share of land (0.1Km2), refer to page 16 while in Koboko riparian areas cover the largest share of land (0.21 Km2).

The presence of well-designed and maintained places coupled with adequate infrastructure supporting safety and comfort in public spaces such as signage and lighting, as well as seating, shade and shelter, encourages people to use facilities, thereby supporting activity and social interaction. These features contribute to building social capital as well as the physical and mental health of the community. The presence of infrastructure for use were found in an number of open public spaces in the three municipalities except for water taps which were not found in any of the open public spaces in Arua and Nebbi. Public toilets were found in majority of the open public spaces. However, a common phenomenon in the three municipalities was the poor conditions of these infrastructure in the open public spaces as well as a lack of landmarks such as monuments. This shows the need for public space design expertise in the municipalities.

The per capita public space for each of the municipalities was also calculated based on population as referenced in the 2014 National and Housing and Population census and Arua was found to have the least per capita of 2.1m2 per person and Koboko had the highest with 6.6m2 per person while Nebbi had 2.9m2 per person. This however, does not include the urban refugees and the day population.
Access is basically the ability of an individual to gain access to a facility or service. Accessibility is dependent on socio-economic status, race, gender, age and physical ability. Connectivity is the articulation of networks that connect different public spaces irrespective of their typology and location. Connectivity is important to ensure that public spaces are not left as an island and therefore lose its functionality.

A high quality public space can be of limited value if access to it is restricted by major barriers such as transportation corridors. An integrated public network is efficient and effective in increasing the use of public spaces and hence the sustainability of the open spaces.

The physical accessibility of public spaces in the three municipalities was also determined using the infrastructure available to access the public spaces, their condition, the presence of clearly defined entrances, accessibility level and walking distance.

Percentage of public spaces with infrastructure available to access the public space

- **OPS with well defined streets**
  - Koboko 77%
  - Arua 83%
  - Nebbi 51%

- **OPS with wheelchair access**
  - Koboko 58%
  - Arua 61%
  - Nebbi 53%

- **OPS with vehicular parking**
  - Koboko 47%
  - Arua 27%
  - Nebbi 34%

- **OPS with bicycle parking**
  - Koboko 50%
  - Arua 23%
  - Nebbi 42%
Walk distance is important because walking is the primary access mode from home to public spaces and because walking distance has a significant impact on public space use. It has been noted that accessibility and utilization of public spaces have decreased since they are neglected in urban planning and development processes.

The maps focuses on spatial access as understanding influences on walking distance to public spaces along the streets as a key element of establishing equitable access to public spaces.

**PROXIMITY ANALYSIS**

<table>
<thead>
<tr>
<th>Walking distance</th>
<th>KOBOKO Serviced (Km²)</th>
<th>KOBOKO Unserviced (Km²)</th>
<th>ARUA Serviced (Km²)</th>
<th>ARUA Unserviced (Km²)</th>
<th>NEBBI Serviced (Km²)</th>
<th>NEBBI Unserviced (Km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5mins walk (400m)</td>
<td>1.1</td>
<td>7.2</td>
<td>4.5</td>
<td>5.7</td>
<td>3.7</td>
<td>41.7</td>
</tr>
<tr>
<td>10mins walk (1,000m)</td>
<td>2.6</td>
<td>5.7</td>
<td>8.7</td>
<td>1.5</td>
<td>7.9</td>
<td>37.4</td>
</tr>
</tbody>
</table>
OPEN PUBLIC SPACE ASSESSMENT
COMFORT ASSESSMENT ENSURING QUALITY OF USE AND STAY

KOBOKO MUNICIPALITY

ARUA MUNICIPALITY

NEBBI MUNICIPALITY

More refugees in open public spaces than host community in Koboko

More refugees in open public spaces than host community in Arua

Open Public Space Assessment

Comfort Assessment Ensuring Quality of Use and Stay

1 open public space out of the total (36) was perceived very comfortable

All (66) open public spaces were perceived very comfortable

NONE of the open public spaces were perceived very comfortable and only 18 out of the total (64) were perceived moderately comfortable

More refugees in open public spaces than host community in Arua

68% (45) of the public spaces in Arua that were perceived as very comfortable had equal representation of both age and gender balance from the Refugee community

Koboko 44%

Arua 17%

Nebbi 16%

Koboko 25%

Arua 23%

Nebbi 22%

Koboko 47%

Arua 8%

Nebbi 2%

100% (1) of the public spaces in Nebbi that were perceived as very comfortable had equal representation of both age and gender balance from the Refugee community

Very Comfortable

Moderately comfortable

Uncomfortable
Public spaces play the role of creating comfort and the quality of stay to the users in urban areas. However, there are certain measures that are required to create comfort in public open spaces. Using the city-wide assessment of public spaces, the main measures of comfort in open public spaces relate to:

- Comfort from natural environment eg. from sunlight, extreme winds, snow
- Cleanliness eg. provision of dustbins, provision of clean drinking water, regular maintenance by, cleaning water bodies and trimming grass and hedges, reduction of air pollution through planting of more trees.
- Aesthetics eg. overall design of the public space
- Provision of sitting space infrastructure
- Noise levels
- Cultural comfort eg. respect of religious and social norms in the public spaces

The city-wide public space assessment in the three municipalities looked at the quality of each open public space by assessing the perception of comfort using the above indicators. A comfort index, using these indicators, was therefore used to rank the comfort of each open public space. It was found that all public spaces in Arua were perceived as very comfortable while in Nebbi none of the open public spaces were perceived as very comfortable and in Koboko only one open public space was perceived as very comfortable.

Surprisingly, majority of the users of open public spaces in Koboko and Nebbi were present in the uncomfortable spaces. When these spaces were cross-tabulated with the safety index, the result was that majority of these uncomfortable spaces were perceived as very safe. This shows the importance of ensuring safety in public spaces. However, the spaces that were perceived as very comfortable in the three municipalities had equal representation of both age and gender. Therefore users in public spaces is an indicator of comfort. Other indicators included the presence of amenities for use such as seating, public toilets, artificial shading and garbage bins, level of noise in the open public space and clean environment.
### OPEN PUBLIC SPACE ASSESSMENT

**MEASURING THE QUALITY OF SAFETY**

#### Neighboring sub-districts

<table>
<thead>
<tr>
<th>Neighboring Sub-Districts</th>
<th>KOBOKO MUNICIPALITY</th>
<th>ARUA MUNICIPALITY</th>
<th>NEBBI MUNICIPALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>64%</td>
<td>75%</td>
<td>64%</td>
</tr>
<tr>
<td></td>
<td>(Percentage of public spaces within neighbourhoods that have incidents of drug abuse)</td>
<td>(Percentage of public spaces within neighbourhoods that have incidents of drug abuse)</td>
<td>(Percentage of public spaces within neighbourhoods that have incidents of drug abuse)</td>
</tr>
<tr>
<td></td>
<td>47%</td>
<td>69%</td>
<td>52%</td>
</tr>
<tr>
<td></td>
<td>(Percentage of public spaces within neighbourhoods that have poor street lighting)</td>
<td>(Percentage of public spaces within neighbourhoods that have poor street lighting)</td>
<td>(Percentage of public spaces within neighbourhoods that have poor street lighting)</td>
</tr>
<tr>
<td></td>
<td>39%</td>
<td>64%</td>
<td>41%</td>
</tr>
<tr>
<td></td>
<td>(Percentage of public spaces within neighbourhoods that have recreational facilities)</td>
<td>(Percentage of public spaces within neighbourhoods that have recreational facilities)</td>
<td>(Percentage of public spaces within neighbourhoods that have recreational facilities)</td>
</tr>
<tr>
<td></td>
<td>65%</td>
<td>64%</td>
<td>39%</td>
</tr>
<tr>
<td></td>
<td>(Percentage of public spaces within neighbourhoods that have narrow streets)</td>
<td>(Percentage of public spaces within neighbourhoods that have narrow streets)</td>
<td>(Percentage of public spaces within neighbourhoods that have narrow streets)</td>
</tr>
<tr>
<td></td>
<td>63%</td>
<td>98%</td>
<td>31%</td>
</tr>
<tr>
<td></td>
<td>(Percentage of public spaces within neighbourhoods that have issues of violence)</td>
<td>(Percentage of public spaces within neighbourhoods that have issues of violence)</td>
<td>(Percentage of public spaces within neighbourhoods that have issues of violence)</td>
</tr>
<tr>
<td></td>
<td>52%</td>
<td>94%</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>(Percentage of public spaces within neighbourhoods that have illegal dumping)</td>
<td>(Percentage of public spaces within neighbourhoods that have illegal dumping)</td>
<td>(Percentage of public spaces within neighbourhoods that have illegal dumping)</td>
</tr>
<tr>
<td></td>
<td>34%</td>
<td>59%</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>(Percentage of public spaces within neighbourhoods that have issues of illegal dumping)</td>
<td>(Percentage of public spaces within neighbourhoods that have issues of illegal dumping)</td>
<td>(Percentage of public spaces within neighbourhoods that have issues of illegal dumping)</td>
</tr>
<tr>
<td></td>
<td>31%</td>
<td>86%</td>
<td>31%</td>
</tr>
<tr>
<td></td>
<td>(Percentage of public spaces within neighbourhoods that have issues of public transport)</td>
<td>(Percentage of public spaces within neighbourhoods that have issues of public transport)</td>
<td>(Percentage of public spaces within neighbourhoods that have issues of public transport)</td>
</tr>
<tr>
<td></td>
<td>36%</td>
<td>62%</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>(Percentage of public spaces within neighbourhoods that have issues of violence)</td>
<td>(Percentage of public spaces within neighbourhoods that have issues of violence)</td>
<td>(Percentage of public spaces within neighbourhoods that have issues of violence)</td>
</tr>
<tr>
<td></td>
<td>3%</td>
<td>0%</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>(Percentage of public spaces that are threatening and aggressive)</td>
<td>(Percentage of public spaces that are threatening and aggressive)</td>
<td>(Percentage of public spaces that are threatening and aggressive)</td>
</tr>
<tr>
<td></td>
<td>22%</td>
<td>58%</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>(Percentage of public spaces that are perceived as very safe)</td>
<td>(Percentage of public spaces that are perceived as very safe)</td>
<td>(Percentage of public spaces that are perceived as very safe)</td>
</tr>
</tbody>
</table>

*OVERALL*

- **KOBOKO MUNICIPALITY**: 64%
- **ARUA MUNICIPALITY**: 75%
- **NEBBI MUNICIPALITY**: 64%

*OVERALL*:

- **KOBOKO MUNICIPALITY**: 64%
- **ARUA MUNICIPALITY**: 75%
- **NEBBI MUNICIPALITY**: 64%
The importance of providing a sense of security among people in public spaces cannot be underestimated. Besides being a basic human need, failing to have a sense of security in one’s everyday environment can have various negative consequences. It has also been found that where public space is inadequate, poorly designed, or privatized, the city becomes increasingly segregated. The result can be a polarized city where social tensions are likely to flare up and where crime and violence rises.

