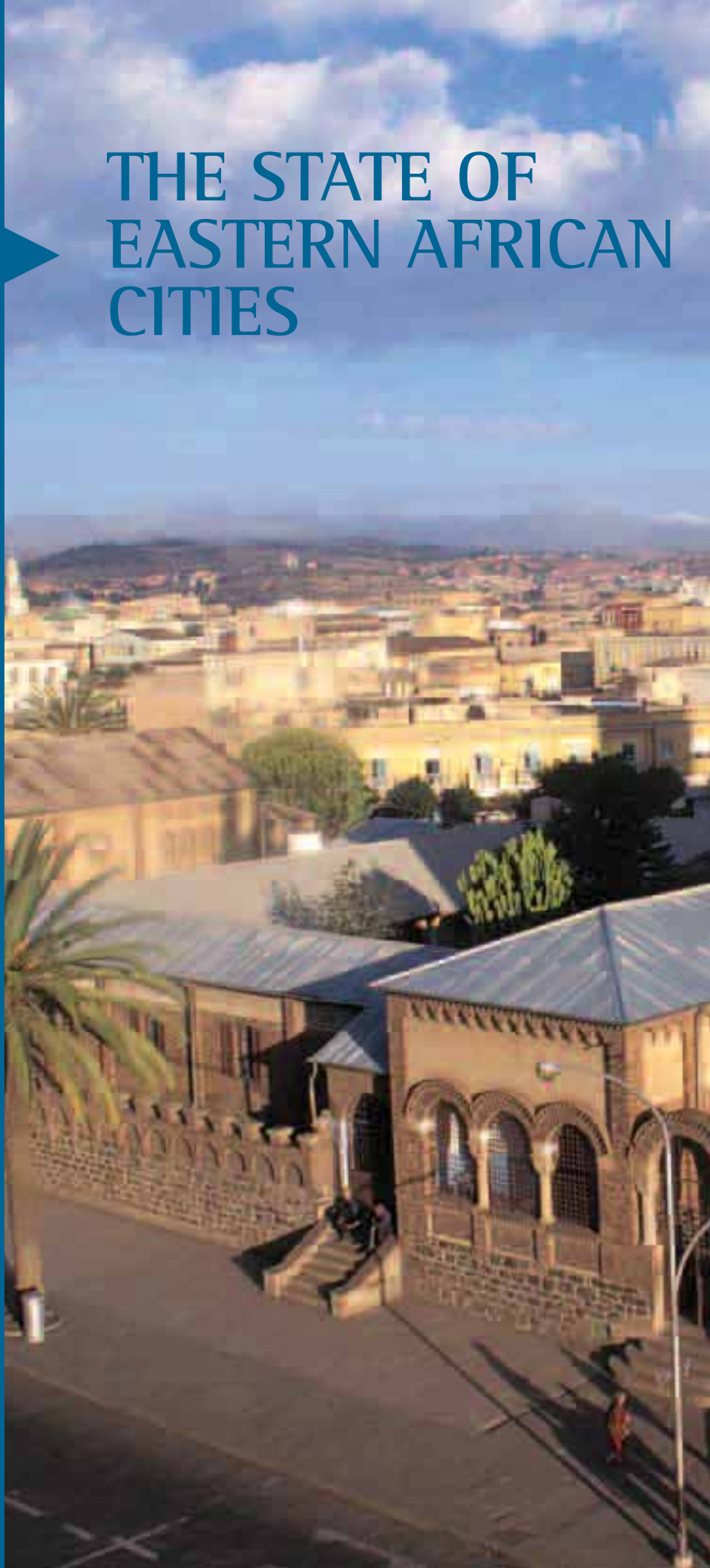


# Chapter Four

# 04

## THE STATE OF EASTERN AFRICAN CITIES







# 4.1

## The Social Geography of Urbanisation

### The Geographic Spread of Urban Demographic Growth

For the purposes of this report the Eastern African region includes Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Réunion, Rwanda, Seychelles, Somalia, Tanzania and Uganda.

By 2010, about 40 per cent of all Africans resided in cities, compared with only 23.6 per cent in Eastern Africa. Urban demographic growth across the continent remained the strongest worldwide at an annual 3.3 per cent average, compared with a global 2.5 per cent rate. During the 2005-2010 period, significant discrepancies in urban demographic growth rates emerged across African sub-regions, with the strongest rate in Central Africa (4.13 per cent), followed by Western Africa (4.05 per cent), Eastern Africa (3.86 per cent) and urban growth rates below the global average in Northern and Southern Africa with 2.45 and 1.88 per cent respectively.<sup>1</sup>

Over the 50 years between 1960 and 2010, the urban population of Eastern Africa soared from 6.0 million to 77.1 million (see Table 4.1 for continental trends and Table 4.2

for country trends). During the incipient decade, Eastern Africa's urban population is projected to increase by another 38.9 million to 116.1 million in 2020, a 50.4 per cent growth rate. Between 2020 and 2030, the region's urban population is expected to increase by a further 56.6 million to 172.7 million; this would signal a slight slowdown compared with the previous decade, but still a significant 48.7 per cent increase over the projected 2020 urban population. By 2030, one-third of all East Africans will be living in areas classified as urban and on current projections it should take at least two decades for this proportion to reach beyond 50 per cent. By 2050, Eastern Africa's urban population is projected at 337.4 million which, with a 47.4 per cent urbanisation rate, will still leave it short of the 50 per cent 'tipping point' which the world as a whole experienced in 2008.

In 2010, only the region's smaller states - Djibouti, Réunion and the Seychelles - had predominantly urban populations. This stage is to be reached by Somalia during the 2030-40 decade. By 2050, still only one third of all Eastern African nations are projected to be predominantly urban, leaving the region the least urbanised in Africa for many years to come.

With rural-urban migration continuing to slow down, natural growth and *in-situ* urbanisation (i.e., the absorption of smaller settlements on the growth paths of larger cities) are now the major contributors to urban demographic expansion in the region. In some countries, conflict is a significant factor in population movements, whether rural-urban, urban-rural or intra-urban migrations. The prolonged civil war in Somalia, for instance, pushes relatively large numbers of people from the main towns to areas where their clans originated. Consequently, as people flee the ongoing strife in *Mogadishu*, populations expand substantially in *Lower Jubba*, the inter-riverine areas and in previously small regional Somali towns such as *Belet Weyne*, *Galkaiyo*, *Baidoa* and *Bossaso*.

Primate cities continue to contribute to urban demographic growth in Eastern Africa. However, intermediate cities (those with populations under 500 000) are now absorbing the lion's share of total urban demographic growth. The exception in Eastern Africa is *Kigali*, as the Rwandan capital between the year 2000 and 2005 recorded one of the world's highest growth rates - an annual 8.6 per cent average, largely due to returning refugees and people internally displaced by the 1994 conflict.

MAP 4.1: EASTERN AFRICAN COUNTRIES

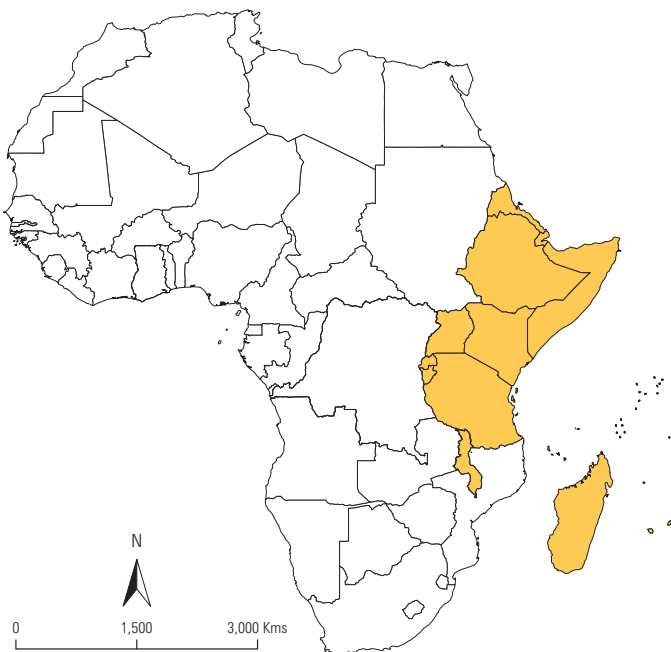
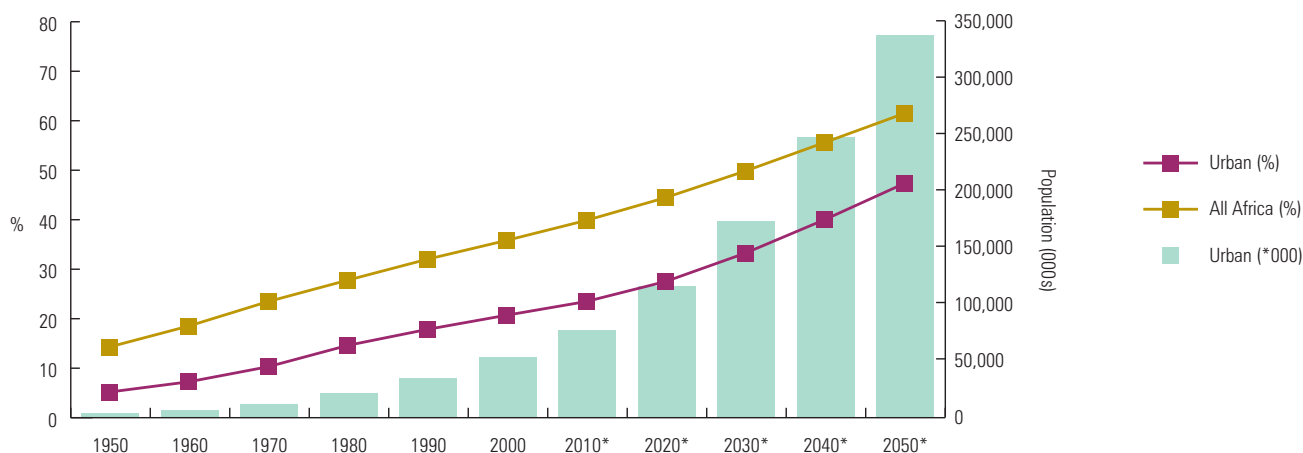


TABLE 4.1: EASTERN AFRICA AND ALL-AFRICA URBAN POPULATION TRENDS, 1950-2050 (ABSOLUTE AND PERCENTAGE)

Population	1950	1960	1970	1980	1990	2000	2010*	2020*	2030*	2040*	2050*
E. Africa Urban (*000)	3,434	6,047	11,211	21,38	34,660	52,641	77,194	116,130	172,766	247,674	337,493
Urban (per cent)	5.30	7.37	10.42	14.73	17.96	20.83	23.59	27.64	33.36	40.14	47.44
All Africa (per cent)	14.40	18.64	23.59	27.91	32.13	35.95	39.98	44.59	49.95	55.73	61.59

\* Projections  
Source: WUP, 2009

GRAPH 4.1: EASTERN AFRICA AND ALL-AFRICA URBAN POPULATION TRENDS, 1950-2050 (ABSOLUTE AND PERCENTAGE)



\* Projections  
Source: WUP, 2009

As shown in Table 4.3, ill-balanced urban settlement hierarchies and high degrees of urban primacy among the capitals remain as defining features in a majority of countries, concentrating wealth and power in relatively narrow geographical areas, affecting the development prospects of others and, therefore, the country as a whole. This urban imbalance results in inequitable distributions of political power, unequal access to resources as well as of national wealth and the benefits of urbanisation. Therefore, Eastern Africa’s ongoing urbanisation should preferably be taken as an opportunity to promote more balanced urban hierarchies and, consequently, a better geographical spread of urban populations, political power or leverage and urban livelihoods. Where urbanisation is left to itself, these aims are unlikely to be achieved. In this regard, the general trend whereby Africa’s secondary cities absorb increasingly larger shares of national urban demographic growth is to be seen positively; still, governments should be far more proactive in the pursuit of a better geographic balance of urban-based economic opportunities and livelihoods. If this is to be achieved, governments must deploy concerted and prioritized interventions, investments and policy initiatives that do not only promote a more even distribution of the populations but also provide better access to national resources and urban-based economic development in particular. Over the past decades, some of the region’s nations have launched commendable initiatives along these lines, but generally more

proactive public interventions are required to maximize the beneficial economic and social outcomes of secondary city growth.

Faced with the negative aspects of the primacy of capital cities (traffic congestion, air pollution, land supply shortages and escalating real estate prices, among others), several Eastern African governments are considering or developing new spatial initiatives to ease the pressures on their capitals. Commendable as they are in their own right, these initiatives tend to focus on boosting the settlements on the periphery of capital cities. The problem is that this type of policy can only give medium-term relief, since all it does is merely distribute the benefits of urban concentration and agglomeration economies to the commuting distance of the primate capital. As a result, city-region development gets the benefits, when what is really needed is to stimulate economic activities in cities at a distance from the primate capital. Alongside with better-focused spatial interventions in the primate city region, additional, pro-active functional decentralisation to the benefit of secondary cities throughout a given country would have a stronger long-term effect on the geographical spread of urban opportunities.

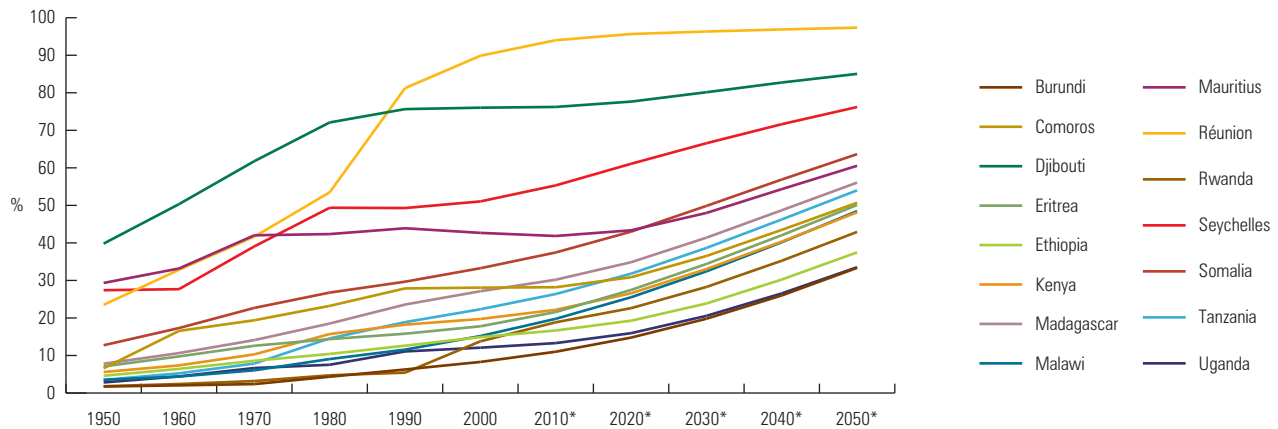
Urban primacy remains very strong in Eastern Africa and goes back a long way. Colonial rule set the model of power centralization in the capital. However, as independence recedes ever further in the past, colonial rule can no longer serve as an excuse for Eastern Africa’s imbalanced demographic con-

TABLE 4.2: EASTERN AFRICAN NATIONS' URBANISATION TRENDS, 1950-2050 (PER CENT)

Population	1950	1960	1970	1980	1990	2000	2010*	2020*	2030*	2040*	2050*
Burundi	1.73	2.04	2.38	4.34	6.27	8.28	11.00	14.77	19.79	26.00	33.35
Comoros	6.60	16.55	19.39	23.22	27.87	28.08	28.19	30.85	36.51	43.47	50.70
Djibouti	39.81	50.33	61.78	72.10	75.65	76.03	76.23	77.65	80.15	82.74	85.04
Eritrea	7.10	9.75	12.59	14.36	15.80	17.78	21.58	27.46	34.39	42.05	50.11
Ethiopia	4.60	6.43	8.59	10.41	12.62	14.90	16.66	19.27	23.85	30.24	37.48
Kenya	5.59	7.36	10.30	15.71	18.22	19.73	22.18	26.57	33.04	40.36	48.14
Madagascar	7.80	10.64	14.10	18.52	23.57	27.12	30.19	34.85	41.39	48.70	56.07
Malawi	3.51	4.39	6.05	9.05	11.56	15.18	19.77	25.52	32.42	40.18	48.47
Mauritius	29.33	33.18	42.03	42.35	43.90	42.67	41.84	43.36	47.98	54.33	60.55
Réunion	23.49	32.84	41.66	53.48	81.23	89.87	94.01	95.66	96.33	96.88	97.35
Rwanda	1.80	2.40	3.19	4.72	5.42	13.77	18.85	22.61	28.26	35.25	42.93
Seychelles	27.40	27.67	39.07	49.37	49.29	51.05	55.32	61.08	66.56	71.63	76.21
Somalia	12.73	17.31	22.68	26.76	29.66	33.25	37.45	43.0	49.86	56.89	63.65
Tanzania	3.49	5.25	7.85	14.56	18.88	22.31	26.38	31.79	38.66	46.25	54.01
Uganda	2.82	4.42	6.66	7.53	11.08	12.08	13.30	15.94	20.56	26.54	33.52

\* Projections  
Source: WUP, 2009

GRAPH 4.2: EASTERN AFRICAN NATIONS' URBANISATION TRENDS, 1950-2050 (PER CENT)



\* Projections  
Source: WUP, 2009

centrations and attendant factors of political, economic and social exclusion. Today's urban challenges in Eastern Africa are increasingly the outcomes of post-independence political, economic and social policy choices (or lack thereof). Far more proactive government action is necessary given the rapid pace of urbanisation. This theme is further discussed in section 4.5 based on the example of the Greater Nairobi Metropolis.