Safety in public spaces is perceived as an important element of both the quality of community life, and the effective management of cities. The image of a public space also contributes to whether it will be utilized or not. If the public space environment experiences poor lighting and visibility, physical isolation, poor maintenance, and has a confusing layout, people avoid the place. The condition of these street lighting infrastructure is also an indicator of perception of safety. In order to create an environment of safety and comfort, there is a great need to address these fears of personal safety and the actual safety in the community.

In the three municipalities, several indicators were linked to safety and comfort in public spaces. These included perception of safety during the day and at night in the public spaces, presence and condition of street lighting, incidences and experience of crime in the neighborhood where the public spaces are located, incidences of traffic accidents adjacent to the public spaces, interactions between the refugees and host communities in the public spaces and infrastructural problems present in the public spaces.

Perception of safety was seen to decrease as it gets darker in the three municipalities, while those spaces, however few, that had street lighting in good condition were perceived as partially safe to safe at night. As mentioned earlier, public space is a powerful tool in the integration of refugee communities whether returning or emigrating to a second or even third country. In the three municipalities, users, both refugees and host communities, in public spaces were found to be well integrated with no discrimination. However, three main social problem were seen to occur in the three municipalities and in majority of the public spaces which included, drug abuse, illegal dumping, lack of recreational facilities and violence. The main infrastructure problems were poor street lighting and poor roads.

An overall safety index was established based on these indicators and public spaces in Koboko and Nebbi municipalities had a very low percentage of safe public spaces. This shows the need for the municipalities to work on ensuring that the presence and condition of infrastructure including ensuring social programming of activities in the public spaces are put in place to ensure quality of stay.
Gender survey conducted in the three municipalities' public spaces shows that women are indicators of safety. Out of the 59 public spaces with women present during the survey in Nebbi, 36, which accounts for 61%, were perceived as very safe during the day. None of the public spaces were perceived as unsafe.

Majority of the public spaces in the three municipalities had persons with disabilities present during the time of assessment. However, the spaces are not designed for their needs especially for the deaf and blind.

Assessment shows that neighbourhood spaces have the most number of users, and gender balance.
Public spaces that had multi-functional activities accounted for 42% of all public spaces in Arua. Out of these, 57% (24) were perceived as very safe while the rest 43% (18) were perceived as partially safe. None were perceived as unsafe.

A similar result was found in pluri-functional public spaces in Koboko, which accounted for 9% of the total public spaces. Of these, 89% (8) were perceived as very safe while the rest 11% (1) as partially safe and none were perceived as unsafe.

USE OF PUBLIC SPACES

Public spaces can be mono-functional meaning they are limited to only one activity. These spaces are mostly perceived as unsafe. Within the municipalities, majority of the spaces were recorded as pluri-functional public spaces. There are spaces that are used for different types of activities at the same time and usually perceived as safe. The assessment showed that majority of pluri-functional (spaces with different kinds of activities at the same time) and multi-functional public spaces were found to be very safe to partially safe. None were perceived as unsafe.

In terms of responsive spaces, the city-wide assessment of public spaces in the three municipalities were found to be organized and levels of staying activities differ. Most activities within the public spaces in the are religious related, commercial and sports related, while non-organised activities were mostly work related and random unplanned activities. This shows a potential of public spaces within the three municipalities to become lively due to the presence of staying activities.

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Many public spaces are not designated to one particular activity or one user group; streets, for example, play a multitude of roles for diverse user groups (Moudon, 1991; Shehayeb, 1995). They accommodate social activities of leisure, festivity, praying and protest; public space serves as a community center, a work place and a learning environment (Shehayeb & Kellett, 2006). Public spaces therefore play an important role in public life and enhance the quality of life. It is important that these spaces have features that allows people to spend time and enjoy themselves regardless of their differences. According to Kurniawati, (2012), public spaces have at least three basic things, those are:

1. Responsive - accommodate a variety of activities, interests and desires of the users,
2. Democratic - usable and accessible to a variety of human physical condition without any discrimination,
3. Meaningful - have a linkage between human, space and the world at large.

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A user index was analyzed to understand the distribution of gender and age in public spaces for both the refugees and host communities. The index took a range from 1-9 representing 4 age groups (0-14, 15-24, 25-60, 60+) both female and male, with 9 having the best representation. Surprisingly, public spaces in Koboko and Arua municipality had more refugees in public spaces than host communities and had a good representation of both age and gender.
Studies have proven the necessity of providing green spaces, captured in terms of the social, environmental, health and economic benefits that such spaces offer to urban communities, along with the core linkage to sustainability and enhanced quality of life. They have long-term positive effects on the economy but can also generate more direct economic benefits and values through e.g. increased property value, willingness-to-pay for goods, urban agriculture and city branding. The benefits of green spaces for human health cannot be ignored which has shown to include longevity, physical and mental well-being, brain power and child development, all important for social and economic sustainable development. Ecological benefits from urban green spaces include e.g. regulating services, noise and pollution reduction, local climate regulation and reduction of global warming. Notably, trees and vegetation have a natural cooling effect as they provide shade, potentially reducing surface temperature, by 5°C, to 20°C. Green spaces can also increase the attractiveness of urban areas for residents and visitors, providing possibilities for increased quality of life in terms of e.g. safety, participation, social interaction and attractive living and working environments.

Notably, the city-wide assessment of public spaces recognises the importance of green areas in urban areas and therefore assessed the three municipalities in West Nile Region using the indicators below:

- Green area
- Per capita green
- Grass coverage
- Presence and number of trees
- Presence of urban agriculture

Among the three municipalities, Nebbi municipality, which has the largest area (45.4Km2) and the lowest population (35,029) has a per capita green of 1.42m2. In Arua municipality, the parcapita has been found to be 1.94m2 per person. However, in Koboko Municipality which has an area of 8.3Km2 and a current population of 51,598 residents has a green area of 0.31km2 which accounts for 6.01m2 per person (this is highest per capita in the three municipalities) and but only 4% of the area of the municipality. These numbers however has not accounted for the urban refugees living in the municipalities especially in Arua and Koboko. This shows that the municipalities are growing rapidly with no regard to green area and with the expected population growth and urban sprawl, this may mean a negative impact on both the environment and the residents of West Nile.
Neighboring sub-districts

75% (Percentage of public spaces with tree coverage)

56% (Percentage of public spaces with tree coverage)

61% (Percentage of public spaces with tree coverage)

GREEN INDEX

- Not green
- Partially green
- Green
- Very green

Nebbi
Arua
Koboko

Neighboring sub-districts
MARKET SPACE ASSESSMENT
MANAGEMENT AND MAINTENANCE

44% (Are formal markets)

11% (Are formal markets)

9% (Are formal markets)

PRESENCE OF MAINTENANCE

SOURCE OF FUNDING FOR

National government
Municipal government
Merchants

Arua (36) Nebbi (56)

Government

MANAGEMENT COMMITTEE IN EACH

ARUA MUNICIPALITY NEBBI MUNICIPALITY KOBOKO MUNICIPALITY

50%-10%
50%-47%
50%-33%

Yes No

N

Nebbi

Arua

KOBOKO MUNICIPALITY ARUA MUNICIPALITY NEBBI MUNICIPALITY

Would you like to help me understand any specific part of this document?
Clear arrangements must be set up for the management of markets. Investments in markets should not be made without a management system and a market committee. Yet, in the three municipalities, a very small number of markets, 23 in Koboko, 20 in Arua and 13 in Nebbi have a clear management plan. A similar result was found when the maintenance plan was set up. These numbers do not come as a surprise in Arua and Nebbi municipalities since majority of the markets are informal markets. However, a good number of markets accounting for 44% of the total markets in Koboko are formal. The funding for maintenance was mostly from merchants as seen in the table. Notably, the market management committee’s responsibility is to operate a well-functioning market, which includes defining procedures. This could mean initiating meetings with the traders on a regular basis in order to resolve specific issues, application of rental and stall-allocation policies, operation of market rules and regulations, future improvement and expansion of facilities, enforcement of environmental, public health and food safety requirements etc. The management committee in each municipality are comprised of both the government and non-government with equal representation from both gender groups. However, non of the markets in the municipalities have management committees with refugees.

Ideally the best solution for management is the local government to take it up, particularly when rents for stalls or pitches are collected on a monthly or annual basis. Apart from daily rubbish collection, an adequate system of management normally requires only regular visits to the market by local health inspectors. A small percentage of markets in the three are managed solely by the local governments and majority are jointly managed as seen in the graph. While the maintenance of individual stalls are mainly done by the vendors.

To ensure that market operations run smoothly and the local government gains from their economical value, a clear maintenance and management framework needs to be set up in place. This may mean formalizing all majority of the formal markets. The involvement of refugees in the market committee cannot be emphasized to ensure inclusivity as they are already participating in the local economy. An agreed percentage of the market fees should be also be reserved for market operations and maintenance (a minimum of 30 percent). This is usually calculated in advance, so that the money can be put aside.
MARKET SPACE ASSESSMENT
MARKET OPERATIONS

92% (Of markets a operational)

100% (Of markets a operational)

98% (Of markets a operational)

NUMBER OF MARKETS SELLING LOCAL PRODUCTS

NUMBER OF MARKETS SELLING DIFFERENT PRODUCTS

% of local products sold

Koboko (31) Arua (36) Nebbi (56)
Antiques 0 3 3
Artisan 0 3 14
Fresh vegetables and fruits 17 10 43
Animal produce 1 1 4
Flowers 0 0 0
Used products 6 5 17

% of markets with permanent vending stalls

Koboko 13% Arua 14% Nebbi 21%

% of markets with toilets

Koboko 50% Arua 29% Nebbi 13%

% of markets with electricity

Koboko 27% Arua 16% Nebbi 50%

% of markets with water

Koboko 15% Arua 47% Nebbi 34%
Markets well served by infrastructural facilities such as electricity, toilets, permanent vending stalls and water more often than not are sustainable and thrive therein. Customers and vendors get a higher return on their produce when they sell in these markets. Additionally, these markets encourages day and night use especially markets which are more active during the evening or at night than during the day. An example is the Farakan market in Bobo-Dioulasso, Burkina Faso which takes over from the central market in the evening (after 7 p.m.). While during the day only about 100 traders operate in this market, there are 1,000 traders at night offering farm produce and a wide range of manufactured goods (Barasa, 2008). As seen from the statistics, the municipalities have markets that lack these basic infrastructure especially permanent vending stalls.

An efficient transport system to enable vendors to transport their farm products to market centres is important for efficient agricultural marketing. Passable roads or fast and frequent transport services, coupled with good storage, can minimize losses of certain crops such as milk, fresh vegetables and tea which deteriorate quickly over time. If the journey to market is made through an efficient means of transport then products such as bananas and mangoes does not suffer losses from bruising; this results in high prices to the farmer. Additionally, efficient means of transport has an important part to play in reducing transport costs from farms to the markets. This saves farmers money as well as time by ensuring that vendors arrive at the market places early enough and operations in the market places also start early (Hine, 2016).

It is highly significant to ensure formal enrollment of vendors operating in any given market place for a number of reasons which includes; facilitation of good governance of the market centres. This is through provision of infrastructural facilities by the local authorities which are tasked with provision and maintenance of these facilities. It is also important to enroll vendors for the purpose of linking them with credit facilities provided by either an individuals, government or non-governmental organizations. By having a register of vendors operating in the market place helps creditors have faith on the vendors and by so doing they can easily access the credit facilities. Enrollment of vendors in the market centres also helps in the payment of taxes and fees by vendors to the local authorities. The local authorities are able to know the number of vendors operating in a given market and the estimated amount of tax to pay. These taxes are used in the maintenance and development of the market centres (Schulz, 2011).
MARKET SPACE ASSESSMENT
ACCESSIBILITY ASSESSMENT OF MARKETS

KOBOKO MUNICIPALITY

Arua (36)
Nebbi (56)

ARUA MUNICIPALITY

Nebbi
D.R.Congo
Erussi
Nyaravur
Kucwiny

NEEBI MUNICIPALITY

Share of land the is 10mins walking distance to a market

MARKETS WITH FACILITIES TO ACCESS THEM

<table>
<thead>
<tr>
<th>Market</th>
<th>Koboko</th>
<th>Arua</th>
<th>Nebbi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheelchair access</td>
<td>11</td>
<td>10</td>
<td>36</td>
</tr>
<tr>
<td>Vehicular access</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Paved cycle way</td>
<td>9</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td>Paved sidewalk</td>
<td>14</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>Public transport</td>
<td>2</td>
<td>3</td>
<td>21</td>
</tr>
</tbody>
</table>

MODE OF TRANSPORT USED BY VENDORS

<table>
<thead>
<tr>
<th>Market</th>
<th>Koboko</th>
<th>Arua</th>
<th>Nebbi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheelchair access</td>
<td>73%</td>
<td>58%</td>
<td>98%</td>
</tr>
<tr>
<td>Vehicular access</td>
<td>46%</td>
<td>37%</td>
<td>39%</td>
</tr>
<tr>
<td>Paved cycle way</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Paved sidewalk</td>
<td>31%</td>
<td>42%</td>
<td>20%</td>
</tr>
<tr>
<td>Public transport</td>
<td>31%</td>
<td>42%</td>
<td>20%</td>
</tr>
</tbody>
</table>

MODE OF TRANSPORT USED BY CUSTOMERS

<table>
<thead>
<tr>
<th>Market</th>
<th>Koboko</th>
<th>Arua</th>
<th>Nebbi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheelchair access</td>
<td>88%</td>
<td>89%</td>
<td>100%</td>
</tr>
<tr>
<td>Vehicular access</td>
<td>50%</td>
<td>63%</td>
<td>50%</td>
</tr>
<tr>
<td>Paved cycle way</td>
<td>4%</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>Paved sidewalk</td>
<td>15%</td>
<td>11%</td>
<td>29%</td>
</tr>
<tr>
<td>Public transport</td>
<td>50%</td>
<td>47%</td>
<td>39%</td>
</tr>
</tbody>
</table>

8% Share of land the is 10mins walking distance to a market
Accessibility is a precondition for an inclusive society for all, and may be defined as the provision of flexibility to accommodate each user’s needs and preferences in the market places. There are many advantages of having good infrastructure for accessing market centres and they include; ensuring that all people in the society including people with disability, mothers and children are included in daily operation of the markets. Clear pedestrian, vehicular, proximity to public transport and access for persons with disability ensures all groups of people in the society are included in the daily operations of the market since they can access and leave the markets easily (Klaesson et al., 2016). It also promotes tourism in the market areas. Many people from different parts of the country and the world can access the market centres easily when the infrastructure is in good condition (Park et al., 2016). Markets with clear infrastructural access brings about diversity in terms of the goods and services in the market hence attracting a wide variety of customers. This improves the economy of the market in terms of cash flow.

Market accessibility also helps during emergencies and natural calamities such as internal disturbance in the market centres, theft and occurrences of fire in the market areas. People can easily be evacuated from the markets in case of any emergency or natural calamity if the infrastructural access is in good condition. In addition, it helps reduce congestion in the markets. Proper market accessibility also ensures that perishable goods are transported faster to the market centres. This reduces losses in terms of the goods that go to waste (UN, 2016).

It is important to ensure that there are clear delivery stations for both goods and services in the markets in order to help sort them depending on the region and transport them from sortation centres to their local delivery stations. Clear delivery stations also help reduce time wastage by customers and vendors while locating where different goods might be found. Time for delivery for different goods and people varies depending on the delivery service offer for that product sector and the service level selected by the customer (Kondratjev, 2015).
Economic assessment has been 
Neighboring sub-districts

31%  
(of markets have been assessed economically)

26%  
(of markets have been assessed economically)

16%  
(of markets have been assessed economically)

KOBOKO MUNICIPALITY

ARUA MUNICIPALITY

NEBBI MUNICIPALITY

PAYMENT OF STALL BY VENDORS with a formalized

<table>
<thead>
<tr>
<th></th>
<th>Koboko</th>
<th>Arua</th>
<th>Nebbi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Market owner</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Market commitee</td>
<td>7</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Owner vs Vendor negotiation</td>
<td>3</td>
<td>0</td>
<td>9</td>
</tr>
</tbody>
</table>
Generally, markets are the machineries for allocating resources to the people. Well-operational markets maximises consumer welfare, and, by raising economic growth, also increase total welfare. When markets are well-operational, they provide what consumers want better and more cost-effectively than their competitors. Diversity in the markets provides significant benefits for consumers through greater choice of produce, lower prices, and better quality goods and services. It also provides strong incentives for efficiency and innovation, thereby helping raise productivity growth across the economy (Erforschung and Pottie-sherman, 2011). But how can markets provide tangible evidence of their valuable direct and indirect economic impact? It is therefore necessary to conduct an economic assessment of markets. As seen on the map, very few markets Koboko (31%), Nebbi (16%), Arua (26%) have done an economic impact assessment.

Participation in a market as a vendor usually requires paying a fee, but fee requirements vary considerably. Some markets require payment of dues for membership in the market or producers’ association, charge annual fees for use of the stall, or charge rental fees at a monthly or daily rate. The market committees in these municipalities determine rental rates, however, a very small percentage of vendors have formalised licences and hence a very small percentage of them pay for vending stalls. Therefore, rules for market operation is important for daily operation of the markets and they need to be agreed at an early stage as well as methods of leasing spaces and the setting of fees.

The importance of the informal sector cannot be over-emphasised. A relatively small proportion of the total commercial employment is taken up by formal urban wholesaling and retailing activities. However, there is usually substantial under-estimating of the real employment in retailing as the number of street vendors is often not taken into account. Street vendors provide an important means of supplementary employment, particularly for women. Vendors normally operate from a variety of locations, ranging from tables outside markets the backs of vans and lorries, down to small-scale street “hawkers” with a single box of produce to sell. We see that this is the case in the three municipalities, as mentioned earlier, with many informal markets. This means that there is a higher multiplier effect (money circulates more times in the local economy before leaving) in these municipalities and the loca government needs to capture this and ensure the impact to the local economy is realised.
MARKET SPACE ASSESSMENT
ENVIRONMENTAL ASSESSMENT MEASURING QUALITY OF STAY

QUALITY OF STAY

KOBOKO MUNICIPALITY

27% (Of markets have a waste removal system)

19 (Markets experience flooding)

ARUA MUNICIPALITY

42% (Of markets have a waste removal system)

15 (Markets experience flooding)

NEBBI MUNICIPALITY

54% (Of markets have a waste removal system)

36 (Markets experience flooding)

Once a day 3 6 17
Twice a day 0 1 5
Once a week 4 1 2

Percentage of markets that recycle waste

10% 14% 23%

Percentage of markets with garbage disposed in its environs

58% 88% 64%

<table>
<thead>
<tr>
<th></th>
<th>Koboko (31)</th>
<th>Arua (36)</th>
<th>Nebbi (56)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Government</td>
<td>5</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>Community groups</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Private contractors</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Nordic nations

Presence of waste removal

N

Neighboring sub-districts

Local Government

Community groups

Private contractors
Markets are increasingly viewed as one facet of the solution to national chronic health problems. Many vendors in markets take inadequate precautions to prevent the spread of foodborne illness, and they should be trained to reduce food-safety risks. When food scraps are thrown in the trash, they contribute significantly to climate change. When these materials decompose in a landfill, they become powerful contributors to greenhouse gas emissions and when they are burned in incinerators they contribute to emissions and pollution. In fact, landfills are the single largest direct human source of methane. When composted instead, this material creates nutrient-rich soil that is in high demand to grow more food and healthy food because it reduces the need for chemical fertilizers and pesticides, and greatly improves soil quality. Therefore, it is important to recycle all that can, and compost all that can. By doing so, it is easy to see what's left in the bottom of our garbage bins and make different choices and policies. Arua has the highest percentage (26%) of markets that recycle, which is quite low while Koboko has the least percentage (12%).