Eastern Africa's current rapid urban demographic growth comes with a host of problems, including spiralling urban unemployment, overstretched and deteriorated infrastructure and services delivery systems, environmental degradation and acute shortages of affordable housing and residential land. These factors result in a rapid proliferation of slums, informal settlements and overcrowding. Combinations of weak urban, housing and social policies, inadequate planning and under-resourced, under-funded and therefore poorly performing

government institutions, as well as many years of anti-urban policies, have made it difficult for most Eastern African municipalities to maintain a grip over ongoing urbanisation and adequately manage its spatial, economic, social and environmental effects.

### The Links Between Poverty, Inequality and Slums

In Eastern African cities, the three main links between poverty, inequality and slum incidence are as follows: (a) lack of access to affordable and adequate land and housing for the predominantly poor urban populations; (b) severe inequality in domestic wealth sharing; and (c) unequal access to basic (including social) infrastructures.

Ethiopia holds the unenviable record of the highest slum



▲ Water shortages in Mathare slum, Nairobi. ©Manoocher Deghati/IRIN

TABLE 4.3: THE POPULATION OF EASTERN AFRICAN CAPITALS - SHARE OF TOTAL URBAN POPULATION AND PRIMACY (2010 - PROJECTIONS)

Country	Capital City	Population (*000)	Percentage of Total Urban Population	Second-largest City		Primacy <sup>a</sup>
				Name	Population	
Burundi	Bujumbura	455	11.00	Gitega	45	9.96
Comoros	Moroni	49	28.19	Mutsamudu	21	2.27
Djibouti	Djibouti	567	76.23	Ali Sabieh	87	6.51
Eritrea	Asmara	649	21.58	Keren	86	7.55
Ethiopia	Addis Ababa	2,930	16.66	Dire Dawa	330	8.87
Kenya	Nairobi	3,523	22.18	Mombasa	1,003	3.51
Madagascar	Antananarivo	1,879	30.19	Toamasina	2,856	0.65
Malawi <sup>b</sup>	Lilongwe	669	24.5	Blantyre	661	1.01
Mauritius	Port Louis	149	41.84	Beau Bassin	100	1.49
Réunion	Saint-Denis	141	94.01	Saint Paul	92.5	1.52
Rwanda	Kigali	909	18.85	Butare	896	1.13
Seychelles	Victoria	26	55.32	Anse Etoile	4.4	5.90
Somalia	Mogadishu	1,500	37.45	Hargeisa	650	2.30
Tanzania	Dar es Salaam <sup>c</sup>	3,349	26.38	Mwanza	476	7.03
Uganda	Kampala	1,598	13.30	Jinja	509	3.13

Notes: <sup>a</sup> Population of the capital city divided by the population of second-largest city.

<sup>b</sup> 2008 data, National Statistics Office, Malawi

<sup>c</sup> Commercial capital

Source: WUP, 2009



#### BOX 4.1: KHARTOUM SLUMS EPITOMISE EASTERN AFRICA'S TYPICAL PATTERN

Like other large cities in the region, Khartoum features three distinct types of very low-income residential areas: (a) inner-city slum areas that over time have been absorbed in urban expansion, such as Fallata Village (Ushash Fallata); (b) *de facto* slums on the urban periphery, which had been planned as low-income residential areas and distributed to the landless; and (c) squatter settlements on and beyond the urban periphery, built on illegally occupied land by newcomers. Khartoum's slum dwellers are mostly from southern Sudan tribes such as Dinka, Nuer and Shuluk, or from the western regions of Kordofan and Darfur (Fur, Nuba, Mseiria, Zaghawa, Masalit, Borno and Rizeigat) who fled insecurity in their areas of origin during the Sudanese civil war and, more recently, the violence in Darfur.

#### BOX 4.2: ENERGY IN ERITREA: ALTERNATIVE SOURCES MUST BE DEVELOPED

Eritrea's energy supply consists mainly (70 per cent) of biomass fuels with petroleum accounting for 27 per cent. All petroleum products are imported. Electricity accounts for only three per cent of national energy supply.

Electricity is generated by thermal plants (99 per cent), with renewable sources (wind and solar) accounting for only one per cent; 78 per cent of urban residents have access to electricity, compared with only three per cent of rural residents. Nationwide, only 38 per cent of the area is connected to the grid (18 per cent of the population); the remaining 62 per cent relies on alternative energy sources. Eritrea is one of the countries with the lowest number of connections to the power grid in the world. The country has great potential for alternative energy sources including wind, solar, geothermal and hydroelectric, but these remain unexplored.

Source: Eritrean Ministry of Energy and Mines, <http://www.moem.gov.er>

incidence in Eastern Africa, coupled with extremely poor access to basic urban services<sup>2</sup>. Even those Ethiopians living in settlements that are *not* defined as slums have only limited access to infrastructure and services. In *Djibouti City*, informal settlements continued to account for the largest share of urban expansion over the past decades. In the early 1990s, the country's total urban population of 329,300 comprised more than 240,000 slum residents (or 73 per cent). Likewise, in Eritrea, 70 per cent of the population lives in informal settlements and slums. *Nairobi* is host to more than 200 informal settlements, where living conditions are among the worst in Africa due to extremely high population densities: reaching 26,000 km<sup>2</sup> in inner-city slums like Pumwani and Maringo.

Across Eastern Africa, low-income urban residents have little if any access to formal land or housing markets. Their only access to residential land is outside the formal system or, to be more specific: informally, illegally, or through urban land invasions. These processes and their effects are described in

detail in Section 4.3. As a result, and given the large numbers of low-income urban residents, the overwhelming majority of urban land and housing transactions in Eastern Africa are now informal in nature and taking place on marginal, often hazardous public or private urban land that is deprived of basic services or amenities. This exacerbates the vulnerability of the urban poor, because such informally acquired urban lands typically neither meet local authority minimum development standards nor environmental regulations. Consequently, these land plots cannot be eligible for later conversion to assets that are tradable in formal markets. Meanwhile, repeated subdivision of these marginal and under-serviced urban plots into smaller parcels continues as highly speculative informal land markets become more entrenched.

Between 40 to 60 per cent of people in unplanned settlements in Eastern Africa lack adequate water and sanitation<sup>3</sup>. Their access to water is only through street vendors. They pay more for poorer quality water than those residents with home connections to the municipal water network. At the moment, local authorities favour privatisation as the best remedy to this situation, as is the case in *Nairobi*. Although private companies are quite familiar about water reticulation in formal residential areas, servicing informal settlements comes as a challenge. This is why non-governmental organisations have been trying to bridge the gaps in water supply to these urban areas. However, their success is limited as they neither have a formal mandate to provide this service nor the capacity to provide water on an adequate scale and, therefore, at affordable prices. What they manage to do, though, is to help utility companies keep any damage to water supply infrastructure and loss of water from illegal tapping at a minimum.

Access to sanitation is another major challenge for the poor in most Eastern African cities. This is notable in the slums of *Addis Ababa*, *Asmara*, *Dar es Salaam*, *Kampala*, *Nairobi* and many other cities. The plastic bags used to throw out toilet waste by people with no access to latrines are often called 'flying toilets' which are now heaped in large piles in the slums of *Nairobi* and *Kampala*. Not surprisingly, informal and slum settlements are associated with high incidences of cholera, which is linked directly to the prevailing unsanitary conditions.

The problem of lack of sanitation is less pronounced in smaller cities like *Bujumbura*, *Kigali* and the unplanned settlements on the western Indian Ocean islands of Mauritius and the Comoros. In these smaller cities, local authorities have the capacity to meet urban challenges like water and sanitation. In Mauritius, supply of services is directly linked to the fact that most residents own their properties, enjoy security of tenure and have invested in good quality conventional buildings. This is the same in the Comoros, where nearly all residents have access to clean water and modern sanitation systems. However, city size does not appear to be the critical factor in this respect as in *Antananarivo*, about 85 per cent of the 1.9 million urban population has access to the water network and 70 per cent to some form of modern sanitation<sup>4</sup>.

The majority of the urban poor in Eastern Africa uses either wood, charcoal, liquefied petroleum gas (LPG) or

kerosene for cooking. In urban Kenya, gas and kerosene are more common than wood or charcoal (47 per cent use kerosene for cooking)<sup>5</sup>. Research by UN-HABITAT shows that respiratory diseases are a leading cause of child mortality in urban Eastern Africa due to widespread use of wood and charcoal combined with poor residential ventilation in urban slums. Studies in Ethiopia showed a 30 per cent rise in the incidence of respiratory diseases in children below 5 years when cow dung was used, falling to 8.3 per cent with charcoal and to 4.8 per cent with kerosene.

Ethiopia, Tanzania and Uganda are now exploring the use of bio fuels. This has in turn led to conversion of food crop land into cash crop plantations. Sugar cane is the favourite alternative energy-producing crop. A variety of other crops, such as *Jatropha Curcas*, are planted on a large scale in Tanzania. However, expansion of bio fuel crop farming can in some cases involve more extensive use of fresh water for irrigation and diversion of productive agricultural land to non-food producing purposes, and this may need careful policy reconsideration.

As part of nationwide power rationing schemes, *Addis Ababa*, *Dar es Salaam*, *Kampala* and *Nairobi*, as well as numerous smaller cities in Eastern Africa, experience recurrent electricity rationing, with adverse consequences not just for households but productivity as well. In *Nairobi*, rationing is the result of drought-induced low water levels in dams. This has prompted the government to explore alternative sources of energy, i.e. wind, geothermal and solar, while the monopoly for production has been broken in a bid to encourage other contributions to energy security.

Regarding informal settlements, Eastern African governments take a variety of approaches. Forced eviction has

long been the favourite method and in some cases continues to be viewed as acceptable. The urban poor typically hold few if any rights and are facing eviction and demolition of their homes where these are categorized as 'illegal' by uncompromising public authorities. This false solution is often stigmatised by international development agencies, civil society and local communities. Forced eviction simply destroys whatever limited assets the urban poor have managed to build up and only shifts them to other locations within or adjacent to the city.

As the shortcomings of forced eviction become more apparent, governments often turn to *in-situ* upgrading of urban slums as the only practical way forward. Examples of ongoing slum and informal settlement upgrading schemes include the Kenya National Slum Upgrading Programme (KENSUP) in various locations, and the Hanna Nassif Slum Upgrading programme in *Dar es Salaam*. However, large-scale, city-wide slum upgrading is still missing while upgrading of social and basic infrastructures remains focused on unplanned middle-income areas where security of tenure prevails<sup>6</sup>, rather than addressing the living conditions of the poorest segments of Eastern Africa's urban populations. Clearly, addressing the residential and services needs of urban middle and lower-middle income groups is important; especially where housing for low-income households is taken over by lower-middle income groups. However, the already deeply marginalized and disenfranchised urban poor communities need urgent attention as well.

Mauritius and the Seychelles are the only countries without slums in the whole of Eastern Africa as they feature small populations and healthy economies based on tourism, with relatively high incomes per head and, most importantly, more equitable national wealth distribution.



▲ Antananarivo, Madagascar. 85% of the 1.9 million urban population has access to the water network. ©Pierre-Yves Babelon/Shutterstock



## 4.2

# The Economic Geography of Cities

### Economic Inequality

Although almost all Eastern African countries have experienced positive economic growth in recent years, the low-income majorities are not benefiting from the commensurate increases in wealth. Eastern Africa exhibits comparatively high socio-economic inequality with most countries exceeding Africa's 'relatively high' average (income-based) Gini coefficient of 0.45. (For details on Gini coefficients, please refer to Section 1.2 in Chapter 1). In *Addis Ababa*, inequality, as reflected in a 0.61 coefficient, is 'extremely high' and almost double the 'relatively low' (0.38) national average. In *Bujumbura*, 'high' income inequality (0.47) is steeper than in urban Burundi as a whole (0.37). This clearly indicates that in urban Eastern Africa, small and privileged groups are

unequally benefitting from economic growth, with very large income and consumption disparities between rich and poor.

Research by the United Nations Development Programme (UNDP) indicates that in Kenya, the wealthy earn 56 times more than the poor on average. The richest 10 per cent of the Kenyan population controls 42 per cent of the country's wealth, compared with less than one per cent for the poorest 10 per cent.<sup>7</sup> Trends suggest that this situation is worsening rapidly. Between the 1980s and the 1990s, the Gini coefficient for urban Kenya grew dramatically from 0.47 to 0.58,<sup>8</sup> signalling a significant rise in urban inequality, which is steep nationwide. Overall, Kenyan urban income inequality stands at a 'very high' 0.55, though still lower than the national average (0.57) and in *Nairobi* where, with a 0.59 coefficient, it verges on the 'extremely high' bracket. The urban poor contribute 51.5 per cent of the total poor population of Kenya and poverty, to a significant degree, is an urban issue. The country is one of the most unequal in Eastern Africa, based on both nationwide and urban Gini coefficients. *Kisii* and *Migori*, for example, feature 'very high' Gini coefficients (0.56 and 0.63 respectively) with the latter even notably higher than *Nairobi's*.

In relative terms, *Dire Dawa* and *Dar es Salaam* stand out among the more 'equal' cities in sub-Saharan Africa, with 'relatively low' income-based Gini coefficients of 0.39 and 0.36 respectively.<sup>9</sup> Tanzania as a whole shows relatively low inequality, too (0.35); most likely the outcome of many years of redistributive policies under the *ujamaa* socialist economic system, which would go to show that sustained wealth redistribution can have significant socio-economic effects. In Uganda, between 2002 and 2006, 'relatively high' income inequality has slightly diminished (from 0.43 to 0.41) probably on the back of stronger economic growth. However, and as suggested by the case of Tanzania, reduced inequalities are not brought about by economic growth alone. Rather, low Gini coefficients are always directly linked to wealth (re)distribution (with a few African countries displaying low income inequality against a background of general poverty). The general point here is that there can be income equality at any degree of riches or poverty.

TABLE 4.4: GINI COEFFICIENTS - SELECTED COUNTRIES AND CITIES

Country	City	Year	Gini coefficient [consumption]	Gini coefficient [income]
Ethiopia		1999/2000	0.28	0.38
	Addis Ababa	2003	0.56	0.61
Burundi		2006	0.3	
	Bujumbura	2006	0.47	
Kenya (national)			0.45	0.57
Kenya (all urban)				0.55
	Nairobi			0.59
Rwanda (national)		2005	0.51	
	Kigali	2005	0.47	
Tanzania (mainland)		2007	0.35	
	Dar es Salaam	2007	0.34	
Uganda (national)				0.41
Uganda (all urban)				0.43
	Kampala	2007	0.4	

Source: UN-HABITAT, *State of the World Cities 2010/11*.



▲ Dar es Salaam, Tanzania. ©Brian McMorrow

## How Slum Dwellers Survive

Although statistics on informal socio-economic conditions in Eastern Africa are unreliable at best, it is evident that the share of the urban population in informal employment and housing has hugely increased since the 1980s and continues to do so. Whereas a large pool of unemployed and underemployed city dwellers keeps labour costs low and therefore can make Eastern Africa increasingly competitive, the consequences of massive urban poverty almost inevitably include increased urban violence, crime, insecurity and social unrest that are in no one's interest and can scare away foreign capital.

In the years following independence, civil service jobs and housing stood many residents in Eastern African capitals in good stead. However, these top-heavy, bloated institutional arrangements soon proved too expensive for nascent post-colonial economies. Necessary but painful retrenchment followed and many lost both livelihood and shelter. This was to have a far-ranging effect on Eastern Africa's urban economies, as fewer formal employment opportunities were available to ever-larger populations. In the absence of effective social policies, informal livelihoods became the norm for most city dwellers and things have hardly changed since then, with the urban informal sector the main provider of livelihoods and housing to this day.

## Addressing Urban Inequality and Fragmentation

Unequal access to social and basic infrastructures combines with highly imbalanced leveraging of political power to cause the physical and social fragmentation that is typical of Eastern African cities. Poor informal neighbourhoods with limited infrastructure and services contrast with wealthy residential areas that are serviced to much higher standards and enjoy an abundance of public goods. However, urban inequality is not only a matter of access to services and public amenities. It is also reflected in residential density differences. For many years, the urban poor in Eastern Africa have experienced the undesirable, extreme population densities that today are also and increasingly found in the large, high-rise middle-income residential developments in *Dar es Salaam*, *Kampala* and *Nairobi* which are rapidly emerging as a new 'vertical slum' phenomenon. 'Rooming' (occupying a single-room) has become the residential norm for many city dwellers. By 1981, more than 80 per cent of the population of *Nairobi* lived in such rented single rooms, especially in inner-city locations, creating a remarkably contrasting pattern of residential land use with the very low-densities found in the city's leafy suburbs.

As poverty in Eastern African cities has become chronic and structural, crossing over socio-economic lines through economic advancement or via social relationships like marriage is becoming ever more a challenge. The resulting vicious circle of urban poverty is proving to be increasingly difficult to break. Evidence of additional social fragmentation along ethnic and religious lines is becoming more and more glaring, creating polarization and tensions as the driving forces of emerging 'communities of fear'. In *Nairobi*, for instance, ethnic groups and tribally-organized gangs have taken advantage of poor law enforcement to engage in extortionist and other criminal activities.<sup>10</sup> This is one type of response to lack of effective urban social policies. If the needs of the poor who dominate Africa's urban populations are left unaddressed, the outcomes can only be further insecurity, social unrest and political upheaval.

A clear example of rising urban insecurity rooted in inequality and lack of effective spatial, housing, labour and social policies is the emergence of the Kikuyu 'Mungiki' and the Luo militia known as 'Taliban', again in *Nairobi*. These politico-religious criminal organizations grew out of the former political private militias which began to feed off Nairobi's perpetual insecurity and poverty crises by means of terror, kidnapping for ransom and extortion in exchange for protection. Failure to cave in to extortion all too often leads to murder and these militias have now grown beyond any control. If the Government of Kenya is to suppress these criminal organizations, then it must address the core roots, including: (a) improved access to land and housing for the urban poor majorities, (b) redressing the massive unemployment of urban youths, and (c) meeting the basic social and physical infrastructure needs of the poorest sections of the *Nairobi* population.<sup>11</sup> In the meantime, all efforts should go to identifying the perpetrators and bringing them to court.

In October 2010, the government made a significant first step by placing 33 groupings, including 'Mungiki' and 'Taliban', on a list of out-lawed organisations whose membership is now a crime punishable with prison terms.

Currently, holistic city-wide government interventions in informal settlements remain thin on the ground in Eastern Africa. Severe lack of capital expenditure on upgraded living conditions for the urban poor is an outcome of weak political will and poor understanding of the essence of informality. Indeed, informal settlements are rarely seen for what they really are: a natural, market-led response to restricted formal access to adequate and affordable housing by low-income segments of the population. The relationships between informal housing and informal economies are still not widely understood either (see Box 4.3). So far, the most commonspread policy approach in Eastern Africa is to declare informal housing and land access illegal. With this sweeping generalization, responsibilities are unreasonably placed on the residents of informal settlements and slums, rather than on public authorities for their failure to devise urban, housing and social policies that benefit the majority of its city dwellers. As elaborated in Section 4.3, a number of feasible and productive options and directions are available to Eastern Africa.



▲ A mother and child flee a police swoop to root out 'Mungiki', Mathare slum, Nairobi.  
©Julius Mwelu/IRIN



#### BOX 4.3: KENYA: INFORMALITY IS THE PROBLEM, NOT POPULATION GROWTH



▲ Selling snacks outside a mosque in Nairobi, Kenya. ©Julius Mwelu/IRIN

The stark message from the 2009 census results, published in August 2010, is that the Kenyan population is growing very fast. Every year, one million Kenyans are added to those in need of housing, services and livelihoods, adding to already existing huge backlogs, especially in urban areas. However, rapid demographic expansion is a problem rather than an asset *only* when it outstrips economic growth, because the difference is almost always increased poverty.

Still, demographic controls should not necessarily be Kenya's first development priority as numbers are not the problem *per se*. Rather, Kenya should be worried about the pace and direction of the economy and their impacts on cities. Natural growth and continued rural-urban migration put enormous pressures to the point that one can speak of 'over-urbanisation' as urban economies lag behind and fail to generate adequate jobs. As a result of this increasing urban poverty, informality is making rapid progress in Kenyan cities. For instance, instead of a formal transportation system Nairobi relies on a chaotic, informal and dangerous minibus system (known as '*matatu*'). The city is also unable to cope with burgeoning numbers of hawkers because the authorities have only constructed one new urban market (Muthurwa Hawkers City Market) over the past 20 years. Urban slums and informal settlements are also growing much faster than formally planned neighbourhoods.

For a long time, Kenya's urbanisation policy emphasised the development of secondary towns. That was a wise approach in principle. Providing housing and roads in intermediate-sized towns such as Thika, Kitale, Homa Bay and

Malindi would enable the government to divert rural migration away from the larger cities. In practice, the grand plan fell victim to a piecemeal approach. Promoting secondary cities without simultaneously and vigorously boosting their economic development and livelihood-generating capacities merely results in a transfer of poverty to smaller cities. Today, these towns are beginning to experience the same informal patterns of livelihoods and living conditions already prevailing in larger Kenyan cities: expanding slums, with mobility dependent on informal transport, increased street vending, lack of planning, and rises in violence and crime. Thika, which was constructed in the Kenyatta years as Nairobi's satellite industrial town, now is host to two slums aptly named Kiandutu (Kiswahili for 'sand fleas') and Matharau ('contempt'). The phenomenal demographic expansion of urban Kenya may be disquieting, but what is far more worrisome is the fast rate at which urban economies are going informal.

The informal sector is often hailed in Kenyan policy documents as the leading employer and therefore the saviour of the country's economy. But this ignores that economic informality is nothing but a survival strategy for those excluded from the formal labour markets, in the same manner as slums are the residential survival strategy for people excluded from inefficient formal land and housing markets.

The informal sector acts not as a saviour but as a predator for the poor, often extending the most hostile and brutal labour and living conditions on disenfranchised people who are in no position to fight back. The alternative to informality is

unemployment and homelessness. Energetic youths can be found loitering around Nairobi's Westlands shopping area, peddling puppies, rabbits, *mitumba* (second hand) shoes, suits or counterfeit Chinese hi-fi equipment. Informality is about maximum physical exertion, inhuman working hours and single-room occupancy in leaking slum shacks without access to water or sanitation. Informality is the main manifestation of Kenya's ineffective housing, labour and social policies and the government should therefore certainly not seek comfort in its rapid proliferation.

All of this goes to suggest that instead of a rapidly growing population, informality stands out as Kenya's biggest problem. A large, young population is a major asset for any country's economy. It should be the government's mission to make sure it is properly nurtured and taken care of in every way in order to produce maximum cumulative benefits of general well-being, prosperity and peace, instead of being stymied and marginalised by outdated, inappropriate frameworks or policies. This is why public policy should seek to eliminate informality, addressing the underlying systemic inequalities such as those enabling Kenyan political and economic elites to reap the bulk of the benefits of economic and urban growth. Kenyans should worry about the poor-quality governance provided by its leaders; its rampant corruption; its lack of housing, social and labour policies; and highly unequal access to national resources, opportunities and riches. Kenya should worry about the mushrooming urban informality and poverty that increasingly pose a threat to national political and social stability.

Source: UN-HABITAT and *High population is not the problem; high growth of the informal sector is*, by J. Kiseru, Daily Nation, 7 September 2010, Nairobi

#### BOX 4.4: MOGADISHU: WHEN URBAN PLANNING IS LEFT TO CLAN RULE



▲ The Benadir (Mogadishu) Regional Government building. ©Abdul Qadir Omar

Mogadishu was established around the 10<sup>th</sup> century and kept flourishing since then as one of many East African coastal trading cities. After Italy took over Somalia in 1889, Mogadishu became the political capital and began to expand both geographically and demographically regardless of controls. This trend continued, especially after independence in 1960 when, in the absence of spatial planning, the Mogadishu urban area expanded from 1,500 ha in 1970 to 8,000 ha in 1984 and its population from 272,000 in 1970 to an estimated 1.5 million in 2010.

Lack of land-use policies, urban planning or development controls has combined with the proliferation of spontaneous settlements, with low-income newcomers driven by recurrent rural famine and strife. Already overcrowded areas have seen more makeshift shelters on any vacant land, turning into chaotic, high-density neighbourhoods in the absence of any services provision.

After the military coup of 1969, president Siad Barre sought to address the problem, including through urban spatial restructuring. However, nothing could prevail against deteriorating conditions because, from the mid-1980s, famines and insecurity in Puntland and Somaliland drove ever more people to Mogadishu. Coming from areas where violence is considered 'normal', newcomers were perceived as dangerous and undesirable. The army, para-military forces and militias often intervened violently in informal neighbourhoods. Indeed the 1980s saw many urban conflicts linked to changes in the urban fabric of Mogadishu.

The capital is where the civil war started in

December 1990 which eventually led to the overthrow of Siad Barre in 1991. Disagreement over the succession plunged Somalia into yet another severe civil crisis with rampant lawlessness and clan warfare. However, Mogadishu's population seemed almost impervious as it had already been in a decidedly war-like situation for years, with associated dramatic population inflows, violence and implosion of the formal economy. Whatever urban services that were left in the capital were soon to collapse, as the para-statal bodies in charge diverted any aid flows to the security apparatus or public officials. Electricity had already become a luxury well before 1990 and economic activity in Mogadishu was at best informal.

Civil war deeply affected the urban setting and demography of Mogadishu. In 1991, most of the Daarood - a Northern Somali clan - were either killed or expelled from the city, as were many Gibil Cad of Arab descent. Simultaneously, others were arriving as they considered the capital a place where 'life and access to resources were easy and free'. Subsequent economic growth and rehabilitation in some areas in 1998 restored confidence among the population. Many middle-class newcomers invested in housing and new economic activity, even though re-armament in the capital had again reached alarming levels.

Decades of strife in Mogadishu have considerably restructured urban space and have created socio-spatial divisions which continue to prevail to this day. Perhaps the main social-spatial change was that neighbourhoods became determined by clan affiliation, with many urban districts dominated by a single clan or divided in

clusters each dominated by one. Reflecting the political stalemate, the Somali capital became split into three unequal parts: (a) North Mogadishu, relatively small but with high population densities and where, due to relatively good security under the UN mission and Islamic courts, some new housing has been built; (b) South Mogadishu, effectively the rest of the city, with mixed clans in areas that mostly escaped destruction, and home to the hubs of economic activity: the international seaport and the airport; and (c) Medina, with little demographic or economic significance. For years, the division between North and South remained a painful reality, but has now begun to fade away.

With some neighbourhoods mostly resembling a nuclear blast site, lack of municipal or government apparatus for years and two decades of waste piled up in the streets, this most ravaged of cities has only managed to survive through sheer resilience and informality. Despite the odds, Mogadishu has remained connected with the rest of the world through scheduled commercial flights. Following the complete collapse of the public sector, standard services - water, electricity, telecommunications and banking - have been entirely taken over by a surprisingly vibrant private sector, which has also made inroads into health and education. Remittance-handling services provide a makeshift financial sector and, for those better-off, almost anything is available on local markets, from passports to fashionable sunglasses, as well as more lethal merchandise such as anti-aircraft artillery, ordnance and cocaine.

#### MAP 4.2: MOGADISHU TOWN



Source: Data and Information Management Unit, UNDP Somalia.

Source: Marcal R, *A Survey of Mogadishu's Economy*, a report commissioned by the EU, Paris, 2002.

## 4.3

# The Geography of Urban Land Markets

### Forms of Land Ownership, Tenure and Rights

All Eastern African nations feature a dual land tenure structure that combines customary (traditional) land regimes and a statutory (law-based) system operating side by side. This is a remnant of the region's colonial heritage. The British (in Kenya, Uganda and Tanzania), the Italians (in Somalia, Eritrea and Djibouti) and the French and the Belgians (in Rwanda and Burundi) introduced statutory systems of title registration in their colonial urban centres and in commercial farming areas, leaving the native urban and rural areas to continue with their customary tenure arrangements. Today's realities on the ground reflect this inherited dual system of customary and statutory systems operating in parallel. Due to frequently overlapping and hybrid arrangements, these dual tenure systems tend to create antagonisms and confusion, particularly where they interface. As a result, resolution of land disputes in Eastern Africa can at times be very complex, generating uncertainties over tenure.

The *mailo* system in Uganda (see Box 4.5), is an example of deep-seated tenure ambiguity. Whether formal or informal, the *mailo* land purchaser must pay twice, as both the title holder and the occupant of the land must be compensated. Any inconsistency between the two parties would stall the transaction. Likewise in Kenya, only title registration (freehold, leasehold, encumbrances) will confer interests on land that can be upheld in court. Moreover, any land sales agreement must be completed within six months, or documentation becomes invalid. No wonder, then, that informal transactions should frequently appear as a far more feasible option, even though they are carried out at purchaser's risk of falling prey to rogue vendors.

In post-independence Eastern Africa, it was expected that the statutory system of land tenure would ultimately prevail, being gradually introduced nationwide through successive land adjudication or registration in both urban and rural areas. Today's realities fall well short of this expectation. The fact of the matter is that in many of the region's cities, informal urban developments continue to proliferate and customary systems in urban areas have been reintroduced in the absence of effective land management and governance.

### Urban Land Institutions: Land Administration and Management

Formal land administration and management in Eastern Africa is the domain of central or regional government. Even where independent land commissions have been established, as in Rwanda and Uganda, land registration remains the responsibility of the Registrar of Titles. Ethiopia is the exception, with responsibilities for land administration split between municipal authorities (for urban land) and regional government (for rural land). In Ethiopian cities land is allocated on the basis of leasehold tenure, whereas a 'permit' system extending beneficial right applies in rural areas.

Informal land markets operate similarly across Eastern Africa. Simple letters of agreement are witnessed by local administration (*kebele*, *wazee wa mitaa*, i.e., village elders or chiefs) together with an appropriate number of witnesses chosen by the parties to the transactions. The more affluent parties may use the services of a lawyer, land broker and/or professional surveyor, but in view of the costs this is the exception rather than the rule. In many other cases, informal land transactions take place without any documentation, relying on social recognition for ownership acknowledgment and security of tenure. The section "Informal settlements as a response to land market imperfections" on page 143 details the nature of informal land markets.

### How Land Markets Operate

National and local governments in Eastern Africa influence land markets and access to land in urban areas through allocation of publicly owned parcels, provision of infrastructure and services, and through enforcement (planning controls, power of eminent domain and taxation). These policy instruments are often viewed as inequitably curtailing access to land by low-income urban groups. Whereas Eastern African constitutions and statutes often refer to social justice and the social aspects of property rights, formal urban land market operations have not been to the advantage of the urban poor who constitute the overwhelming majority of demand. The gaps between the need for urban land and



its formal availability reflect those between government policies, unequal access to urban land markets and the failure of those markets to deliver. As a result, Eastern African cities are plagued by informal land transactions and the associated mushrooming of informal settlements and urban slums.

However, laws and policies regarding access to, and use of, land are, by themselves, not enough to improve urban land administration or prevent informal land acquisition. Even where restrictions on land transactions may be warranted, enforcement difficulties have more often than not generated distortions which in effect exclude those marginalised groups they were precisely intended to assist.