Markets that are characterised by huge piles of garbage and open sewage, posing a serious health hazards for residents. However only 7 markets in Koboko, 8 markets in Arua and 27 markets in Nebbi have a waste removal system and the waste is collected once per day. There piles usually block drainage systems and cause flooding in the markets. Out of all markets in the municipalities 19 in Koboko 15 in Arua and 36 in Nebbi experience flooding due to poor drainage.

Agreements should be made with relevant authorities within the municipalities for their involvement in the collection of solid waste, maintenance of street lighting, site security, surface water drainage and environmental health issues. Additionally, procedures should be defined and arrangements made for daily cleaning of the common areas and of the individual premises, particularly stalls and equipment in meat and fish markets and where cooked food is being prepared.
MARKET SPACE ASSESSMENT
COMFORT AND SAFETY

KOBOKO MUNICIPALITY

ARUA MUNICIPALITY

NEBBI MUNICIPALITY

PRESENCE OF BAD SMELL WITHIN MARKETS

38%

11%

32%

<table>
<thead>
<tr>
<th>Location</th>
<th>Koboko (%)</th>
<th>Arua (%)</th>
<th>Nebbi (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between vendors</td>
<td>23</td>
<td>34</td>
<td>35</td>
</tr>
<tr>
<td>Between vendor and client</td>
<td>14</td>
<td>16</td>
<td>26</td>
</tr>
<tr>
<td>Between vendor and government</td>
<td>5</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>Between vendor and security</td>
<td>1</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Rain, cold, heat and wind are just some of the conditions they may have to be addressed to ensure vendors’ and customers’ comfort at the market. It is interesting to note that many innovations which have proven successful in public market are, connecting with local farmers and producers, adding public seating, rebuilding a sense of community and adapting to site specific needs. Facilities are needed to make the markets comfortable and safe for both the vendors and the customers.

A safety index shows that most of the markets in the three municipalities are perceived as partially safe to unsafe by both the clients and vendors in the market. The main reason of perception of unsafety in the markets is attributed to the fact that majority of these markets do not have street lighting (which came out as the main infrastructural problem facing the markets) and the ones that do have are in poor condition. Vendors also mentioned as issue with stealing of their products from storage and lack of fire emergency. Other social problems were illegal dumping, lack of recreational facilities, violence and drug abuse in that order. Conflicts was also seen as a problem which main arises between vendors and it has been found to have a negative effect on the business. These conflicts are mainly resolved by mediation. Loud noise and bad smell were not seen as an issue in most markets.

It is recommended that all vendors in markets should lock their premises, maintaining access to fire-fighting equipment and prohibit the use of open fires for cooking, except in designated locations. Moreover, activating the streets and fostering street vibrancy and safety through the modernization and renovation of street markets can create an urban quality that positively affects property values and investment.
**MARKET SPACE ASSESSMENT**

**SOCIO-CULTURAL ASSESSMENT**

**HISTORIC IMPORTANCE OF THE PRESENCE OF SERVICES IN THE MARKETS**

<table>
<thead>
<tr>
<th>Service</th>
<th>Koboko (31)</th>
<th>Arua (36)</th>
<th>Nebbi (56)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child care</td>
<td>0</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Canteen</td>
<td>16</td>
<td>17</td>
<td>47</td>
</tr>
<tr>
<td>Religious spaces</td>
<td>16</td>
<td>18</td>
<td>31</td>
</tr>
<tr>
<td>Accommodation</td>
<td>10</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>Security</td>
<td>13</td>
<td>14</td>
<td>20</td>
</tr>
</tbody>
</table>

**FAMILIARITY BETWEEN VENDORS AND CLIENTS**

- Familiarity between vendor and client: 88% (Koboko), 92% (Arua), 70% (Nebbi)
- Familiarity between vendor and vendor: 37% (Koboko), 100% (Arua), 86% (Nebbi)
In addition to being places of trade, markets are also meeting points. Vendors know their regular clients’ names and buying habits, and customers encountered their friends, neighbors, and acquaintances on a daily basis. There is a familiarity and loyalty between vendors and customers, which promoted an ethic of quality products and honest exchange. Markets have become civic spaces, the common ground where citizens and governments defined the shared values of the community. The familiarity between vendors and vendors and clients ensures a mutual trust and customer loyalty. As seen in the table on the previous page, vendors are very familiar to each other, however, vendors and clients and familiar to slightly familiar. This shows a weak social relationship between them. There is also cultural, ethnic and religious balance in some of the markets within the municipalities with facilities provided for them such as religious places for worship, areas for eating such as canteens, child care and accommodation.

These markets within West Nile are not seen as tourist attraction area and very few are recognized as historic markets by the local government. It is therefore paramount that the local government within these municipalities to provide guidelines, policies to modernized and renovate these markets to capture their full potential.

Informal markets are known to occupy spaces that are not designated for their use. Such spaces include areas along streets, within bus terminus and on bus stops. In West Nile, street trade and service provision exclusively occurs on the streets and roads. Most traders locate themselves at strategic points with heavy human traffic, while others walk from one place to the other. They locate themselves along main roads and streets, near shopping centers or at corners where they can be seen by pedestrians and motorists. Traders settle in streets spontaneously without any official allocation. With majority of the markets in the three municipalities being informal, it should not be an excuse for the local government to relocate them especially street traders out of (dense and congested) city centers, towards peripheral or peri-central vending space, leading to loss of income for traders hence detriment their livelihoods. There should be a formal process and planning to integrate the informal economy and this may mean provision of permanent vending stalls.
MARKET SPACE ASSESSMENT
SELLER AND CUSTOMER ASSESSMENT

KOBOKO MUNICIPALITY

ARUA MUNICIPALITY

NEBBI MUNICIPALITY

WHY CUSTOMERS CHOOSE SPECIFIC MARKETS

<table>
<thead>
<tr>
<th>Importance</th>
<th>Koboko (31)</th>
<th>Arua (36)</th>
<th>Nebbi (56)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Products</td>
<td>11</td>
<td>10</td>
<td>36</td>
</tr>
<tr>
<td>Proximity</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Competitive prices</td>
<td>9</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td>No other markets available</td>
<td>14</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>Habit</td>
<td>2</td>
<td>3</td>
<td>21</td>
</tr>
</tbody>
</table>

IMPORTANCE OF SOCIAL RELATIONSHIPS

RANKING BY CUSTOMER PREFERENCE

Neighboring sub-districts

- 1-2
- 3-4
- 5-6
- 7-8
- 9-10

MARKET SPACE ASSESSMENT
SELLER AND CUSTOMER ASSESSMENT
A client and customary assessment is important in providing insights provided to help the municipalities allocate their resources more efficiently to better meet consumer needs. Survey participants were asked to indicate which factor(s) among, competitive prices, quality of products, proximity to place of residence/work, habit, social relationships and no other available markets played an important role in their decision on where to purchase. Proximity to residence/work was selected as the main factor followed by social relationships. Approximately in 46% of the all markets, consumers valued quality of products, while 21% indicated that habit was the most important characteristic. Nearly 32% of the respondents indicated that competitive prices of produce affected their decision on where to purchase. Furthermore, 42% chose to purchase since they had no other available markets within close proximity. This shows that the municipality needs to create more market places in close proximity to residential areas.

Survey participants were also asked to rank market from a scale of 1-10 (1 being the lowest and 10 being the highest). 28% (35 of all markets in the three municipalities 123) markets were ranked quite low (3-4), with 22% of the survey participants rating 4-5, 19% rating quality as 5-6, and less than 4% rating it as 9-10. Approximately 58% of the markets had the respondents indicated that social relationships in the markets especially with the vendors were very important.
Safety in the public open spaces helps lower rates of crime and violence and make space for formal and informal social, cultural and economic activities that contribute to improving mutual trust among the city residents. Safety also enables city municipalities to generate sufficient revenue from the public open spaces while at the same time enhancing livelihood opportunities for the city residents through small businesses in the spaces (Andersson, 2016). It was therefore necessary to understand the overall status of safety in open public spaces in West Nile. Several indicators related to perception of safety, incidences of crime and violence and the infrastructure that support safety and perception of safety in public space were assessment in the three municipalities. This was then combined to give an understanding of the overall safety in the municipalities as well as for each individual open public space.

### How Safe Are the Open Public Spaces?

Safety in the public open spaces helps lower rates of crime and violence and make space for formal and informal social, cultural and economic activities that contribute to improving mutual trust among the city residents. Safety also enables city municipalities to generate sufficient revenue from the public open spaces while at the same time enhancing livelihood opportunities for the city residents through small businesses in the spaces (Andersson, 2016). It was therefore necessary to understand the overall status of safety in open public spaces in West Nile. Several indicators related to perception of safety, incidences of crime and violence and the infrastructure that support safety and perception of safety in public space were assessment in the three municipalities. This was then combined to give an understanding of the overall safety in the municipalities as well as for each individual open public space.

#### Findings and Opportunities

- **Koboko Municipality**
- **Arua Municipality**
- **Nebbi Municipality**

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**Graphs and Maps**

- Safety in the public open spaces helps lower rates of crime and violence and make space for formal and informal social, cultural and economic activities that contribute to improving mutual trust among the city residents. Safety also enables city municipalities to generate sufficient revenue from the public open spaces while at the same time enhancing livelihood opportunities for the city residents through small businesses in the spaces (Andersson, 2016). It was therefore necessary to understand the overall status of safety in open public spaces in West Nile. Several indicators related to perception of safety, incidences of crime and violence and the infrastructure that support safety and perception of safety in public space were assessment in the three municipalities. This was then combined to give an understanding of the overall safety in the municipalities as well as for each individual open public space.
An inclusive open public space allows all people to use them and as they use them, they tend to strengthen social cohesion. When all people, that is, men, women, children and people with disabilities are allowed to freely claim and use the public spaces, they get some sense of ownership which enables them to use the facilities effectively hence better management and maintenance of the public spaces. Inclusivity strengthens the cohesion of city residents of different traditions and cultures (Perry and Munien, 2016). When people use and stay in open public spaces it increases the level of safety in the open public spaces. When the results from the use, user, comfort and facilities were integrated, an inclusive index was generated.
HOW ACCESSIBLE ARE THE OPEN PUBLIC SPACES?