### *Formal land markets*

Ethiopia and Tanzania have a history of government ownership of land due to their socialist past. In Ethiopia, all land remains government owned and in cities it is formally delivered through auction, negotiation or government adjudication. Government grants leases of up to 99 years confirmed by title deed. The formal market delivers leaseholds with a surface-based annual rent and a fixed lease period, allowing exploitation according to the land use plan. The purchaser cannot own another plot in the city and a surety deposit is required only to be released once house foundations

are completed. Although the leaseholder may transfer or undertake a surety on the leasehold, the actual transfer option is weakened by Proclamation on Expropriation N° 455/2005, which disregards the market value of the land in the event of compulsory acquisition. Compensation will only be paid for improvements (buildings and structures). The problem with this formal system is that it is plagued with delays, inequity and corruption.

A parallel cash land market operates in Ethiopia where leases or beneficial interests can be exchanged through simple sales agreements. The buyer pays property transfer taxes and commissions to a middleman. Transfers become official when the real estate value has been assessed for tax purposes. However, this market largely remains beyond the means of the urban poor, and those who cannot afford the formal or parallel cash transfers can only be accommodated by informal land markets.

In Tanzania, too, land is government property and until 1995, when a new land policy recognized the value of bare land, there was no property market to speak of. Today, both customary and statutory rights are recognized and stand equal before the law. Land rights can be registered, but land under statutory occupancy cannot be disposed of within three years. However, a loophole makes it possible to sell



▲ Fianarantsoa, Madagascar. ©Muriel Lasure/Shutterstock

only the development(s) on the land. Formal access to land can be granted in one of three ways: (a) 'right of occupancy', giving access to long- or short-term leases; (b) unallocated, abandoned or revoked land sold by land officials; or (c) under an approved land use scheme. While the allocation principle operates on a 'first come, first served' basis, the procedure is deeply flawed by slow bureaucracy and corruption. Therefore, in practice, the formal land market caters for less than 10 per cent of effective urban demand, leaving informal channels, often with semi-legal or socially regularized procedures, as the preferred option for most urban residents.

In Eastern Africa, formal urban land markets also feature elements of legislative/regulatory control through physical planning and registration of titles. Kenya is a case in point, where the government would advertise availability of public land in the *Kenya Gazette* to call for applications. Lease terms (with premiums and annual land rents calculated on the basis of cost to the government, rather than market values) are so favourable that these opportunities for cheap land have resulted in intense competition and illicit behaviour, including massive land grabbing, with a small number of well-connected people accumulating public land, in the process locking out the low-income majority of city dwellers. Once lease titles were obtained, the land was often sold at the prevailing market price, generating huge profits. Speculation and all manner of scandals in the allocation of public land became the norm. As a result, today there is virtually no vacant government-owned land left in Kenyan cities, and the formal urban land market is now almost entirely in private hands, allowing access for the wealthy only. Privately-owned property accounts for 18 per cent of total land area. Trust land (i.e., held by rural local authorities in trust for residents of the area for the purposes of customary land practices) accounts for 69 per cent. Government land (i.e., reserved for use by public bodies, or forests, national parks, game reserves, water bodies, mineral lands and any land in respect of which no individual or community ownership can be established by any legal process) comprises the remainder 13 per cent of Kenya's total land area. Urban land amounts only to 0.7 per cent of total land area and the bulk is formally titled, except for a few remaining pockets of unallocated government-owned land.

In Uganda, the land market is only beginning to develop. Since the survey and land management professions are not yet well established, the sheer lack of reliable land information makes land transactions difficult and risky. Uganda formerly featured two distinct land markets: (a) a formal market for duly registered transactions, with recorded sales and signed legal agreements; and (b) an informal market for property and land use rights that were not formally recorded. The country's 1995 Constitution abolished a previous Land Reform Decree that had converted all land to 99-year leases. The new constitution reinstated the pre-independence land tenure systems and now recognizes: (a) freehold; (b) leasehold; (c) customary tenure; and (d) *mailo* (i.e., subleases of freehold land).

### *Informal land markets*

Eastern Africa's informal land markets also feature a rich variety of practices with various degrees of security of tenure. Probably one of the most informal land markets in the region is to be found in Somalia. After more than a decade without clear central government authority and attendant erosion of legal systems, land and property have become a major concern. Illegal occupation and land grabbing are rampant, generating fresh and continued violent conflict. Statutory law is hardly enforced and proves either inefficient or disconnected from reality. As urban land values continue to rise, speculation has become a commonplace way of adding to personal wealth. All valuable open land surrounding Somali towns has been grabbed, including by those internally displaced persons that have invaded many peri-urban areas.

Faced with a major land management problem, several Somali municipalities have taken to regularise illegal land occupation. The occupant-developer of grabbed or invaded land wishing to acquire a title deed can choose one of two options: (a) referring the case to Islamic courts for an order confirming ownership; or (b) regularizing the land claim directly with the municipal authority. If going to court, a claimant requires four witnesses who can testify by oath on the Quran to the claimant's land occupation. When a claim is referred to a municipal authority, the claimant must declare the plot location, size and duration of occupation, and pay any tax arrears. However, many claimants cannot afford the taxes, and the land then reverts to the municipality which, in turn, can evict any occupants.

Another type of government involvement in informal land markets can be seen at work in the *quartiers populaires* (low-income areas) in *Bujumbura*. These areas have remained largely unregulated. The government is involved through issuance of mandatory provisional titles or certificates, which grant the right to occupy a parcel of land in one of these areas, in the process providing a degree of security of tenure. These titles or certificates enable the government both to regulate these transactions and to benefit from them through mandatory fees.

In neighbouring Rwanda, the formal urban land and housing markets feature a number of deficiencies, as any other in Eastern Africa. In 2002-2003, for instance, the formal land market in *Kigali* would meet less than 10 per cent of demand. On top of ineffective bureaucratic procedures, high land prices and transfer costs as well as unrealistically high standards (compared with average urban income) continue to push the majority of the *Kigali* population into illegality. Formal leasehold land rights had been granted under the "*permit to occupy*" regime, but the government retained ownership and was entitled to re-appropriate any urban or suburban land intended for housing if not developed to regulatory standards within five years. Rwanda's 2005 Organic Land Law recognized private ownership of land and opened the way for land market privatization. However, current land and housing development policies in *Kigali* continue to force the



vast majority (90 per cent) of residents into informal markets and illegality. New formal land administration frameworks are in direct competition with the informal systems that currently prevail in over 98 per cent of the land economy of the country. Administration fees, along with the rates and methods of land taxation, are too expensive and cumbersome for any smooth adaptation of formal markets to the realities on the ground. This situation effectively deprives public authorities from the potentially vast revenues that would accrue if a majority of Rwanda's urban population found it both affordable and convenient to resort to formal instead of informal channels for access to land.

### Land Markets, Urban Form and Configurations

Urbanisation inevitably results in transformations in urban morphology. Such changes in the spatial expansion of cities normally occur through planning, zoning, land-use regulations and subsequent subdivision. However, the reality on the ground is often quite different in Eastern Africa. The reasons include lack of funding and institutional capacities, which are constrained within urban administrative boundaries and outstripped by the sheer pace and magnitude of demographic expansion. Few urban managers in Eastern Africa are in a position to control urban spatial growth.

Uncontrolled sprawl resulting from informal settlements in the absence of government guidelines and enforcement is a reality in many Eastern African cities. Rather than tacitly allowing uncontrolled sprawl, urban development planning should promote compact settlement patterns, in a bid to capitalise on the agglomeration economies deriving from lower per-head costs of infrastructure networks, lower demand for public transport and more efficiently planned cities. The paragraphs below explore the relationship between land markets, urban form and urban configurations in a few Eastern African cities.

#### *Addis Ababa*

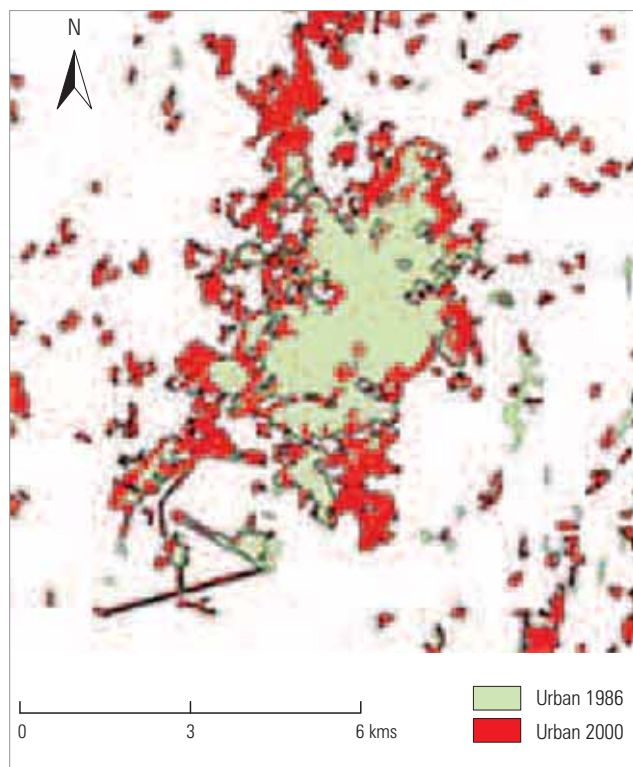
*Addis Ababa* is a primate city, home to more than 3.5 million. It is 14 times larger than *Dire Dawa*, Ethiopia's second largest city. *Addis Ababa* is sprawling on the back of limited land use planning and a strong dependency on a single mode of transport (buses). The urban surface area more than doubled from 224 km<sup>2</sup> in 1984 to about 540 km<sup>2</sup> today. However, these figures only take in the capital as delineated by administrative boundaries, and do not account for the spatial expansion that has occurred way beyond. *Addis Ababa* used to be known for its social and economic homogeneity, with different socio-economic groups living in close proximity. More recently, though, urban fragmentation has become obvious with the proliferation of gated communities like



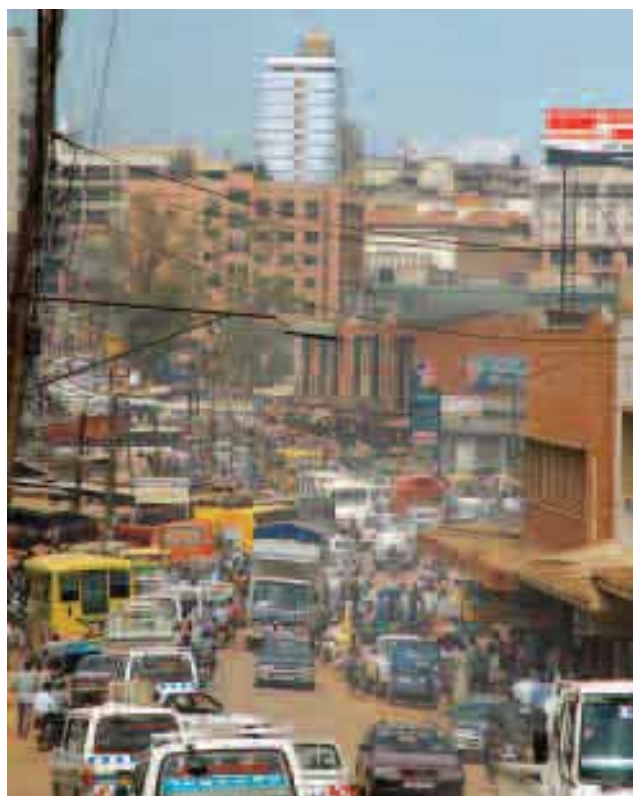
▲ Asmara, Eritrea. ©Stefan Boness/Panos Pictures



MAP 4.3: ASMARA'S EXPANSION, 1986-2000



Source: Yikalo, H. *Urban Land Cover Change Detection: A case study of Asmara, Eritrea*, [www.gisdevelopment.net](http://www.gisdevelopment.net)



▲ Kampala, Uganda. ©Brian McMorrow

Hayat, Sunshine, Shola, Habitat New Flower, Ropack, etc. Uncontrolled sprawl has generated further physical and social fragmentation as well as strongly delineated urban spaces.

Since land use planning is limited and urban sprawl rather significant, the morphology of Ethiopia's capital was bound to become increasingly multi-nuclear. Whereas diverse land uses should promote localised travel and transport, most of today's traffic demand is cross-sectional, forcing people to commute through several sub-centres to reach workplaces, banking or other facilities. Lack of self-sufficient sub-centres defeats the purpose of any multi-nuclear urban form. One priority for planning, therefore, would be to make sub-centres more self-contained and functional, with denser urban functions in order to reduce cross-city commutes, while at the same time re-appraising the capital's almost exclusively bus-based public transport system.

### *Kampala*

Since independence, urbanisation and densification have continued unabated in Uganda's capital, without any control from weak urban planning. The latest Master Plan was completed in 1980 and has not been updated. Lack of an overall zoning plan has resulted in chaotic, multiple and mixed urban land uses. The city's productivity and global attractiveness are hampered by poor infrastructures and unreliable energy supplies. Urban mobility remains time-consuming and costly, especially for the poor.

The commercial and industrial spatial patterns of the city have been affected by the systems of land tenure prevailing in the whole *Kampala* region, as has the provision of basic residential infrastructure. Large areas of the city are placed under the *mailo* regime and remain largely unregulated, haphazardly occupied and poorly serviced if compared with the city centre and high-end residential neighbourhoods, which have long been under lease to private interests.

### *Asmara*

Between 1986 and 2000, the surface area of Eritrea's capital expanded by more than 1,000 ha. Since independence in 1993, *Asmara* has experienced further changes due to demographic pressure, geographic expansion and the spatial spreading of economic activity. A time-scale series analysis shows that urban physical growth has occurred around most of Asmara, except for the north-western part. This tremendous growth in the urban built-up area and the changing spatial patterns of regional economic development has been made possible by significant improvements in infrastructure, which have driven expansion into the rural-urban fringes.

*Asmara* represents an urban ideal from a spatial organization point of view, one which planners all over the world should (re-)introduce in other cities. The central area features a complex mixture of uses, horizontally by plot and vertically by floor. Even in areas of one- and two-storey residential villas, small factories, workshops and retail outlets sit side by side and are all easily accessible on foot. Asmara is very much a lived-in and a liveable city, with many different layers of social and



▲ School children in Kibera slums, Nairobi. ©Africa924/Shutterstock

TABLE 4.5: NAIROBI MUNICIPALITY: SLUM DWELLERS BY LOCATION AND SUB-LOCATION

Location	Male	Female	Total	Households	Area (km <sup>2</sup> )	Density (/km <sup>2</sup> )
Kibera	206,778	177,144	383,922	121,933		
Gatwikira	13,580	11,411	24,991	7,270	0.3	85,323
Kibera	53,297	44,041	97,338	32,115	0.2	65,197
Kianda	15,229	14,127	29,356	8,327	0.7	39,478
Lindi	19,545	15,613	35,158	11,551	0.5	70,302
Makina	12,965	12,277	25,242	7,926	0.7	38,508
Mugumo-Ini	14,410	15,981	30,391	8,478	3.0	10,186
Siranga	10,198	7,165	17,363	6,164	0.2	71,072
Serangome	28,809	25,538	54,347	15,597	1.0	52,433
Laini Saba	15,688	12,494	28,182	9,927	0.4	75,942
Embakasi	98,896	84,808	183,704	66,555		
Mukuru Nyayo	27,277	26,026	53,303	17,357	5.9	8,983
Mukuru kwa Njenga	71,619	58,782	130,401	49,198	12.0	16,720
Huruma	54,787	51,532	106,319	34,017		
Huruma	37,734	34,761	72,495	23,800	0.7	103,431
Kiamaiko	17,053	16,771	33,824	10,217	0.7	50,620
Mathare	95,866	81,450	177,316	60,798		
Mabatini	15,286	12,974	28,260	9,809	0.4	79,740
Mathare	11,205	9,256	20,461	6,617	0.8	25,040
Mlango Kubwa	20,622	17,752	38,374	15,000	0.4	93,005
Majengo	8,945	7,342	16,287	5,295	0.3	55,323
Mathare 4A	10,211	8,565	18,776	5,627	0.2	87,209
Mathare North	29,597	25,561	55,158	18,450	0.5	119,055
Kangemi	33,306	30,712	64,018	21,665		
Gichagi	10,164	9,290	19,454	6,409	0.9	22,243
Kangemi	23,142	21,422	44,564	15,256	1.6	28,298
Korogocho	21,958	19,988	41,946	12,909		
Gitathuru	11,379	10,356	21,735	6,480	0.5	45,262
Korogocho	5,376	5,000	10,376	3,129	0.9	46,961
Nyayo	5,203	4,632	9,835	3,300	0.2	52,286
Viwandani	41,257	30,133	71,390	27,740		
Landi Mawe	15,434	11,075	26,509	9,814	5.6	4,772
Viwandani	25,823	19,058	44,881	17,926	5.7	7,859
Kahawa	7,765	8,678	16,443	5,063		
Kongo Soweto	7,765	8,678	16,443	5,063	1.2	13,649
Total	560,613	484,445	1,045,058	350,739		

Source: 2009 Kenyan Population and Housing Census, Nairobi, August 2010.

economic interaction, most of them unplanned and informal. Streets are alive with activity. Nevertheless, incipient urban fragmentation can be sensed with the emergence of both continuous and discontinuous urban features.