There are numerous benefits of ensuring equal accessibility to open public spaces in the cities. They include better perceived general health, reduced stress levels and reduced depression to the city residents. This is achieved through the leisure and recreational opportunities in the open public spaces, especially for local citizens residing in close proximity to these spaces. People who have access to public open spaces are three times more likely to achieve recommended levels of physical activity than those who do not use the spaces (Clos, 2015). It was found that 30 open public spaces in Arua, 7 open public spaces in Koboko and 18 open public spaces were found to be least accessible. These relates to the level of accessibility, and presence of infrastructure to access the space. Arua has the highest number of inaccessible space but just as much (29) accessible spaces. Majority of the spaces (16) in Koboko are accessible. In general open public spaces in the three municipalities are accessible due to their openness in terms of fees charged to access the spaces.
Due to the lack of an economic assessment in most markets in the three municipalities, a high vending stalls vacancy rate, a large number of informal markets, a small number of vendors conducting business during a typical market day, the low aesthetics of the markets making them least attractive to tourism as well as market committee that are not inclusive. The markets were found to rank very low when it came to economic feasibility. Without a proper formalization process and the ambiguity in tax and fee collection the benefits cannot be calculated in terms of the revenues that can be collected. It was found that 34 markets in Nebbi, 20 in Arua and 14 in Koboko were not economically feasible and the municipality cannot therefore capture the benefits both economically and socially from these markets. Very few were found to be feasible and they included 16 form Koboko, 11 from Nebbi and 10 from Arua.
The overall accessibility of markets in the three municipality were assessed based on, presence of different modes of transport for vendors and customers to access the markets, presence of infrastructure to access the markets such as wheelchair access, clear delivery stations for both goods and services in the markets, and proximity of the markets within walking distances. It was found that majority of the markets were moderately accessible with very few markets perceived as inaccessible. This is due to the location of the markets which are mostly found along main and arterial roads. Main problems related to accessibility of the markets was lack of clear and defined pedestrian route to access the them and poor roads that are narrow and have potholes. This results in markets that have poor accessibility especially during emergencies such as fire. It was found that 14 open public space in Nebbi, 13 in Arua and only 3 in Koboko were found to be the most accessible.
Much effort goes into building markets as a tool for economic and social development, often overlooking that in too many places social exclusion and poverty prevent many, especially vulnerable groups, from participating in and accessing markets. Inclusive markets break down access barriers and offer the poor the things they need – livelihoods, finance, goods and services – to increase their incomes and well-being, ultimately lifting themselves out of poverty. Inclusion in the management, maintenance of markets, the diversity of affordable products for sale, facilities to access the markets and the use and users of markets for both vendors and customers was analysed and an inclusive index was made. This showed that majority of the markets in the three municipalities were found to be moderately inclusive and with a higher number of least inclusive than most inclusive. Most inclusive markets were 6 in Nebbi, 6 in Koboko and only 1 in Arua. While the least inclusive we 9 in Arua, 8 in Nebbi and only 3 in Koboko municipality.
Introduction

Mission statement – “to collectively provide quality, sustainable and coordinated social economic development within the urban setting of Koboko, Arua, Nebbi municipalities”, or “KAN Corridor” Mayors.

Uganda’s urban population will increase from around six million today to over 20 million in 2040, with an urban population average annual growth rate of 4%. Policy makers need to act now to ensure that this rapid urbanization is managed well, so it can contribute to Uganda’s sustainable and inclusive growth. Even though the Ugandan National Urban Policy has recently been approved and is now starting to be implemented, the rapid (and unplanned) urban growth is imposing challenges for the urban areas, hindering social, economic and environmental development in many regions of the country. In addition to the growth of cities by birth rate, cities often go through planned or unplanned spatial expansion to accommodate migrating communities, to which adequate and integrated governance is crucial.

In Uganda, however, the Population and Housing Census remains the main source of demographic data, especially at the sub-national level.

Current Status: Economy

Agriculture has remained a dominant sector in the economy and majority of the households in depend mainly on subsistence farming as their main economic activity. Climate in the KAN Corridor favors agriculture and there is a lot of local produce (such as maize, sorghum, bananas, cassava etc.) supplied from the West Nile region to Kampala, Democratic Republic of Congo (DRC) and South Sudan.

The strategic location of the KAN municipalities is at the confluence of a trade route between the West Nile region, South Sudan and the DRC which facilitates cross border trade, labour mobility and information flow. Transport terminals to DRC, South Sudan and for humanitarian aid, are mainly through Koboko. This improved road network has increased the volume of trade within the West Nile as well as across the borders. Arua city in particular is poised to be a regional trade hub. There are small scale industries which include joinery, tobacco processing, wineries, bread baking, maize milling, welding, carpentry and joinery.

Despite its strength, the West Nile economy has glaring weaknesses. The corridor constantly has limited and erratic electricity supply which has constrained industrial development. The scale of manufacturing industries is negligible hence limiting employment creation, value addition in agriculture and GDP growth. The tourism sector is also not fully exploited. Most citizens are employed in the informal sector such as boda-bodas which limits local revenue generation. As such, many do not pay taxes and organizing such businesses becomes a problem.

Local Economic Development (LED) is much needed in the KAN Corridor. LED is a participatory process in which various local stakeholders combine their efforts towards building a vibrant, resilient, inclusive, and sustainable economy by creating jobs and improving quality of life for all. LED is not a silver bullet or about “quick fixes”; rather, it is a strategic planning exercise that requires a long process of developing a deep understanding of a city’s economic assets and potential, identifying strategic growth industry sectors and their champions, and designing strategies and efficiently allocating resources to improve the competitiveness of the targeted sectors.

KAN Corridor can consider LED strategies that are broad and inclusive in nature; engages both public and private, and formal and informal sectors of the economy. The selected strategies ought to aim at increasing the rate of economic growth and enlarging the size of the local economy, while leveling the playing field for investment and generating productive employment opportunities for all.

Current Status: Municipal Finance

The revenue available to local governments is a key determinant of a city’s ability to provide the services citizens need and to meet expenditure requirements. In cases where revenue is constrained, infrastructure investments often suffer, and government services are reduced. The need to diversify, grow and mobilize revenues is one of the most pressing challenges city leaders face in various regions of the developed and developing world. Building a solid revenue base depends on several factors, including empowering city leaders to grow and diversify their own-source revenue pool to complement external revenue flows (e.g., intergovernmental transfers) over which local government officials lack direct control. It also requires enabling city leaders to mobilize own-source revenues, after they are raised, by harnessing financial tools that can support their strategic priorities (e.g., land-based financing instruments, debt instruments, and public-private partnerships (PPPs), among others).

There is a heavy reliance on government transfers as a main source of revenue throughout the Nebbi-Koboko-Arua corridor (see figure:2). Locally raised revenues appear to contribute the least despite the different sources of local revenue streams that are already established in the corridor (see figure: 2 and 3). In particular, there is low collection on taxes and fees such as local services tax, hotel tax, property fees and land fees which are usually the main sources that enable local governments to fund their core activities.
such as infrastructure projects or deliver specific services to the community such as garbage collection.

Figure 2.
Source: Budget reports from Arua, Nebbi and Koboko Municipal Council Offices

During the data verification workshops, it was noted that the KAN municipalities did not collect some of the local revenues directly, instead, they hired a private company to collect on their behalf. This method subjects the collected revenues to risk that would deter the achievement of revenue enhancement objectives. Use of electronic revenue collection systems or use of banks would mitigate inherent risks involved in cash collection. With electronic systems, municipalities would need to have clear segregation of duties for the revenue collecting officers i.e. payment should be received by different people from those who enter data in the system and those who authorize transactions. It is also important to embed a cost benefit analysis and risk assessments on matters of collecting the much-sought revenue.

Figure 4.
Source: Budget reports from Arua, Nebbi and Koboko Municipal Council Offices

In seeking to expand municipal finances, the question is not only which of these can be added, but also which are already being used but are in need of reform or, in cases of gross inefficiency, in need of cutting.

Each option for revenue generation must serve a dual aim of making local government financially sustainable and fostering a general culture of tax compliance among citizens. Even if a tax or levy is profitable for local government, it should be administered in a way that enhances citizens’ feelings of inclusion and ownership, and that makes citizens proud to pay their taxes.

Developing more effective municipal finance is essential for a number of reasons (figure 5). Without strong and consistent revenue flows, it is not possible to develop sustainable towns and cities. One implication of this is that municipal authorities will lack the resources that they need to effectively plan for the impact of urbanization. This is likely to have a negative effect on the livelihoods of citizens. In turn, this can have long-term implications for residents’ quality of life and for the ability of the area to attract investment in the longer term.

Figure 5. Why does municipal finance matter?
FINDINGS AND OPPORTUNITIES
URBAN ECONOMY AND MUNICIPAL FINANCE IN THE WEST NILE REGION

1. Revenue Collection
The KAN municipalities seem to have well-established sources of local revenue which include a mix of taxes that should, ideally, give municipalities more flexibility to respond to local conditions such as changes in the economy, evolving demographics and expenditure needs, changes in the political climate, and other factors. However, there is a need to establish an electronic revenue collection system enforced by the KAN municipality officials and not the private sector so as to increase the transparency and accountability of the revenue collected. The municipalities should also consider an overall revenue assessment so as to establish the gaps in the current revenue streams and to build strong and consistent revenue streams that are relevant in the corridor.

2. Trade and Markets
The KAN economy is well-supported with a good road network connecting to other cities like Gulu and Kampala as well as a busy airfield serving South Sudan Uganda and DRC. Markets are available and strategically placed and they seem to be a high source of locally collected revenue in the region (figure:3). However, there is a need to upgrade and expand these current markets so as to decongest them and create space for storage facilities such as cold rooms. Also, due to the proximity to the international borders, there is a need to build markets in Koboko that target the trade of locally available goods to DRC and South Sudan.

3. Water and Sanitation
According to the locals, there is a lack of proper waste disposal management provision of basic services such as water especially in the market areas and rural settlements. Rivers and streams remain the main sources of water in the rural areas, which in some cases are contaminated due to lack of sewage management systems. It is essential to develop adequate tap water infrastructure in the region and create awareness to the population on encroachments to the river banks which is also contributing to the contamination of rivers and streams. The need for a sustainable waste management collection system in the region is crucial and the KAN municipalities can charge user fees to provide these services which will subsequently lead to an increase in local revenue. The user fees will also enable the KAN municipalities to provide adequate basic services such as water and improved sanitation. Transparent accounting and opportunities for members of the public to learn more about the solid waste management system may be helpful in explaining the need for payment of charges.