### *Nairobi*

In *Nairobi*, urban sprawl is associated with a rapidly deteriorating quality of life that is particularly detrimental to the poorer segments' ability to meet their basic needs. Most affected are housing, water supply, sewerage and transport. Access to social services and infrastructures is dependent on income rather than population density (although there is a clear correlation between income and residential densities), with excellent standards of provision in well-off areas and next to none in high-density, low-income areas. Ethnic spatial segregation in colonial times resulted in a tri-partition of *Nairobi*, with most Westerners residing in the north-western and western high-value areas; Asians in north-eastern areas; and Africans concentrated in densely populated areas to the east and south. Since independence, this residential segregation has been reduced in the sense that income rather than ethnicity is today's tacit criterion. Nevertheless, the ethnic partition has not been completely eradicated and these three distinct sections can still be recognized.

*Nairobi* requires 15,000 new housing units every year, but only 3,000 are built at best. As a result, it is mostly claimed that informal settlements and slums accommodate more than half the population in crowded, unplanned and inadequately serviced settlements. From the 2009 *Kenyan Population and Housing Census* results, however, it can be derived that the *Nairobi* slum population consists of a 'mere' 1,045,058 people or 33.7 per cent of a 3.1 million total population. Likewise, the census figures appear to shatter the long-standing perception that the Kibera slum neighbourhood populations add up to anything from half a million to one million people. The census data appear to set this figure at just under 400,000.

However, depending on the source, the population figures of the combined Kibera sub-locations continue to vary. The 1999 and 2009 census results suggest a 14 per cent inter-decade *decline* in the Kibera population from 450,000 in 1999 to 384,000 in 2009. This contrasts sharply with the area's number of registered voters for the 2005 and 2010 referendums, which recorded a half-decade (2005-2010) population *increase* with 23 per cent (after including those below the age of 18 years who are not eligible to vote). Moreover, it should be noted that voters' rolls do not reflect an estimated 35 percent of the total Kibera population that remains unregistered for whatever reasons.

But slum figures derived from the census should be interpreted with caution for several reasons. Firstly, the census was not an exercise in slum identification and does not enumerate incidence of insecurity of tenure. Since the internationally accepted definition of slums is based on inadequate access to safe water, sanitation and other infrastructure; poor structural quality of housing;

overcrowding; and insecure residential status the census data therefore cannot give accurate figures on the number of slum dwellers. Secondly, recent claims in Kenyan papers that the total *Nairobi* slum population is a mere fraction of the share previously assumed appear to be based on selective interpretation of data only from major slum locations (Kibera, Embakasi, Mathare, Korogocho, Viwandani and Kahawa). Thirdly, it should also be understood that throughout Africa slum dwellers are increasingly found beyond the municipal periphery in the Greater Metropolitan Region. As *Nairobi* takes on a regional city scale, the wider concept of the regional city should be applied also to the count of slum inhabitants.

Indeed, formal development of residential opportunities for *Nairobi's* low-income populations is often proposed for the urban periphery or in areas such as *Athi River* and *Mavoko*, some 25 km away. In these locations the poor incur substantial costs, in terms of both time and money, when commuting to employment opportunities in the capital. What is often not realized is that these new outlying locations are rapidly becoming vibrant urban settlements in their own right, being spatially decentralised from the crowded metropolitan core while still within a relatively short distance from the city. Kenyan policymakers recognise that providing land to the poor is ultimately a political issue driven in many respects by concerns for distributive justice and sustainable livelihoods. However, no city was built overnight (except temporary refugee 'cities' in emergency situations). Based on relatively cheap land in the urban periphery and the expectation that *Nairobi's* satellite cities will, over time, provide viable and vibrant urban economies of their own, the allocation of low-income residential functions at a distance from the metropolis is preferable in the longer term, despite short-term inconveniences.

### *Kigali*<sup>12</sup>

Many households were displaced across Rwanda during the 1994 conflict. Most had their assets destroyed and found themselves literally destitute after seeking a safe haven in neighbouring countries. Political stabilisation brought returnees back by the hundred thousand, causing the country's urbanisation rate to soar to 17 per cent in 2002, compared with a mere six per cent in 1991. Most returnees found themselves in direct conflict with the government and the municipality of *Kigali* over land tenure arrangements. In Rwanda, land is the exclusive property of the government, as individual claims to land have been erased with the loss of records during the genocide. Today, government-leased land must be developed within five years and is subject to various fees. The government is also increasingly allocating land to private companies in order to enhance revenue. Many issues arise from this approach and they have some effect on the urban system. To start with, those private companies or individuals cannot always afford the fees or build housing to agreed standards within five years, so much so that many sell off before the five years lapse and proceed to squat some other land plot. Second, the competition within the private



sector has resulted to massive displacements, with evictions by both public and private institutions. Up to 96 per cent of the conflicts dealt with by Rwanda's ombudsman are land-related. The result of these tensions over the formal land market is none other than a proliferation of informal developments on under-serviced land.

### The Shortcomings of Conventional Urban Land Administration and Management

In Eastern African cities, a host of legal and administrative hurdles hinder the proper operation of both formal and informal property markets. Most importantly, market information is pitifully scarce. This reflects the fact that only a fraction of land transactions are documented and registered. Moreover, lack of urban inventories makes it difficult to forecast trends in future demand for land. Another commonplace constraint is the plethora of professionals involved in land transactions (lawyers, valuers, surveyors, planners, etc.) who all add to costs and delays. One-stop shops would enable local authorities or government departments to cut procedures short and lower transfer costs.

In Kenyan cities, securing approvals for subdivisions and change of user is particularly cumbersome as it involves multiple government institutions. An application for an urban subdivision may take 29 months from formal submission with the Nairobi City Council until sub-titles are issued by the Commissioner for Lands. Similarly slow processes apply to applications for lease extensions.

The lengthy procedures and high costs associated with for-

mal transfers are also the norm in *Dar es Salaam*, while in Ethiopia (bureaucratic procedure and corruption aside) land transactions are severely affected by the law on power of eminent domain (Proclamation 455/2005) which only provides for compensation for improvements (buildings and structures) to land, ignoring both increased land values and length of any remaining lease period. The law also negatively affects leasehold transferability, as it only allows transfers made as surety or collateral rather than selling the leasehold interest.

In Rwanda, registration of title to land is compulsory. Nevertheless, any land rights acquired by sale, inheritance or under customary or indigenous practices (representing 98 per cent of all land holdings) remain largely undocumented- and therefore informal due to associated costs and lengthy procedures.

In Burundi, poor consultation, minimal consensus-building at the policymaking stage and limited public awareness of land policy has resulted in a confused land tenure situation. Provisions on land ownership, access and transfer as spelled out in the Land Code are barely understood and therefore hardly implemented. Less than five per cent of the land is registered and oral traditions predominate as far as ownership is concerned.

In Uganda, up to 49 procedural steps combine with the high costs of tenure regularisation for informal settlements effectively to prevent the urban poor from converting customary to formal leasehold tenure. However, few things better illustrate the impact of confused mixed forms of land tenure on urban land market transactions than the *mailo* tenure system in *Kampala*, as discussed in Box 4.5.



▲ Kigali, Rwanda. ©Ole Doetinchem

#### BOX 4.5: HOW KAMPALA'S MAILO LANDS THWART URBAN DEVELOPMENT

In Kampala, the formal land market is constrained by structural factors like complex tenure systems, absence of a coherent policy, unrealistically high planning standards and regulations, incomplete registration systems and taxation regimes and lack of information, as well as by socioeconomic factors like speculation and corruption.

Currently, 52 per cent of Kampala is held under *mailo* tenure, 30 per cent is privately leased public land administered by the City Council (KCC), 7 per cent is owned by the government and 11 per cent by institutions. Most of the land in Kampala suburbs is also under *mailo* tenure. The dual system of ownership and the unplanned, disorganised settlement patterns on *mailo* lands have had a significant effect on the development of an efficient land market in the Kampala region.

Before an owner can sell or develop *mailo* land, tenants must be compensated or resettled (if they have occupied the plot unchallenged for more than 12 years). Tenants are recognized as 'customary owners' and have rights to sell or mortgage the land but only in consultation with the *mailo* land title deed holder. Likewise, this title deed holder cannot sell the land until the customary owners are adequately compensated. However, the tenants (customary owners) cannot sell the land as they have no clear title. With little vacant public land remaining in Kampala and much of the *mailo* land occupied by tenants, there is in effect next to no plot of substantial size available in Kampala for further residential development.

Acquiring land on leasehold terms from the City Council is equally cumbersome and may take as long as five years, largely on account of political interference, bureaucratic procedures and inevitable bribery to keep an application moving through the system.

Moreover, since urban land is scarce, the average price of a □ acre (1,050 m<sup>2</sup>) in up-market Kampala is equivalent to US \$120,000, compared with US \$60,000 at the lower end of the market. Further out of the city (15-20km), larger tracts of unserviced *mailo* land sell for US \$25,000 per acre (4,200 m<sup>2</sup>). Therefore, construction of new urban housing estates at prices affordable to low- and middle-income groups has become virtually impossible.

Sources :Kituuka (2005); Giddings(2009)

### Informal Settlements as a Response to Land Market Deficiencies

In practice, where formal land delivery systems fail or fall short, the market finds a way to meet demand. Failure of land reform to deliver affordable urban land in a timely manner and in sufficient quantities for predominantly low-income households has inevitably created informal land markets.

Eastern Africa's experience - particularly in Ethiopia, Kenya, Tanzania and Uganda, where more information is available - shows that informal land market operations fill significant governance voids. Informality helps overcome the inability of formal markets to provide for the huge demand for affordable urban plots, irrespective of the prevailing land tenure system

in the country. The region's informal urban land markets operate, on the one extreme, in places where universal private tenure prevails, like in Kenya, and, at the other end of the spectrum, in cities where public authorities struggle to maintain control over subdivisions, title deed issuance and unauthorized construction in the face of increasingly prevalent illegal subdivision of privately or communally held land, as in Rwanda and Uganda. In other cases, civil servants have effectively 'privatized' formal land supply, as has happened with Tanzanian 'ten-cells' and *mitaa* land approvals.

In all cases, though, and however informal the prevailing system may appear in legal terms, land transaction processes are well-structured and governed by generally understood communal norms and procedures, and as such can play a major role in overcoming the delivery failure of formal urban land markets. Commonly endorsed and respected grassroots institutions and procedures allow for highly decentralised access to urban land, with a significant degree of security of tenure, and with prompt redress and arbitration procedures in case of disputes.

The vast potential of community regulated urban land transactions and settlement development is much underestimated and little understood by the public sector. Rather than writing off informal procedure as illegitimate, Eastern African nations should consider institutionalizing socially regulated informal land and housing markets. Unlike formal markets, they offer pragmatic, efficient and low-cost procedures that could significantly alter the slum and informal settlement situation in many of the region's cities. Recognising and institutionalising community-based land and housing management could reduce management and administration burdens on municipalities in a cost-effective manner. It would further allow for decentralised tenure and title registration as the foundations for subsequent pragmatic public sector interventions in informal settlements with regard to spatial lay-out, minimum allowable plot size and public access, as well as service provision in cooperative partnership with the grassroots institutions that micro-manage socially regulated land transactions.

### Ethiopia

Under Ethiopia's informal supply system, land can be accessed without planning or documentation. Transfer of unregistered urban land is a function of personal connections. Transactions are confirmed by simple agreements which may be endorsed by local administration (*kebele*) or by power of attorney. Although informal land allocation is widespread and the main factor behind land squatting, unplanned settlements and slums, about 90 per cent of these allocations represent informal subdivision of formal land holdings. Institutionalising these informal procedures would not just act as an incentive to land registration and facilitate municipalities' spatial and other interventions, it could also restore some of the municipal tax revenue which marginalised, ineffective formal and informal markets are unable to generate.





▲ Kampala, Uganda. ©Duncan Purvey/iStockphoto

### Tanzania

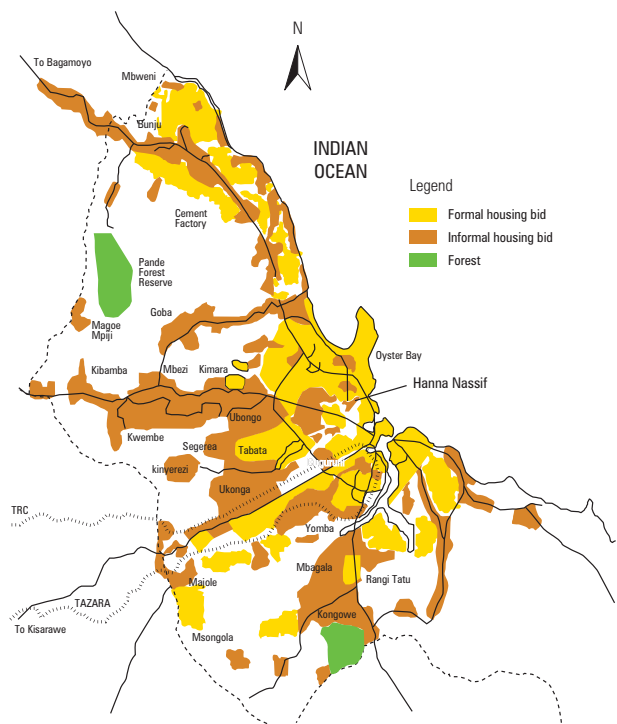
Informal access to urban land in Tanzania can be secured through three distinct channels: (a) land invasion (quite limited in actual scale); (b) allocation by local leaders, elders or acknowledged owners, for a token fee; and, frequently (c) land is purchased in unplanned areas from an acknowledged owner and registered with a local leader or the local branch of a political party.

Informal market transactions are witnessed by relatives, friends and community leaders; legitimacy is derived from social recognition that allows redress and arbitration by community leaders in case of conflicts. Informal as these procedures may be, they help overcoming the failures of formal markets as experienced by the lower-income segments of the population. Since ward officials and dispute resolution committees are part of formal government and linked with the formal judiciary, informal land access has emerged as a recognised land regularisation sub-system with linkages to the formal land registration frameworks.