4. Power Supply
The supply of electricity in the corridor is insufficient and there are frequent power cuts which has led to a decrease of the industrial development and interest from private investors. There is a need to invest in the supply of electricity via connection to the national high voltage grid and renewable energy systems such as solar or wind (which will reduce the carbon footprint). The strongest growth, globally, in renewable energy systems has been in grid-connected power facilities such as small hydro, wind farms, solar panels, and biomass cogeneration systems. Energy from solar panels can reduce the overall demand on the grid. These systems will require innovative mechanisms for capacity regulation and grid connected storage capacity, financial support mechanisms, market stimulation and sensitization of the population, both at the national and the local level. Using appropriate new technologies can ensure that there is sustainable renewable energy to power cold storage rooms in the municipal markets where traders can be charged small user fees for storage so as to maintain them.

6. Agri-business and Value Addition
Agriculture remains the leading economic sector in the region, as such it has great potential for enabling the local population to upgrade their income and transform farming into businesses. However, the region needs to tap into value adding via agricultural processing, industrialized agriculture and mechanizing of agriculture so as to increase the quality of produce/products. This will result in agricultural progress which in turn leads to the extension of market/s for industrial products. Also, the increase in agricultural productivity leads to an increase in employment, increase in the income of rural population which in turn leads to more demand for industrial products, thus development of industrial sector. Increase in agricultural production and the rise in the per-capita income of the rural community, together with the industrialization and urbanisation, lead to an increased demand in industrial production.

In this way, the agricultural sector helps promote local economic growth by securing as a supplement to the industrial sector.

7. Tourism
The KAN Corridor is home to historical, natural and cultural attractions such as the tombs in Adali (Nebbi), Ajai game reserve (Arua) and the home of the former president Idr Amin (Koboko). During the workshops, the participants shared their vision of promoting tourism and wildlife resource through enhanced partnerships for a competitive tourist destination in Uganda. There is a need to; (1) promote PPPs in development of tourist sites, (2) preserve and conserve identified tourist sites in the region, (3) establish an inventory of the existing tourist destinations in the region and (4) plan and budget for tourism in the region. This will develop and make the KAN corridor a tourist destination.

8. Tax Awareness
There is a high tax evasion rate in the corridor as there is no proper sensitization to the community i.e. the community/traders are not aware of why the municipal offices are collecting this revenue and market traders do not know who is legally collecting the revenue. Therefore, members of the public are discouraged to pay the taxes. There is a need for the municipal officials to create more awareness to the public on the benefits of paying taxes, i.e. the public services that these taxes pay for such as garbage collection. This will lead to tax compliance by the taxpayers and result in an increase of local revenue. This can be done via radio announcements, newspaper or ‘barazas’.

With this understanding of the tax, the level of corruption and fraud that currently occurs will be minimized. Simultaneously, the level of compliance of taxpayers to pay taxes will increase. Tax penalties can also be put in place with the goal of keeping taxes as the taxpayers will be afraid to violate the Tax Law. Taxpayers will comply with their tax payments in view that penalties will be more detrimental. Penalties is a guarantee that the tax provisions of taxation legislation (taxation norms) will be followed / observed / complied with, in other words the tax penalty is a deterrent to the taxpayer.
Case Study 1:  
Supporting Revenue Enhancement in Kiambu County, Kenya

Kiambu County is one of the 47 counties in the Republic of Kenya. It is located in the central region and covers a total area of 2,543.5 Km² with 476.3 Km² under forest cover according to the 2009 Kenya Population and Housing Census and agriculture is the predominant economic activity in the county. According to the Kenya National Bureau of Statistics, Kiambu county had a population of 1,795,999 in 2014.

In 2014, a joint revenue assessment was conducted by UN-Habitat and the County and the findings were as follows:

- 80% of the organizational resources are being used to collect 20% of the county’s income from the lowest revenue generating sources while the income from the highest revenue generating sources especially land rates are not being adequately accessed and collected.
- The tax and fee structures were reversed such that the economically weakest band of the population was contributing the most in the county revenues. Parking fees and market fees were the major sources of revenues and land taxes contributed almost the same as parking fees.
- Sub counties had their own separate revenue management systems which complicated collection and monitoring.
- Revenue variations within sub-counties remained large even after standardization.
- The county personnel inherited from the previous local government structure lacked specialization.
- The above findings led to the following key areas of action:
  - Improving collections of the existing tax base by enhancement and streamlining of the revenue management system.
  - Initiate a program for local economic development and public asset management which would directly and indirectly expand the tax base.
  - Increase public participation: for any intervention to attain the required acceptability level and conformity to the law, there must be a heightened public engagement.

Results:
- Establishment of a county revenue management office with the responsibility of the overall management of revenue collection and enhancement.
- Automation of revenue collection in the county.
- Doubled revenue in one year.
- Introduced new laws enabling the county to do zone-based land/property tax, the law enables.

Source: Urban Economy and Finance Branch, UN-Habitat

Case Study 2:
Water Services in Manila

Metropolitan Manila's water system in the 1990s suffered from extreme inefficiency and poor maintenance. Approximately two-thirds of the water produced was lost because of leaks and illegal connections, and only eight per cent of homes were connected to the municipality's sewage line. Meanwhile, the government agency in charge of the city's water and sanitation services, the Metropolitan Waterworks and Sewage System (MWSS), was in debt and lacked the necessary financial resources for maintaining Manila's water system.

Following the National Water Crisis Act of 1995, the Philippine government decided to privatize MWSS in order to improve the operation, coverage, and quality of the city's water system. The government awarded two concessions for operating Manila's water and sanitation system to two private companies: Manila Water Company, and the other was awarded to Mayniland Water Company. The concession contracts allowed the two private companies to collect revenues from water tariffs but were responsible for all operational and maintenance costs in addition to payment of a concession fee to the government.

The tariffs were set according to recommendations made by the government office of MWSS and accounted for a number of external factors such as inflation and other shocks that would affect the price of water and sanitation services. The collaboration between the private entities responsible for operating and maintaining Manila's water and sanitation system and MWSS's regulatory office created an environment in which public and private interests were able to improve the access to and quality of the city's water system.

While Manila's experience with public-private partnerships was largely a major success, it did face challenges along the way. For example, the tariff formulas were determined inadequate and had to be restructured following the PPP agreement, and later on, financial difficulties with one of the concessionaries resulted in the government stepping in to provide funding in order to ensure the continued operation of water and sanitation services across the city. Nevertheless, this case provides a useful example of how private operators can improve the efficiency of public facilities and services while working in collaboration with government agencies and regulatory offices.

Ultimately, this public-private partnership was enormously successful.

Results:
- Improved coverage - Manila Water Company and Mayniland Water Company service 99 per cent and 97.8 per cent of their concession areas, respectively, and are operational 24 hours a day.
- The efficiency of the city's water and sanitation has dramatically improved.
- Working collaboration across sectors, and with government agencies and regulatory offices.

Case Study 3:
Solar Energy Systems in Rizhao, China

Rizhao, a city of about 350,000 people in northern China, is using solar energy to provide lighting and water heating. Starting in the early 1990s under a municipal government retrofit program, the city required all buildings to install solar water heaters. After 15 years of effort, 99 percent of the households in the central district had obtained solar water heaters. Solar water heating now makes economic sense. The city has over a half-million square meters of solar water heating panels, the equivalent of about 0.5 megawatts produced by electric water heaters. Most traffic signals and street and public park lights are powered by solar cells, reducing the city's carbon emissions and local pollution. Using a solar water heater for 15 years costs about US$1,934 (Y 15,000), less than the cost of running a conventional electric heater, which equates to saving US$120 per household per year in an area where per capita incomes are lower than the national average. This achievement is the result of a convergence of four key factors: a regional government policy that promotes and financially supports research; the development and deployment of solar water heating technologies; a new industry that takes the opportunity in stride; and city leadership that not only has a vision, but also leads in action and brings along other stakeholders.

How does it work? The municipal government, the community, and local solar panel producers have had sufficient political will to adopt and apply the technology. The provincial government of Shandong provided subsidies and funded the research and development of the solar water heater industry. The cost of a solar water heater was reduced to the cost of an electric water heater, about US$190. This represented about 4 or 5 percent of the annual income of an average household in Rizhao and about 8 to 10 percent of an average rural household income. Panels are simply attached to the exteriors of buildings. The city helps install the panels.

The city raised awareness through community campaigns and education. Rizhao held public seminars and supported advertising on television. The city mandated that all new buildings incorporate solar panels and oversaw the construction process to ensure proper installation.

Results:
- Establishment of a county revenue management office with the responsibility of the overall management of revenue collection and enhancement
- Automation of revenue collection in the county
- Doubled revenue in one year
- Introduced new laws enabling the county to do zone-based land/property tax, the law enables

Source: Eco2 Cities: Ecological Cities as Economic Cities, The World bank

Case Study 4:
Solid Waste Management Tax in the United Kingdom

In the United Kingdom, waste management is financed through the council tax, which is raised by local authorities to pay for local services, such as providing police and security, providing support to the elderly and vulnerable, maintaining parks and open spaces, cleaning streets, and collecting and disposing of waste. The tax is based on the property value and is set in an amount to cover the budgeted expenses for the year. Waste management authorities also receive money from a central grant. Waste collection authorities do not receive any financial compensation from the Packaging Waste Recovery Notes system.

The introduction of direct user charges is obstructed by the Environmental Protection Act 1990, which states that “no charges shall be made for the collection of household waste” that is the responsibility of local waste collection authorities. But the collection authority may specify “the kind and number of receptacles” in which the residents store the waste for collection. Accordingly, it is becoming common to charge for the waste amount that exceeds the volume of the storage receptacle and lies next to the bin.

Results:
- Revenues for materials generated from recyclables brought to civic amenity sites can be channeled back into the community for various projects.
- Residents who do not use the recycling facilities provided by local authorities can be fined.
- Waste authorities can assign credits to the waste collection authorities if they have diverted recyclables from the waste stream. Similarly, the waste collection authorities can assign such credits to third parties (waste generators or recycling initiatives), which have helped them divert recyclables from the waste stream, thus reducing waste collection costs.

Source: Improving Municipal Solid Waste Management in India (World Bank, 2008)
THE NEED FOR A REGIONAL APPROACH

According to the Uganda Vision 2040 and the 2nd National Development Plan, the relevance of the West Nile Region is set in its potential for cross-border trade, sustained by the planned upgrade of Arua’s airport and the realization of a new railway connecting the region to the rail network connecting Kenya’s Mombasa port to DRC, and linking Nebbi, Arua and DRC through Goli. Other development potential and natural assets stressed by the NPA’s plans include agriculture and limestone quarrying.

The Albertine Graben PDP indicates Arua as a regional city (hub for expanded trade, agriculture processing, health and education and future rail terminus), Nebbi as district trading and service centre along the new rail line and Koboko as district trading center. The three main cities are seen as the hinge points of a network connecting several cross-border trading centers along the borders.

The discussions held at the workshops with national and local authorities clarified the need to intensify the communication and cooperation between the NPA and local governments. Improved interaction is needed both between national and local institutions and among national ministries and authorities (i.e. with the Ugandan Investments Authority). In discussion with national level decision making bodies, the question if there’s the need to further explore a mediating regional dimension (as either another institutional level or a loose system for strategic coordination) was again addressed.

Setting a new institutional level by modifying the national constitution would be a long process that will result in another static political system of borders. On the other hand, introducing alternative loose frameworks of networked relations built on strategic statements and specific agreements could allow to immediately act by self-organizing in a proactive way. As proposed in the workshop, an informal but regular exchange of strategies and projects in the three urban municipalities and the surrounding districts would already lead to a joint vision and actions for the West Nile Region.

At current stage, in which some of the most important (infrastructure) projects for the West Nile region seem to have been postponed, bottom-up initiatives of cooperation among local institutions could overcome national inertia and foster the achievement of alternative development patterns. As an example, considering the lack of electric power, while waiting for the national grid to come, pursuing alternative off-grid projects involving private partners could be an option.

Moreover, the national planning frameworks, having been drafted some time ago, do not include considerations of one of the biggest challenges of the region, the humanitarian crisis due to a large influx of refugees and migrants into the region. Despite the supposed temporariness of the phenomenon, it impacts the development of the region and needs immediate actions as well as long-term solutions.

NPA Updates from the Workshop

In the workshop held in Arua from 27-30 November 2018, a representative from the NPA, clarified that the most important infrastructural assets proposed in the 2nd National Development Plan (NDP2) have been postponed or reconsidered. The standard gauge railway project is advancing slowly and priority will be given to the connection with South Sudan and its capital Juba through Gulu. The upgrading of the airfield in Arua is currently on hold due to the prioritization of Hoima airport, that will serve as the hub for oil and gas operations. The Nebbi-Goli highway is expected to be in NDP3 and the upgrading of the regional network is connected to USMID funds, together with the realization of a second bridge on the Nile, in the north of the region.

Other expected national investments will include the realization of the ICT national backbone (already in NDP2), rural electrification (depending on the realization of Karuma dam), housing projects in partnership with National Housing and Shelter Afrique, pilot projects for intensive modern farming and agro-processing of strategic crops.

Moreover, NPA confirmed the upgrading of Arua’s city status to a regional city, with EU and UNECA funds to support the development of guidelines and masterplans by the end of 2019.
During a prior activity, the Arua Planning Studio in March 2018, UN-Habitat MetroHUB and Politecnico di Milano MSlab discussed with local authorities a potential metropolitan perspective for the development of the West Nile region and additional meetings were held at nearby municipalities such as Koboko and Nebbi (both municipalities are not yet covered by the USMID Program) with the aim of stressing the potentials of adopting a territorial approach.

Recommendation:
- The suggested metropolitan perspective consists in supporting the idea of cooperation among small and medium size cities to grow together as integrated system of cities that cohesively plan their future balancing urban and rural development instead of competing and multiplying splintering patterns.

UN-Habitat’s MetroHUB methodology (http://urbanpolicyplatform.org/metrohub/) strongly promotes a territorial approach for planning, to which United Nations Member States committed firmly by adopting New Urban Agenda in 2016. Other core recommendations from the MetroHUB include considering planning, governance, financial and socio-environmental aspects in an integrated approach, also including capacity development and strategic acupuncture projects as well as vertical and horizontal cohesion and the inclusion of multiple stakeholders e.g. different government levels, civil society, private sector and academia.

The regional profiling presented in this report has been conducted in this perspective and with the aim of understanding and discussing with local authorities and stakeholders cross-scalar development challenges and opportunities and their physical correlations. The implications for city and neighbourhood level can be found in the second part of the overall report.

Starting from geography, infrastructure and urbanization patterns, some first diagrams have been sketched to visualize potential relational patterns giving shape to the region, both in a national and cross-border dimension.

The aim of these relational diagrams is supporting further analysis regarding the potential polycentric development of the region to support alternative trajectories of urban-rural linkages and integrated approaches to growth. Among the objectives of this strategy are:
- designing and triggering the realization of metropolitan infrastructure for socio-economic development with a focus on social innovation and local entrepreneurship in relation to trade, tourism and agriculture or other areas of potential;
- supporting urban-rural integration experimenting alternative scenarios for sustainable and inclusive settlement patterns and digital social cohesion systems;
- integrating green infrastructure for water and food security with landscape and public space policies and projects;
- overcoming formal and informal, physical and immaterial boundaries that generate conflicts on land tenure and use of resources;
- defining an improved humanitarian framework of rights and inclusivity for urban refugees and migrants.
THE KAN CORRIDOR
TERRITORIAL SYNERGY AND METROPOLITAN PERSPECTIVE

WEST NILE REGION: Armatures for a sustainable development.
Sketch: MS LAB 2018

WEST NILE REGION: Armatures for a cross-border synergy development.
Sketch: MS Lab 2018
In preliminary presentations and discussions with local and national authorities, this metropolitan perspective has been well received and, during the workshop in November 2018, the three mayors of Koboko, Arua and Nebbi discussed an informal agreement to pursue the joint vision of what they named KAN Corridor, from the initials of their cities.

They proposed this initiative in a guiding statement as following: a transformed and prosperous urban metropolitan municipality of West Nile Region by 2040. The “mission” to achieve this is based on the agreement to collectively foster sustainable and coordinated social economic development within the urban setting of Koboko, Arua and Nebbi municipalities and collaboration with the respective district authorities. The key action points suggested by the mayors mainly include the need of pushing the cooperation forward by exchanging information and sitting around the same table to discuss common engagements.

- Having links and lobbying capacity, with the three mayors directly committed to collaboration.
- Promoting follow ups and coordination.
- Sharing information among the three municipalities.
- Programming regularly general meetings for exchange, knowledge sharing and peer-to-peer learning.

**Recommendations**

- As a first step, the KAN Corridor need a common vision to be framed upon global (SDGs), the New Urban Agenda and based on local values and priorities, which would then lead to specific guidelines for a contextualized sustainable development which could, in a second phase, be scaled up and shared with other Uganda municipalities.
- The metropolitan vision should promote the concept of a system of cities with different sizes, roles and a balanced integrated relation between urban and rural areas. The transformation of the existing highway in a continuous urbanized corridor exclusively devoted to transportation is a limiting perspective to be avoided.
- A dedicated metropolitan agency could be established by the three mayors of Koboko, Arua and Nebbi, with the participation of representatives from the three districts and including Maracha Districts, with the aim of supporting and coordinating initiatives and investments to support the development of the vision.
During the workshop, a selection of main economic drivers that could support the development of the West Nile Region, were discussed in detail with national and local stakeholders, trade, agriculture and tourism. This selection was randomly made, based on the choices of participants and is not comprehensive.

**Trade**

Trade needs infrastructure. However, from a strategic perspective, what is crucial to discuss is the relation between cities, border posts and infrastructure. The role of cities as service centres (including administrative, social and financial services) could grant to border gateways a role as international ports. Analysing targets, products and accessibility should help in shaping an integrated strategy connecting the KAN Corridor to DRC, South Sudan, Kampala and to global markets according to the best logistic convenience.

Moreover, trade patterns should embrace environmental friendly, socially inclusive and culturally sensitive models that require a specific effort in shaping the political and governance framework of future investments. Legislation and policies to create an enabling environment, especially for cross-boundary trade, should be specifically defined.

**Agriculture**

Agriculture needs a clear strategy regarding urban-rural linkages and the socio-economic model to promote the region as qualified hub for agro-production and agro-processing entering the international market. In cooperation with partners and other UN agencies, UN-Habitat has just finalized the work on Guiding Principles for Urban-Rural Linkages, which could serve as a reference. Choices related to the power grid, road tarmacking, irrigation can make a difference in the way rural and urban balance their exchanges and settlement patterns evolve. Moreover, cash crops and food basket farming produce distinct landscapes and differently shape society. Appropriate governance frameworks, cooperative of farmers and innovative digital tools and value addition by processing could foster virtuous economies of scale combining different scales and models of production. Agricultural processing offers a great opportunity for small and intermediate cities such as Arua.

**Tourism**

Tourism needs a crucial investment in communicating and revealing the value of existing assets, while investing in needed infrastructure to improve accessibility and new services and capacities to promote cultural values (i.e. museums and traditional theatres). Mapping and identifying natural and historical, material and immaterial and built heritage could improve awareness on the existing potential and lead to the drafting of itineraries and communication strategies for various potential targets: local, Ugandan, cross-border or international tourists. Making the West Nile Region a destination with a clear brand requires a dedicated public budget and the promotion of public-private partnerships as well as a “regional marketing” strategy. Arua, due to its strong hospitality sector, strategic location and airport, is in a good position to increase the economic potential of this sector by applying a regional and territorial approach in cooperation with private sector actors.
According to the information gathered by desktop research, in field activities, workshop discussions and metropolitan mapping, some first indications come out in relation to potential trajectories of sustainable development. In particular, visualizing data in maps, helped to understand specific patterns of correlations, allowing to identify potential economic vocations of the different areas (locations) and cities in the region. The following main findings are the outcome of the mapping and regional profiling exercise.