### Uganda

With about 85 per cent of *Kampala's* 1.8 million inhabitants living in informal settlements and slums, massive failure of the formal market to deliver land for low-income residents could not appear more clearly. Many titled land subdivisions and transfers are not reflected in the land registry due to the high costs attached. Registration is a precondition for the use

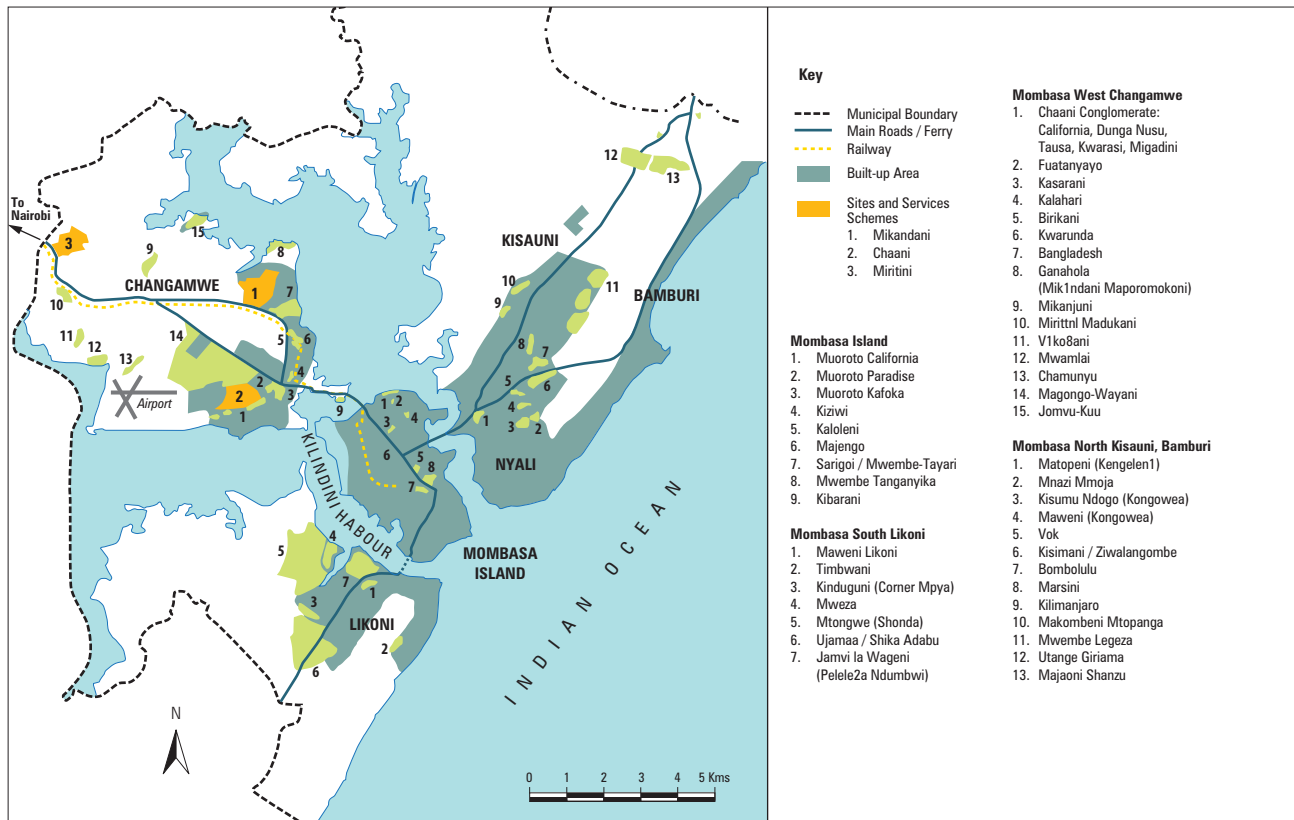
MAP 4.4: DAR ES SALAAM: FORMAL AND INFORMAL HOUSING (2002)



Source: Kimani, M. *Investigating the Effects of Property Rights Formalisation on Property Market in Informal Settlements: The Case of Dar es Salaam City, Tanzania*. MSc Thesis, IIGISEO, Enschede, 2007.



MAP 4.5: MOMBASA INFORMAL SETTLEMENTS



Source: Janice Edwards.

#### BOX 4.6: HOW MOMBASA'S 'SWAHILI LAND MARKET' PLAYS AGAINST TENANTS

Owners of land along the 16 km Mombasa coastline were issued with freehold titles under the Land Titles Act 1908. Any land not claimed became 'Crown land' for allocation through the formal market system. As in nearly all Kenyan cities, land in Mombasa is now mostly in private hands. Local land tenure has been influenced by the Sunni-Arab legal system, whereby third parties are allowed to own chattels (movable possessions) or crops on another person's land, sometimes in return for a rent or crop sharing. Such land users are called 'tenants-at-will' and can be evicted at short notice without compensation for improvements, although they can take the crop and chattels with them.

In the 1920s, the colonial government introduced town planning in Mombasa and in the process displaced some people who were to give way for access roads. The Municipal Council devised a 'village layout' system that allowed for large parcels to be subdivided into 120x240 ft plots for temporary accommodation for the

displaced. Since the system was to ensure later re-development with higher quality housing, only temporary shelter was allowed. However, it took the authorities some time before they facilitated housing for an expanding population, and 'village layout' plots became the norm rather than the exception.

Titled land owners continued to subdivide plots for documented letting to 'tenants-at-will' who paid monthly rent. The land owner would sign documentation on behalf of the tenants for approval by the municipal council, showing the location of the plot in the overall subdivision layout. The transaction involved a simple sale agreement witnessed by the village headman (*mzee wa kijiji*) or a power of attorney witnessed by an advocate. Although tenants were given receipts for monthly land rents, they had no formal registration document. Today, more than 50 per cent of Mombasa's population lives on land accessed through what became known as the 'Swahili land market' and in accommodation

referred to as 'Swahili houses' that typically provides single-room shelter.

Since much of the land in the 'Swahili land market' is available under unrecorded transactions, government agencies have no records and, consequently, act as though these markets do not exist. Should an owner decide to transfer land to a third party, the new owner can give tenants one month's notice without any compensation for improvements. With sharply rising land prices, this is not an unlikely scenario. In the Mombasa areas of Kisauni, Magongo and Likoni, for instance, a non-titled 1,000 m<sup>2</sup> plot was selling in 2000 for 180,000 Kenyan shillings (KES) (or US \$2,200) compared with KES 300,000 (US \$3,700) for titled land in the same area. These prices have since soared with titled land in Likoni going for KES 600,000 (US \$7,400) and for KES 750,000 (US \$9,260) and KES 1million (US \$12,340), in Kisauni and Magongo respectively.

Source: Gatabaki-Kamau et al., 2000

of title deeds as loan collateral, but this is unpopular: indeed, this is perceived as a promise to forfeit the property under pressure from excessive interest rates on the loan. Moreover, successive subdivisions have shrunk many plots below legal minimum size, making formal registration more complex.

Today, informal urban land supply mechanisms are slowly gaining recognition in Uganda for their pragmatic approach. More specifically, public authorities are realising that the costs, delivery times and security of tenure associated with informal systems are suitable not just to the urban poor, but also to local authorities, which can adapt governance and regulatory modalities accordingly, in the process alleviating the burden of municipal land adjudication. The informal system is simple, well understood and adhered to and affordable; on top of this, it does not appear to be all that different from the formal urban land market as it operates in *Kampala*, where many titled land transactions are not reflected in the land registry. All of this would suggest that, with proper steering from formal urban land authorities, the informal sector may pave the way to self-regulation of land markets in cities.

### *Kenya*

In the wake of a near complete absence of vacant government-owned land in Kenyan cities, the following land supply sources have emerged: (a) subdivisions of titled land; (b) public development projects; and (c) transactions on untitled land. Subdivision of titled lands often renders ownership informal, as most resulting subdivision plots are not titled. Under this format, peri-urban land is bought by a group and each member is issued with a share certificate. The land is then cut up and occupied without the mandatory subdivision approval that would require proper plan layouts, cadastral surveying and provision of infrastructure and matching costly local municipal council standards. Unregistered selling of share certificates continues unabated, only witnessed by the officials of the group. Thus, like squatter settlements (illegally occupied and subdivided lands), many settlements (like the Zimmerman Estate in *Nairobi*) cannot be titled only because they fail to meet the criteria required. As a result, formally titled land becomes classified as informal due to the physical developments thereon.

Transactions on public development projects include site-and-services or tenant-purchase schemes. Sales are carried out on the market using legal instruments such as power of attorney and may or may not be registered as *documents*, though not as land transfers. Examples in *Nairobi* include the National Housing Corporation 20-year tenant-purchase scheme at Nyayo High-rises, or the numerous site-and-service projects that have not been titled to date. These site-and-services plots nevertheless continue to change hands without registration.

Transactions on untitled land involve public land (way leaves, open spaces, road reserves, etc.) for which provincial authorities or council officials issue quasi-legal letters allowing 'temporary' occupation. The allottees who built structures can sell these in the informal market, witnessed by the

authorities that issued the letters of allocation in the first place, or by village committees as, for instance, is the case of the Korogocho squatter settlement in *Nairobi*.

## The Political Economy of Urban Land

The relationship between land and political power is an inextricable one, as is the one between land and neo-liberal market rule. Eastern African countries are emerging from a recent past where land was either customary or owned by a colonial government. When countries became independent, these two systems of ownership continued side by side. Urban land was generally owned by government and leased to individual users to facilitate development controls, land use efficiency through planning, and collection of revenue through taxation. Public urban land allocation through the formal land markets was intended as a significant source of income for local authorities. However, things did not work that way in many of the region's countries for several reasons, including:

- Lack of capacity among local authorities with regard to participatory planning, zoning, subdivisions and development control;
- Widespread corruption among officers responsible for managing government-owned land;
- Lack of adequate, accurate and updated urban land information;
- Lack of forward planning to provide adequate supplies of land at appropriate locations and at affordable prices, a deficiency that has encouraged sharp rises in urban land prices; speculation and use of 'short-cuts' to acquire land; and
- Absence of viable legal redress options, including land restitution or compensation for undue process related to land and economic activities.

Well-connected political and economic elites have taken control of urban land, restricting equitable access for a broad array of economic uses and occupations. The non-connected majorities have systematically been excluded from formal access to urban land by cumbersome administrative processes, leaving them no option but informality with significantly different degrees of security of tenure. The resultant risky nature of informally accessed land and housing has encouraged investment in poorly-built housing in informal settlements and slums.

Informally accessed land implies loss of municipal revenue, including land transfer fees, rates or land tax. Worse still, urban land, which is a finite resource, is not always used as efficiently as it could – far from it. An effective system must be found which can deliver adequate amounts of land in a timely and cost-effective way.

Alternatives can be found in just about every Eastern African city to make better use of urban land as a municipal revenue source. For example, next to the geographical centre of *Nairobi* lies a former large railway yard with an eclectic selection of decommissioned rolling stock nominally serving as a railway museum. Immediately adjacent to the

central business district, this functional hole in the heart of the metropolis is, perhaps, one of the worst examples of foregone spatial intervention opportunities. The value of this extremely well-located parcel of land is immense and careful redevelopment would generate much-needed revenue for the city council. Other large cities in Eastern Africa should critically review under-used urban parcels and bring to market any land which historic functional allocation can and should no longer be sustained today. Such functions include military compounds, derelict river frontages and other underused prime urban sites.

In Tanzania, the government has reformed local authority revenue collection, abolishing ineffective instruments and streamlining municipal rate systems (rate structures and collection procedures). Reforms also include central government compensation of local authorities' revenue shortfalls<sup>13</sup>.

Urban property taxation varies significantly across Eastern African cities. For example, Tanzania will tax only buildings, and Kenya only land. Uganda makes tax assessments based on annual rental value, and Kenya on capital-based unimproved site value. Tanzania supports use of market capital value, and building valuation is based on replacement cost.

Cities in the East African Community feature similar tax collection and enforcement procedures. Penalties for late payment of rates range from 1 to 3 per cent per month in some cities.<sup>14</sup> To recover outstanding debt, local authorities are allowed to attach rents and go to court for charging orders on personal property to recover unpaid taxes, the alternative being to place a charge on the property. Although every Eastern African country has a variety of taxation instruments at its disposal, they are seldom used. This can have to do with ineffectual tax administration<sup>15</sup> and management, which make it difficult to track land owners and absentee landlords and, as a result, collection of rates is limited both in scale and scope.

## New Tools for Land Administration and Management

At the moment, most Eastern African countries are modernising land administration and management systems. Kenya, for instance, has completed its land policy revision and also adopted a new constitution which allows for many types of land intervention. In Ethiopia, decentralisation of land information is under way. Generally, however, Eastern African countries feature poor land administration and information systems, although these are critical for market efficiency, and particularly to prevent unlawful public land manipulation for private gain.

High-precision tools like electronic land records based on geographic information systems (GIS) are readily available, cost-effective and especially desirable for decentralised access to land information. Many practical innovations can help improve broad-based access to land information, including:

- civil society- or community-led enumeration to collect land data on informal settlements;
- Geodetic systems using information collected by the US space agency;

- Land/geographic information systems to help create data frameworks;
- High-accuracy, off-the-shelf global positioning systems (GPS) for use by local communities; and
- One-stop shops for urban land transactions.

Moreover, land policy processes should be consultative, inclusive and participatory in order to ensure consensus and to reduce the potential for confusion or conflict due to dual tenure systems in urban areas. Recognition of the positive aspects of community-based land management - the current foundation of informal urban land markets - should be promoted to guide the transition to full residential tenure regularisation.

Rwanda and Ethiopia already recognise existing customary interests in land, provided that they convert to statutory leases whenever transactions take place. Policymakers should learn from the informal processes that handle the bulk of Eastern Africa's urban land transactions as a starting point for reform. Learning from informal market operations is the only feasible way forward if land management and administration processes and procedures in East African cities are to be adjusted to the realities on the ground.



▲ Dar es Salaam, Tanzania. ©Lance Bellers/iStockphoto



## 4.4

# The Geography of Climate Change

### Local Authorities and Adaptation to Climate Change

Local authorities in Eastern Africa are lagging when it comes to addressing the challenges of climate change, and hardly any have policies or programmes in place. This contrasts with national governments, many of whom now are involved through the United Nations Framework Convention on Climate Change (UNFCCC). The governments of Burundi, Ethiopia, Rwanda, the Seychelles, Tanzania and Uganda have developed National Adaptation Plans of Action with support from Framework Convention services. Kenya has developed a National Climate Change Strategy of its own. Ethiopia and Tanzania have also developed various adaptation programmes.

There is, however, not much present in terms of *urban* adaptation strategies. Oxfam, the World Bank, and UN-HABITAT have all commissioned studies in order better

to understand the effects of climate change on cities. UN-HABITAT is now exploring urban climate change-related mitigation and adaptation. In Eastern Africa, a pilot study has been undertaken in *Kampala*, but the recommendations have not yet been implemented. While awareness has been enhanced in a number of other Ugandan cities, many are yet to develop their own adaptation and mitigation strategies.

Current measures to deal with extreme weather events in Eastern African cities are basic at best. These piecemeal though positive initiatives cannot deal with climate disasters like extreme flooding, drought, fires, strong winds, etc. The effects of climate change appear to be increasingly destructive for urban infrastructures and systems in Eastern Africa. In 2009, 31 mayors from various African countries endorsed the 'Nairobi Declaration' in a bid to enhance integration of climate change interventions into their urban development plans. But here too, the recommendations have yet to result in policies and practical programmes. With a proper framework,



▲ Flood waters near Jamame, Southern Somalia. ©Manoocher Deghati/IRIN

ongoing initiatives should be integrated into cohesive urban climate change adaptation programmes; they include clearing of urban drains; providing flood controls before the onset of seasonal rains; improved water and sanitation in urban informal settlements; and the development and maintenance of urban open spaces.

### Climate Change and Cities: How much do we know?

Meteorological stations in several Eastern African countries provide basic weather information and climatic data. However, this information is not used optimally, partly because it has been specifically designed for the aviation and agricultural sectors, rather than for urban managers.

National meteorological institutions are linked with regional and international organizations that work on various aspects of local and regional climate. In Eastern Africa, one such institution is the Climate Prediction and Application Centre (ICPAC) which operates in *Nairobi* under the aegis of the subregional Intergovernmental Authority on Development (IGAD). The facility focuses mainly on drought monitoring, although its mandate includes provision of information on climate change disaster management for Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, Sudan, Tanzania and Uganda<sup>16</sup>. The information, though available, is seldom used to manage or mitigate the effects of climate change on Eastern African cities.

The Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (the 'Physical Science Basis'), is a

major resource for climate change information on Eastern African cities<sup>17</sup>. The report includes regional climate change projections and reviews anticipated effects, vulnerabilities and suggestions for adaptation. The report also provides information on regional and sector-specific effects. It includes systemic information on climatic phenomena, as well as their effects on agriculture, food security, biodiversity, safe water and health. The report finds that Africa's low capacity for adaptation is worsened by the high incidence of poverty. Authors further state that:

*'...it is very likely that climate change will make sustainable development more difficult [for African countries], particularly as measured by their progress toward achieving Millennium Development Goals for the middle of the century. Climate change will erode nations' capacities to achieve Goals calibrated in terms of reducing poverty and otherwise improving equity by 2050, particularly in Africa...'*<sup>18</sup>

Sustainable development would reduce the vulnerability of many African countries. The Organization for Economic Cooperation and Development (OECD) has reviewed the climate change vulnerability of low-elevation cities in Africa<sup>19</sup>. Of the capital cities in Eastern Africa, *Dar es Salaam*, *Djibouti* and *Victoria City* stand to be the most severely affected by rises in sea level, although the capital of the Seychelles would be less vulnerable due to its proactive policies.

National adaptation strategies to climate change are quite similar across Eastern Africa. Most are drawn from the National Adaptation Plans of Action (NAPAs) sponsored by UNFCCC. The strategies in the region aim mainly at developing economic resilience. Infrastructure is one of the



▲ Lamu Island, Kenya. ©William Davies/iStockphoto





▲ Low cost housing in Victoria, Mahé, Seychelles. ©Sapsiwai/Shutterstock

sectors that are short-listed for interventions through climate change adaptation. Capital expenditure on improved physical infrastructure in critical areas such as water resources would reduce economic and social pressures on city residents. However, most of the current initiatives are in the agricultural and forestry sectors, focusing on land use changes rather than urban areas.

### *The Seychelles*

In the Seychelles, the main strategy for climate change adaptation pursues the right balance between development and environmental protection. A growing population and increasing demands by the tourism industry are putting under strain an environment that is home to scores of birds, reptiles and plants native only to the Seychelles. In 1990, *Victoria City* became the first African city to draw up a 10-year environmental management plan. The archipelago features the highest proportion of environmentally protected land in the world, i.e., more than 50 per cent of its total surface area. However, achieving the right balance between development and the environment presents small island states with tough challenges.<sup>20</sup> *Victoria City* is low-lying and vulnerable to the effects of climate change, especially storm surge flooding and sea-level rise. However, the Seychelles authorities have developed dedicated policies for protection against sea-level rise and adaptation for the poorer segments of the population. An example of an adaptation initiative is the land reclamation

project on Mahé, the largest island, to provide additional space for housing. Mahé is home to 90 per cent of the islands' population of 85,000.<sup>21</sup> One of the Seychelles' strategies is to encourage property developers to set up independent trust funds to finance environmental projects in local communities.

### *Eritrea*

Climate change also poses serious challenges to Eritrea. The country's development priorities include agriculture, livestock keeping, forest conservation, water resource management, coastal and marine environmental protection and safeguarding public health. Eritrea has developed a National Adaptation Plan of Action (NAPA) consistent with ongoing national strategies, plans and frameworks for sustainable development. The resulting adaptation projects are closely linked with national plans regarding poverty reduction, improved food security, disaster preparedness and prevention strategies, as well as promotion of sustainable development. In terms of policies and as part of NAPA, Eritrea looks to mainstream adaptation to climate change into national development, including through sector-specific policies.

### *Burundi*

Burundi's strategies for climate change adaptation focus mostly on current disruptions in rainfall and hydrometric series in most parts of the country. Rainfall deficits have compounded aridity, significantly drying up wetlands, rivers



#### BOX 4.7: KAMPALA LEADS THE CLIMATE CHANGE INITIATIVE IN EASTERN AFRICA

As the recognised engines of national economic development, cities today are also major contributors to local environmental deterioration and pollution as well as to the attendant worldwide climate change and its challenging effects. Being part of the problem, cities are also part of the solution, and this is the rationale behind the *Cities and Climate Change Initiative* which UN-HABITAT launched in early 2009 at the request of its Governing Council.

The Initiative provides city authorities with the expertise, policy advice, methodologies and information they need to meet the daunting challenges. The newly-created Sustainable Urban Development Network (SUD-Net) complements these efforts, including with exchange of best practice. The project operates in partnership with the UN Development (UNDP) and Environment (UNEP) Programmes and a wide range of other relevant organisations.

No region in the world is more exposed to the effects of climate change than Africa. Therefore, it was natural for two African cities – Maputo,

the capital of Mozambique, and Kampala, the capital of Uganda – to feature among the four ‘pilot’ conurbations that have been selected to launch the initiative in the developing world. Indeed, both cities provide an apt illustration of the typical threats climate change is posing for conurbations in the developing world.

*Kampala* is home to 1.2 million along the shores of Lake Victoria. The city is already experiencing increased rainfall. Surface run-off and fragile drainage systems have increased the vulnerability of infrastructure, housing, social services and livelihoods. Since these effects are not felt with the same intensity across the conurbation, area-specific vulnerability analysis provides better clues on mitigation and adaptation measures. Pollution from domestic biomass fuels and increased motorised transportation add to pollution, and therefore energy efficiency is a significant concern. Low-income settlements are located in high-risk areas with poor sanitation and prone to flooding, with inadequate waste management contaminating water resources and

run-off weakening hill slopes. Encroachment on fragile ecosystems and blockage of the drainage systems has increased the occurrence of flash floods, with serious health consequences.

Against this challenging background, the initial assessment carried out under the Initiative has made the following three main recommendations: (i) establishing a national/city climate change network comprised of various stakeholders addressing climate change; (ii) enhancing the awareness and capacities of the Kampala City Council with regard to climate change mitigation and adaptation; and (iii) increasing the synergies and links between national and local climate change policies and programmes through consultations and policy dialogue.

Various demonstration projects including city ‘greening’, alternative energy, clean wood use, climate-proofing of infrastructure and energy-efficient urban transport systems are now under way in Kampala.

Source: UN-HABITAT, *Cities and Climate Change – Initial lessons from UN-HABITAT*. Nairobi: UN-HABITAT 2009.

and lakes. Torrential rains and extreme temperatures also go to highlight the country’s ever-growing vulnerability to climate change. Declining agricultural production, associated loss of human lives, repetitive floods, landslides, increased risks of diseases and loss of biodiversity, etc., are among the consequences of climate change in Burundi. The government’s commitment to addressing the issue is evidenced in the 2007 National Adaptation Plan for Action, which rationale is to identify immediate and urgent steps toward adaptation and mainstreaming them in the country’s development strategies. Human and institutional capacity building is also included in the Plan.

#### *Tanzania*

In *Dar es Salaam* adaptation strategies to climate change are designed at different levels, depending on the groups involved. They are largely in line with the National Adaptation Plan of Action. A dedicated implementing authority has been established and budgets allocated for some adaptation schemes. A major shortcoming is that adaptation efforts are not yet integrated into other national development programmes. In the energy sector, Tanzanian parliamentarians have recommended that the government look for alternative sources of energy and reduce dependence on climate-sensitive hydro-electric power. However, most of the poor in *Dar es Salaam* still rely on charcoal for primary energy needs.

Water stress (i.e., excessive demand) and flooding worsen

sanitation conditions in low-income areas. The *Dar es Salaam* Municipal Council has privatized water supply and waste management to improve service delivery, which, has indeed largely happened. However, challenges remain as better access to adequate water and sanitation services largely keeps eluding the poorer segments of the population.

#### *Somalia*

Climate change information on *Mogadishu* is scarce. However, in a 2005 report, on the ‘*State of the Environment in Somalia*’<sup>22</sup>, the United Nations Environment Programme (UNEP) highlighted some of the country’s climate-change related problems. *Mogadishu* is vulnerable to recurrent droughts, which come as symptoms of complex inter-linkages between five distinct factors: population growth, dwindling resilience of the fragile eco-system, environmental degradation, weather cycles, and the absence of agricultural or other type of rural development.

Across Eastern Africa, some opportunities to combine mitigation of the effects of climate change with local environmental improvements can already be found. A 2003 survey showed that 25 per cent of Kenyan children in areas without waste collection suffered from diarrhoea, compared with 10 per cent in areas where waste was collected<sup>23</sup>. In Ethiopia, incidences of respiratory diseases are six times higher in areas where waste remains uncollected<sup>24</sup>. Box 4.8 outlines urban waste management problems on the East African island of Madagascar.

#### BOX 4.8: HOLISTIC URBAN INTERVENTIONS IN ANTANANARIVO



▲ Antananarivo, Madagascar. ©Mogens Trolle/Shutterstock

Together with growing numbers of visitors and changing consumption patterns, demographic expansion results in greater volumes of solid waste in Madagascar's capital Antananarivo. Services are not up to the challenge as only 25 per cent of Antananarivo's solid waste is collected with only a fraction recycled. Substandard waste collection encourages illegal dumping along the roadside and on beaches, while lack of suitable landfill sites is a challenge to waste processing. Open waste burning is commonplace, with the attendant threats to air quality and public health.

Water quality comes under threat when solid waste is dumped in or near surface or groundwater resources (UNEP, 1998). Intensive animal rearing, especially goats around urban areas, is a further issue for the environment and human health. Contamination and eutrophication (over-fertilization causing a surfeit of algae) of water courses lower the ability of the natural systems to provide vital functions such as water quality regulation and nutrient cycling, while at the same time affecting biodiversity

and providing breeding sites for parasites and bacteria.

However, the Municipality of Antananarivo has decided to meet the challenge under a holistic approach, with help from Cities Alliance and UN-HABITAT. The *City Development Strategy for Antananarivo, Infrastructure Development, Urban Services Improvement and City Poverty Strategy* sets out four major objectives: (i) infrastructure improvement; (ii) urban poverty reduction; (iii) crime prevention for urban safety and; and (iv) formulation of a metropolitan-wide institutional and fiscal framework. The strategy provides decision-makers and financial institutions with a medium- and long-term vision of metropolitan development and a framework for short- and medium-term water drainage, waste water and solid waste management interventions. Neighbourhood-scale strategic plans focus on basic services and improved infrastructure as well as the socio-economic integration of underprivileged and vulnerable groups. The objective of Component (iii) is to coordinate and develop schemes under the existing strategic

and action plan for urban safety. All these are envisaged as components in a new institutional and fiscal framework to be developed for the Antananarivo metropolitan area.

The strategy and action plan have been adopted and institutional arrangements for implementation are now under review. Simultaneously, a metropolitan transportation strategy is under development as part of a separately funded programme by another donor. So far, 16 neighbourhoods have developed strategic plans, and the Municipality has adopted a methodology and a framework for replication. A new municipal department for support to local and partner initiatives has been created. Recommendations for a municipal strategy for housing and land tenure regularization are forthcoming. However, legislative reform has not yet been completed. This example from Madagascar shows how sector-specific problems can give rise to mutually supportive city or metropolitan-wide interventions with multiple objectives through holistic approaches.

Sources: UN-HABITAT, *City Development Strategy for Antananarivo, Infrastructure Development, Urban Services Improvement and City Poverty Strategy*.

#### BOX 4.9: EASTERN AFRICA AND THE NILE WATER DILEMMA



▲ The River Nile, Egypt. ©Doctor Jools/Shutterstock

Egypt was granted near total control over the use of all Nile waters under a 1929 agreement signed by the United Kingdom on behalf of its Eastern African colonies. The agreement was reaffirmed in a 1959 treaty that guaranteed access for Egypt and Sudan to 55.5 and 14.5 billion m<sup>3</sup> respectively, out of a total annual volume of 84bn m<sup>3</sup>. The 6,695 km-long River Nile, together with its upstream tributaries, wetlands and lakes, currently sustains life for at least 300 million people in an area sprawling over 3.1 million km<sup>2</sup> in 10 riparian nations (Burundi, DR Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda). All these nations have fast-growing populations and face increasing competition for water between cities, manufacturing, agriculture and energy generation. Most Nile basin countries have not yet taken advantage of the potential the river holds in terms of urban water supplies, hydropower generation, and irrigation; but with climate change further contributing to regional water scarcity, access to the waters of the Nile and its tributaries has now become a factor of significant regional tension.

The 1929 treaty prohibits any activities that could threaten the volume of water reaching Egypt, giving the country's government the right to inspect and veto water extractions along the entire length of the Nile and its tributaries. From independence onwards, Eastern African nations have expressed their discontent with the treaty and have lobbied for a review. On the one hand, Egypt and Sudan are largely deserts and oppose any new treaty that would reduce their historic powers of control and water shares. On the other hand, several Eastern African riparian countries argue that they were not parties to

the 1929 and 1959 arrangements and consider them as outdated vestiges of a long-bygone colonial era.

A significant share of the 900 million people worldwide without access to adequate supplies of safe drinking water can be found in Africa, and particularly in water-stressed Northern and Eastern Africa. Fresh-water shortages are already worsening under pressure from rapid demographic growth and competition among thirsty cities, manufacturing and agriculture; they will be further exacerbated by changing rainfall patterns and climate variability. Moreover, with the forthcoming 2011 referendum on the status of Southern Sudan, an 11<sup>th</sup> riparian nation may have to be taken into account in any redistribution of rights to the Nile. The world's longest river holds great potential for social-economic development, but the bulk of the populations living in the basin are still waiting for energy generation and irrigation schemes that would boost modern farming. Short of a new protocol on Nile waters, extreme poverty is bound to continue in the basin.

For more than a decade, Nile Basin countries have tried for a new framework agreement to manage the waters and, in 1999, they agreed on the Nile Basin Initiative, a transitional arrangement on negotiated, equitable use of water resources. The shares of Egypt and Sudan will almost inevitably be reduced if all riparian nations must have equal or proportional access. However, even after 10 years of intense negotiations and promises to agree on a deal no later than 2010, Egypt and Sudan are still reluctant to relinquish their preferential rights; these amount to a combined 94 per cent leaving only six per cent of Nile waters for the eight other countries. Under the current treaties, these eight countries

cannot embark on any Nile-based, large-scale hydropower generation or irrigation projects unless Egypt consents.

In June 2010, Ethiopia, Kenya, Rwanda, Tanzania and Uganda agreed on a new pact for fairer sharing of the Nile waters and the removal of Egypt's right of veto, with Burundi, the Democratic Republic of Congo and Eritrea considering following suit. But Egypt's President Hosni Mubarak — who has threatened in the past to go to war with any country interfering with the Nile — has so far refused to join the pact, claiming that protecting the Nile water supplies is an issue of national security for his country. Egypt described as 'provocative' the Ethiopian inauguration of a hydroelectric dam on Tana River, a tributary, in May 2010 and tension over access to the Nile is becoming one of the most prominent diplomatic and security issues in the region. However, in July 2010, Egypt made undisclosed offers of financial support to upstream countries as part of its diplomatic and political efforts to ease the by-then raging controversy.

It is becoming increasingly clear that if water is left out of the equation, there can be no long-term way of meeting the combined effects of rapid demographic growth, the need to provide domestic food and water security for Nile Basin nations, competing claims over access to water, and climate change. On 28 July 2010, the United Nations General Assembly — recognising the world's increasingly scarce water resources as an important issue — declared that access to safe and clean drinking water is a human right, and one that is essential to the full enjoyment of life and the realisation of all other human rights. With any consensus on a new Nile treaty still elusive, alternative directions must be explored alongside international negotiations, including changes to household water consumption patterns, water recycling and conservation, rationalising current irrigation and agricultural practice, reducing corporate water consumption, reducing water pollution, appropriate water pricing, and even possibly exploring the viability of bulk imports from non-water-stressed regions.

While the world population grew three-fold over the course of the 20<sup>th</sup> century, water consumption grew six-fold. Given the regional scarcity of this critical resource, fresh water consumption patterns clearly *must* be rationalised if this liquid element is not to turn into a prominent new source of international violence.



# 4.5

## Emerging Issues

### Domestic Urban Development Corridors and Transnational Urban Systems<sup>25</sup>

#### *Uganda: The Kampala-Entebbe Corridor*

*Kampala* is the largest city on the Lake Victoria shores, at the end of the railway linking Uganda's capital with the Kenyan port of *Mombasa* on the Indian Ocean. This turns *Kampala* into a major logistic hub in the region, with onward freight links to Burundi, Rwanda, the eastern regions of the DRC and to Southern Sudan.

The 40 km Kampala-Entebbe highway is rapidly emerging as the core of a ribbon-shaped urban development corridor, connecting Entebbe International Airport - another major regional logistics hub - with the capital and the whole area.