Recommendations:

- The north-west of the region, between Koboko and Arua, mainly consisting of the Maracha district, has a high concentration of herbaceous crops, but no industrialized agricultural production. Climate change is exposing this part of the country to a higher possibility of droughts and, together with the need to improve agricultural productivity, an appropriate strategy to safeguard, improve and consolidate this area as food basket of the region is needed, while protecting the environmental assets and biodiversity. The aim would be stressing the links between agriculture, food industry and tourism in supporting new socio-economic models for these densely inhabited rural areas.

- The north-eastern area, between Koboko and the river Nile, is currently hosting several refugee camps as a humanitarian response to the current south-Sudanese crisis. A dedicated strategy should be developed to understand the future of the camps, investigating alternative scenarios of consolidation, replacement or transformation and enhancing the connectivity to the urban areas for enhanced economic opportunities and exchange between host and refugee communities.

- The southern part of the West Nile region, between Arua and Nebbi, has a minor concentration of agricultural activities, but will be impacted first by major infrastructural modifications (new railway) and has a high concentration of exploration licenses (according to the mineral cadastre). For these reasons this area seems more suitable to undergo a process of industrialization and relevant transformation.

According to these preliminary considerations, the role of the three municipalities of the corridor seems to evolve in the following directions:

- Koboko as regional trade hub and agricultural center (food basket and high-quality production);
- Arua as international hub (and as starting point for global markets) for trade, transport, business, tourism and hospitality and as basis for humanitarian and development organizations;
- Nebbi as logistic and industrial center, with a focus on agro-food processing (cash crops and fishery) and mining.

A further result of the cartographic effort, combined with dedicated stakeholders workshops should define an chart of metropolitan acupuncture projects to be given priority. The vision for the KAN Corridor, together with the setting of a comprehensive strategic scenario and a governance structure, needs flagship catalytic projects as triggers of change and development.

Representatives of the municipalities have mentioned the intention to prepare for each city a specific Action Plan for Priority Projects. During the workshops with local stakeholders, one project for each city has emerged as immediately feasible and others have been listed as potential future projects, but these preliminary evaluations still need to be tested and discussed further.
The purpose of the open public space and market assessment in the three municipalities was to provide both spatial and non-spatial gaps to empower the municipalities and provide them with a way forward for the upgrading, renovation and the creation of markets and open public spaces. This assessment is a first step towards a more long term strategic plan for the West Nile Region.

All the indicators related to safety, inclusivity and accessibility of open public spaces were analysed and open public spaces were categorized according to their priority in terms of upgrading. It was found that as many as 21 open public spaces require slight improvement such as fixing of benches, lighting, opening up the spaces to the public while 11 require moderate upgrading, such as improving the road infrastructure, installing of streets lighting and 4 open public spaces require total upgrading. This may mean redesigning of the spaces through community engagement and implementing the project. It is however important to ensure that there is a clear budget allocation and involvement of key relevant stakeholders and experts in the process of upgrading.

This is also the case when it comes to renovation or modernization of markets. In Koboko a large number of markets (20) which accounts for 65% of all markets assessed require renovation and only 2 markets requires slight improvement. This was done through an aggregate of several indicators related to economy, environment, safety, inclusivity and accessibility. These priority projects can be integrated into the municipal work plan to ensure their improvement and upgrading.
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ARUA MUNICIPALITY

Arua municipality, which is the core city in the development of an Integrated West Nile has a total of 66 open public spaces and 36 markets. The public space assessment approach promotes participation of all relevant actors at various levels. The approach identifies which market or open public space to target for upgrading and how to promote inclusion is defined through an open and participatory process where the focus is on the open public space or markets that are important to the residents, the municipality and require upgrading. Each market and open public space was assessed using several indicators as mentioned in the previous page and was provided an index to determine priority open public spaces and markets for improvement. Out of the 66 open public space, 21 open public spaces which accounts for 32% require the most improvement while 24 open public spaces require moderated improvement and 21 require least improvement. Notably markets were found to require the most renovation since the index showed none of the markets require slight renovation but most require moderated improvement (19) which accounted for 53% while the rest (17, 47%) require most improvement.

The public space assessment provides evidences which is also a starting point for a long term spatial strategy for Arua Municipality. This approach ensures a demand driven strategic approach where the opportunities for the most deprived neighborhoods as well as the public spaces that need most improvement are the starting point.
NEEBI MUNICIPALITY

Information is another key material in public spaces. It changes the way that people experience the city. With the public space assessment, information is used to support sustainable development. Surprisingly, in Nebbi Municipality, the smallest municipality amongst the three in terms of population but the largest in terms of area, out of a total of 64 open public spaces assessed, only 7 require slight improvement while 31 which accounts for the largest percentage of 48% require moderate improvement and 26 require very few interventions. However it has the largest area of unserviced land, that is, areas that do not have open public space and markets within 5 minutes and 10 minutes walking distance. This is attributed to the small urbanized area as well as a lack of proper planning especially street connectivity in the periphery of the urban core.

Markets that require most improvement accounted for only 6 out of the total 56 while 26 which accounts for 46% requires moderate improvement while 24 which accounts for 43% require least improvement. To anchor the next steps of this analysis which is towards a long term strategy, the analysis of the different policies in place, legal and institutional framework and gaps in the planning of the municipalities has been addressed in the regional assessment chapter.
KOBOKO MUNICIPALITY

PRIORITY AREAS FOR CREATION OF MARKET SPACE
(Not to scale)

KOBOKO MUNICIPALITY
PRIORITY AREAS FOR CREATION OF MARKET SPACE
(Not to scale)

ARUA MUNICIPALITY

PRIORITY AREAS FOR CREATION OF PUBLIC SPACE
(Not to scale)

NEBBI MUNICIPALITY

PRIORITY AREAS FOR CREATION OF PUBLIC SPACE
(Not to scale)

65% (Percentage of total area of the municipality that requires creation of open public space)

92% (Percentage of total area of the municipality that requires creation of market)

12% (Percentage of diversity in the market by ethnic group, religion and culture)

16% (Percentage of market by ethnic group, religion and culture)

52% (Percentage of diversity in the market by ethnic group, religion and culture)

15% (Percentage of total area of the municipality that requires creation of open public space)

45% (Percentage of total area of the municipality that requires creation of market)

83% (Percentage of total area of the municipality that requires creation of open public space)

79% (Percentage of total area of the municipality that requires creation of market)

69% (Percentage of total area of the municipality that requires creation of open public space)

23% (Percentage of total area of the municipality that requires creation of market)

15% (Percentage of total area of the municipality that requires creation of open public space)

83% (Percentage of total area of the municipality that requires creation of market)

65% (Percentage of total area of the municipality that requires creation of open public space)

92% (Percentage of total area of the municipality that requires creation of market)

12% (Percentage of diversity in the market by ethnic group, religion and culture)

16% (Percentage of market by ethnic group, religion and culture)

52% (Percentage of diversity in the market by ethnic group, religion and culture)
A CONNECTED NETWORK OF PUBLIC SPACES ALONG KAN CORRIDOR

The upgrade of existing open public space and markets in the three municipalities will create a network of connected destinations throughout the region. The improvement of the main road connecting the three municipalities will create a green network that stretches from Koboko through Arua to Nebbi. The red dots on the map show the open public spaces and the markets that require the most improvement while the green dots represent spaces that require moderate improvement. This map does not include the public spaces that require slight improvement and if these were to be included much more interconnected network of public spaces will be seen. Since the importance of this assessment was to show gaps in the areas that required creation and the upgrading of open public spaces and markets, the maps on the left show an illustration of how the network across the municipalities will look like if the most deprived markets and open public spaces are upgraded. A network of public spaces will also be created within the municipalities if the municipality prioritises the deprived areas in the creation of public spaces. It is however important to include the community in the process of planning for new public spaces and their upgrading, this will empower the community, enhance stay, improve social cohesion, create a sense of ownership, improve mental and well being and in the long run, the municipality will benefit from the increase in the land value around these public spaces.
STRATEGIES ACROSS KAN CORRIDOR

Develop an annual statistical abstract or municipal level database for the KAN Corridor that will be a single source of information covering various sectors of the economy in the corridor. The indicators can be compiled from various survey reports and population or housing censuses. This database will provide a reliable source of information for city leaders who are responsible for the planning, policy formulation, monitoring and evaluation processes in the corridor. The database will also enable data users to gauge the performance of the corridor against other regions in the country.

There is need for a full rapid self-assessment for revenue enhancement, an analysis of the potential for tax and other untapped sources of revenue and crystalizing a road map to translate potential income generation into real revenues. A proper full assessment will benefit the region as it will also provide guidance on financing strategies that are favorable in the corridor.

There is need for infrastructure development and investment especially from the private sector. Particularly pressing, is the need to provide adequate infrastructure in transportation, water treatment, housing, sewage, and solid waste. There are a variety of ways that local governments can finance infrastructure development. These include tax increment financing and municipal bonds as well as other land value capture mechanisms. The provision of adequate infrastructure and services is necessary to provide both a high quality of life and an environment conducive to business. This includes everything from safety in the streets, proper sewage drainage, and quality schools to health care, roads, and public parks. Of many methods of private financing of infrastructure, PPPs have shown much promise in recent decades. PPPs are long-term contracts between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility.

Financing is needed not only for physical improvement but also for capacity building, legislative adjustments, and institutional changes. An important financing strategy for addressing required institutional changes such as capacity building, restructuring, and infrastructure improvement is strategic partnerships. As the issues at hand are mostly very concrete, time-bound, and visible, this presents an opportunity for city-to-city partnerships, corporate social responsibility activities, and philanthropic contributions whereby the partner can gain visibility. Often the financing of physical infrastructure is the largest and most challenging issue. Therefore, the strategy has to be two-fold: (1) finding options that are adapted to the city situation and are cost realistic, and (2) identifying the right financing mechanism. Depending on the ability of the city, there are plenty of available mechanisms, including redistributive taxes/charges, lending, blending, and drawing together sector budgets into one common project/program budget.

Finally, an important component of the implementation process is supporting the city leaders and officials charged with administering new and existing programs or policies by providing avenues for technical capacity building. Areas of capacity building can include reforms to improve revenue administration, assessment, and collection; and introducing means-testing to make revenue generation more progressive, while retaining high level of revenues. An integrated plan for technical capacity building that is aligned with broader financial management principles can help local government officials steward resources effectively so they can meet their short and long-term financial and operational obligations—and do so with accountability.
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