Demographic expansion within the Kampala-Entebbe corridor now results in planning, traffic, infrastructure, housing and social challenges that require holistic, integrated,

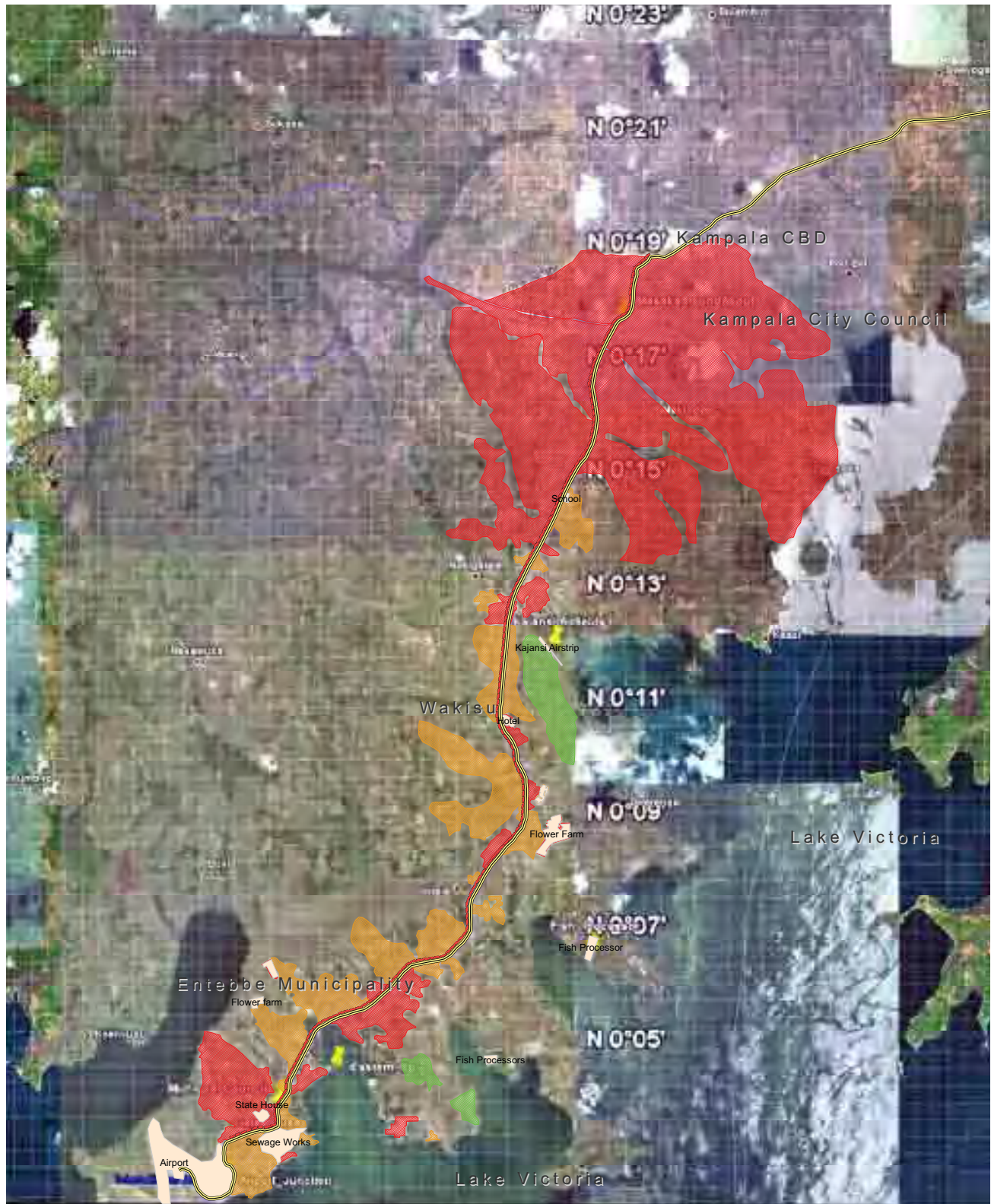
area-wide decision making among the public authorities in *Kampala*, Wakiso District and *Entebbe*. The agenda should include transportation networks, waste management, infrastructure and the development of light industrial, commercial and residential functions within the corridor. Continued demographic and economic growth of the *Kampala* and *Entebbe* Municipalities and rapid development of the area between them can result in greater economic efficiency and productivity if spatial, economic and social interventions are planned, coordinated and implemented as an area-wide initiative.

Holistic sustainable development (including social) of this incipient corridor calls for prompt administrative and legal reforms to ensure continued close cooperation between the



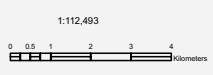
▲ Kampala, Uganda. ©Frank van den Bergh/iStockphoto

MAP 4.6: THE KAMPALA-ENTEBBE URBAN CORRIDOR



**Legend**

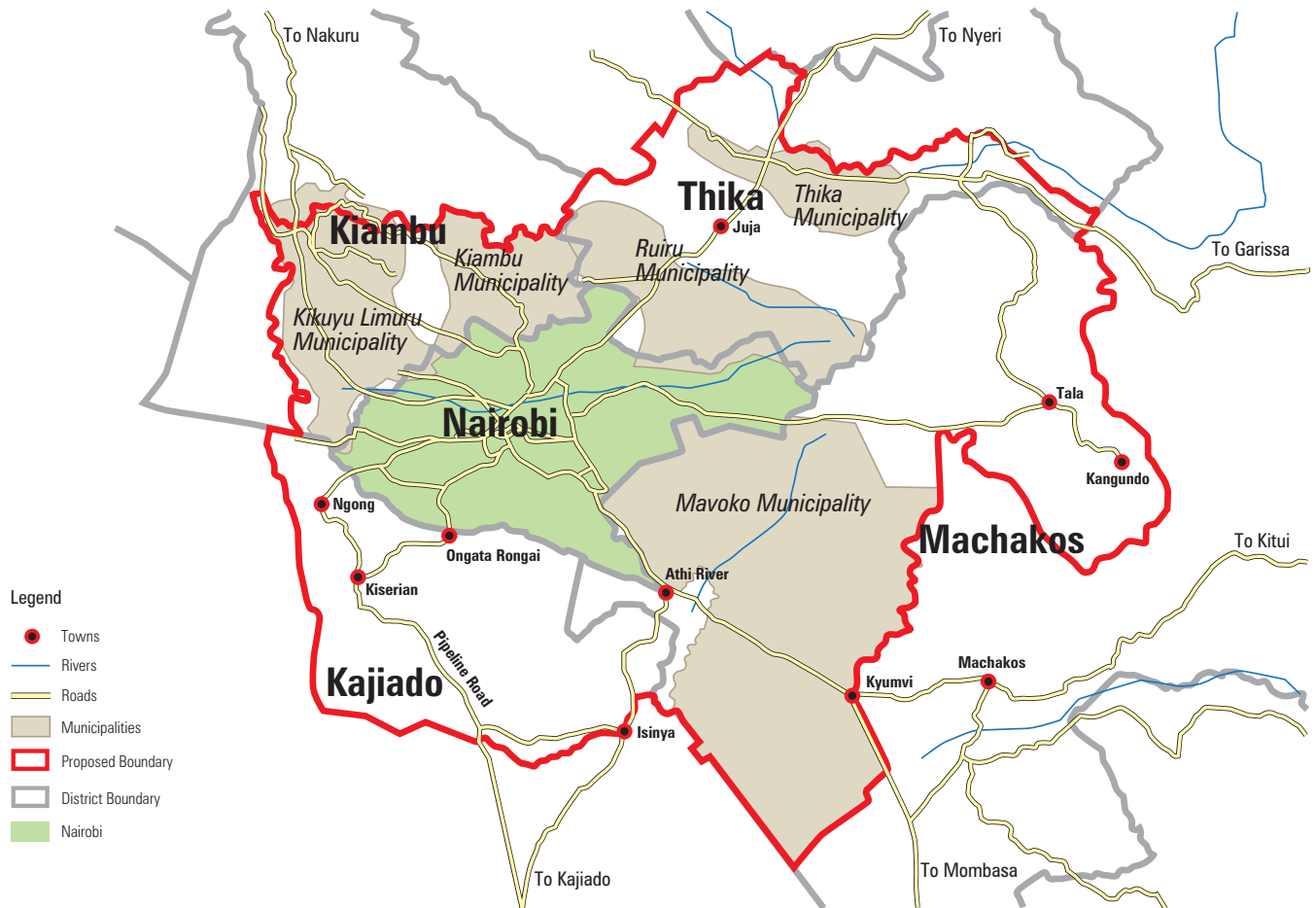
- Existing Road Corridor
- Notable Structures
- Built-Up Residential and Commercial Areas**
- Commercial Development - Kampala CBD, Entebbe and Growth Points
- Mixed Developments - Mainly Residential
- Mixed Developments - Mainly Agricultural



Data Sources: Google Earth Pro  
 Analysis & Layout: Joshua Mulandi  
 Date: 14/07/2008  
 Disclaimer: Map prepared for illustration only



MAP 4.7: NAIROBI METROPOLITAN REGION



local authorities involved. On top of this, perhaps the most important immediate objective would be the development of a prospective medium-term vision (including the economy and transportation) through broad participatory processes, to be complemented by a strategy for resource mobilisation involving not just government but also financial and other partnerships.

### *Kenya: The Greater Nairobi Metropolitan Area*

A number of factors influence the geographic sprawl of Greater Nairobi, and a number of others should be put to good use. On the southern side, urban developments are restricted by the topography of the Great Rift Valley and the Nairobi National Park, a wildlife sanctuary. The western and north-western outskirts threaten to encroach onto the very agricultural lands that feed the metropolitan area. Small rural settlements in the agricultural hinterlands of *Kikuyu*, *Kiambu*, *Ruiru*, *Tigoni* and parts of *Limuru* are turning into fast-growing informal settlements with a mixture of residential and commercial functions.

Nairobi's spatial growth towards and beyond *Thika* to the north also encroaches on agricultural lands that are essential for the productivity and sustenance of the capital. Significant room is available in the southeast direction along the Nairobi-Mombasa highway towards the towns of *Mavoko* and *Machakos*. The surface area of Mavoko Municipality is almost equal to that of the entire *Nairobi* Municipality, and largely empty due to semi-arid conditions. Currently, much of the urban growth of *Nairobi* is being directed there, although weak planning and enforcement of development controls is replicating the inefficiencies that are endemic to unplanned towns. An additional problem may be future water insecurity for this semi-arid region, as the ice cap of Mount Kilimanjaro, a major source of fresh water for the area, is rapidly disappearing.

Instead of adding to *Nairobi's* already significant primacy through unrestricted growth in its peri-urban areas and along its infrastructural life lines, holistic *regional* planning as well as economic and functional decentralisation away from the



Greater Nairobi peri-urban areas would be advisable. The spontaneously occurring linear growth along the logistical lines of Greater Nairobi is creating urban corridors that geographically spread the capital's economic, spatial and infrastructural synergies over an area vastly exceeding the current municipal boundaries. Establishing settlements at distances exceeding 100 km from the city centre is a more desirable approach, as current developments are simply allowing Greater Nairobi to grow further and ever more primate.

The desirability of the current spatial growth of the Greater Nairobi Metropolitan Area in a holistic context of forward-looking economic, social, industrial, and spatial policy must come under critical review. Indeed, in 2008, the Government of Kenya took the first step toward an area-wide approach with the introduction of a Ministry of Nairobi Metropolitan Development, and issued the ambitious *Nairobi Metro 2030 Vision*, a medium-term development proposal for the Greater Nairobi Metropolitan Area. The Vision has come under criticism for largely being a window-dressing proposal that fails to view Greater Nairobi in its national context and which is inward, rather than outward looking. Nevertheless, the proposed creation of a Nairobi Metropolitan Region (NMR) offers a prime opportunity for well-designed interventions that can help preserve open lands (including the Nairobi National Park) around the sprawling city where any further developments should be subject to strict controls.

The proposed Metropolitan Region could also offer prospects for directing economic activity to a ring of satellite settlements between 60 and 100 km away, but linked to the core through high-speed infrastructure connections such as intra-urban highways. However, to start addressing increasingly debilitating traffic congestion, it is recommended that light rail connections be built between the *Nairobi* central business district, on the one hand, and rapidly expanding satellite and future metropolitan dormitory settlements like *Machakos*, *Thika* and *Limuru*, on the other. Diverting population away from the metropolitan region over significant distances would

not add to *Nairobi's* primacy while reducing vulnerability to natural disasters. With its location at the edge of the Rift Valley, the Kenyan capital is exposed to seismic and volcanic risks that are still calling for some serious assessment.

An almost inevitable, though so far largely dismissed step, in the process of diverting population away from the metropolitan region would be the relocation of a number of governmental departments. Various government departments have no overwhelming need to be physically located in the capital. With recent developments in communication technologies, there is little justification to stick with the physical centralization of government functions in the capital, other than possibly the Ministries of the Interior and Foreign Affairs, as well as the Office of the President. Nearly all other line ministries could be located in intermediate cities or new towns, including coastal cities like *Mombasa*, *Kilifi* and *Malindi* or westwards to *Nakuru*, *Kisumu* and other outlying secondary cities.

Not only would such an approach alleviate current traffic congestion in the capital through reductions in daily commutes, but relocation of large numbers of civil servants would relieve pressures on the *Nairobi* land and housing markets while stimulating the economies of the secondary cities. This, in turn, may have positive effects on the current unsustainably rapid proliferation of slums and informal settlements in *Nairobi*, as relocated civil servants would create large numbers of livelihood opportunities for maids, gardeners, drivers, *askaris* (security guards) and other low-wage earners that today are mostly accommodated in Nairobi slums.

Taking a wider regional and national approach to decentralised economic activity and urban demographic growth is the sole credible and sustainable way forward for *Nairobi* and, indeed, the primate cities of Eastern Africa as a whole. The secondary cities in Eastern Africa, currently absorbing some three-quarters of the region's significant urban population growth, would also greatly benefit from a better spread of economic opportunities through decentralization.

## ENDNOTES

- <sup>1</sup> All statistical data derived from World Urbanisation Prospects: The 2009 Revision, Department of Social and Economic Affairs, Population Division, United Nations, New York, 2010.
- <sup>2</sup> See also UN-HABITAT, State of the World Cities Report: Harmonious Cities (2008-9)
- <sup>3</sup> Joint EC/UN habitat workshop, Urbanisation Challenges in Africa, 2005.
- <sup>4</sup> See [www.unep.org/dewa/Africa/publications/AEO](http://www.unep.org/dewa/Africa/publications/AEO)
- <sup>5</sup> UN-HABITAT, State of the World Cities Report: Harmonious Cities (2008-9)
- <sup>6</sup> UN-HABITAT, State of the World Cities Report, 2007
- <sup>7</sup> UNDP figures on Millennium Development Goals
- <sup>8</sup> UN-HABITAT, State of the World Cities Report: Harmonious Cities (2008-9)
- <sup>9</sup> Ali-Dinar, B., (2009). Urban Inequality in Global

Perspective. African Studies Center - University of Pennsylvania, Africa.

- <sup>10</sup> Anderson, David (2002) Vigilantes, violence and the politics of public order in Kenya. *African Affairs* 101:531-555 (2002)
- <sup>11</sup> Citynoise.org/article/8094 Accessed 16 April 2010.
- <sup>12</sup> Durand-Lasserve, Alain (2007) Market-Driven Eviction Processes In Developing Country Cities: the Cases of Kigali in Rwanda and Phnom Penh in Cambodia. *Global Urban Development Magazine* 3(1)
- <sup>13</sup> Fjeldstad, Odd-Helge (2006) Chapter in Karin Millett, Dele Olowu & Robert Cameron, (eds) Local governance and poverty reduction in Africa. Joint Africa Institute ([www.afdb.org/jai](http://www.afdb.org/jai)).
- <sup>14</sup> Kelly, Roy (2000) Property Taxation in East Africa: The Tale of Three Reforms.

<sup>15</sup> *Ibid.*

<sup>16</sup> See [www.icpac.net](http://www.icpac.net).

<sup>17</sup> UNFCC (2007) IPCC Fourth Assessment Report.

<sup>18</sup> *Ibid.*

<sup>19</sup> UN-HABITAT, State of the World Cities Report: Harmonious Cities (2008-9)

<sup>20</sup> Allianz Knowledge. Protecting Seychelles, a tough challenge 2009

<sup>21</sup> *Ibid.*

<sup>22</sup> UNEP, State of the Environment in Somalia - A Desk Study (2005)

<sup>23</sup> UN-HABITAT, State of the World Cities Report: Harmonious Cities (2008-9)

<sup>24</sup> *Ibid.*

<sup>25</sup> This section is an update of a similar section in the State of African Cities report 2008. Nairobi: UN-HABITAT.