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Africa's urban transition and the role of regional collaboration

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Executive summary

Africa is in the midst of an urban transition and getting this transition right is critical. The continent's urban population is growing at about 3.3 per cent a year, the combined outcome of an overall population growth rate of 2.2 per cent a year and an urbanization rate of 1.1 per cent a year. Over the next ten years, Africa's urban population is projected to increase by over 150 million. Economic difficulties may reduce rural—urban migration, but Africa's towns and cities are not ready to accommodate anything like this many new residents.

It is tempting for governments to respond to this challenge by trying to discourage rural—urban migration. Surveys indicate that government officials are increasingly concerned with 'over-urbanization', and a growing number of policies are being implemented to reduce rural—urban migration. There is no evidence of such policies succeeding, however, and plenty of evidence of human suffering when there are harsh restrictions on rural—urban migration. Poor groups can also suffer from the neglect of growing urban areas: neglect often at least implicitly justified on the grounds that the population in these areas ought not to be growing, and that the provision of infrastructure and services will simply encourage more in-migration from rural areas or neighbouring countries. Even responding to urban growth as it occurs typically means too little, too late, and in the wrong place.

This report argues that the challenge is not to curb urbanization, but to seize the opportunities it provides, while curbing the inequalities and environmental burdens that market-driven or poorly planned urbanization can bring. Successful urban development is locally driven, but a successful urban transition requires national support and regional collaboration. It is regional collaboration, involving urban centres in at least two different countries, that is the particular concern of this report.

There are many different reasons for engaging in regional collaboration on urban issues. Some urban issues involve transboundary problems that require the cooperation of two or more national governments to resolve. More often, the justifications for regional collaboration lie in the similar or interconnected challenges faced by often distant urban centres, and the strength and legitimacy that regional cooperation can bring to local initiatives. Africa's urban agendas are already heavily informed and influenced by international perspectives, but all too often these originate in other continents and are not grounded in local realities and interests, let alone those of the urban poor.

Urbanization's opportunities and challenges can be grouped into four interrelated issue areas: migration, economic growth, urban poverty and the environment. Depending on the nature of the opportunity or challenge, the appropriate form of regional collaboration varies. Formal intergovernmental relations and international agencies clearly have a role to play. So too do networks of local authorities, and networks of urban groups, even including networks of slum dwellers, which are playing a growing role in addressing urban poverty.

Migration

Africa's urban transition involves local migration, but also includes international migration. The need for regional collaboration on international migration is clear. With contradictory policies operating in origin and destination countries, migrants often face unnecessary obstacles and prejudice, and are subjected to arbitrary policy changes as economic conditions shift. Poorly coordinated policies affecting migration not only cause problems for urban migrants, but for international relations. But there is also a need for well-informed regional dialogues on other forms of migration, including local rural—urban migration. The evidence gathered for this report suggests that rural—urban migration is often unfairly blamed for problems whose origins lie elsewhere. In effect, local migrants (and urban poor groups

more generally) often face difficulties similar to those facing international migrants. Ultimately, this is an issue that must be resolved at national and local levels, but healthy regional discussions of these migration issues could provide critical support for constructive national and local measures.

Economic growth

Urban policies can contribute to economic growth, not by changing the pace of urbanization (or at least not directly), but by improving its quality. It is no coincidence that in Africa as elsewhere an increasing share of economic activity is urban. There can be large economic benefits associated with urban agglomeration, some of which involve widely shared public goods that need to be provided or encouraged by public policy. Many of these benefits spill over into surrounding rural areas and contiguous urban regions. When urban regions, such as the Maputo Development Corridor, cross national boundaries, there is a clear need for regional cooperation. Regional cooperation is even more necessary where a lack of collaboration prevents such boundary crossing. As with migration, it is also important to have regional dialogues on urbanization and the economic opportunities and challenges it poses. There is also scope for effective cooperation between cities facing similar economic challenges as well as between different countries. However, while economic growth is of considerable importance, there is a danger that policies designed to promote economic growth will exacerbate urban poverty and environmental burdens, which also have regional dimensions.

Urban poverty

Regional activities, cutting across national boundaries, have an essential contribution to make to enabling hundreds of millions of urban dwellers in Africa to secure basic services, and secure tenure and housing improvements. Similar problems are found in many countries in the region, including over-specified standards and a reification of formality. Fears about excessive rural-urban migration have inhibited a thorough reform of urban settlement regulations, many of which originate as far back as the colonial period. In the absence of appropriate shelter policies, the problems of low incomes are exacerbated by illegality, denial of basic services and tenure insecurity. There have been many small successes, but these need to be scaled up both nationally and regionally. This is likely to require national and regional dialogues involving government agencies and local authorities. It will also be important to engage with organizations of the urban poor, and here there are important lessons to learn from the experience of Shack/Slum Dwellers International (SDI), an international network of grassroots organizations built up around savings groups and supported by local NGOs. This organization is grounded in self-consciously local, comparatively informal organizations, but negotiates with national as well as local governments and uses its international connections not only to scale up but also to increase its local power and legitimacy. The experience of SDI illustrates the growing importance of regional action, not just for governments and formal agencies, but also for grassroots organizations.

Urban environment

The urban environmental problems associated with urban poverty, such as poor sanitation and indoor air pollution, are a priority in most of urban Africa. The problems and opportunities similar to those described in relation to urban poverty and justify the same forms of regional collaboration. There are also a range of city–regional burdens, many of which extend across national boundaries and require regional cooperation to resolve. Around Lake Victoria, for example, urban activities in Uganda, Tanzania and Kenya combine to place an undue burden on the ecology of the lake. International and inter-urban collaboration are both required to resolve such issues. Many of Africa's river systems pose

similar problems. Regional collaboration is also justified in response to emerging global environmental burdens. In adapting to climate change, for example, coastal cities are likely to face similar challenges and can benefit from collaborating in the development of adaptation strategies.

International development assistance has an important role to play in supporting the sort of regional initiatives described above. Many African cities face severe financial problems, and development assistance can also make a significant contribution to the financing challenge. For this support to be effective, the development finance must not suppress alternative sources of finance, from the state or from communities. Within the current aid architecture, there are further reasons for supporting urban initiatives through regional development assistance. Regional funding can help to overcome deficiencies in both the quantity and quality of urban development assistance. Most development assistance is based on cooperation between national governments. Urban assistance is rarely separated out as a distinct sector – it is either considered too small, or insufficiently sectoral. Many of the most critical urban issues do not fall neatly into the more traditional sectors. As a result, urban development assistance is often limited in quantity and lacking in coherence. Decentralization can further undermine the coherence of urban development assistance implemented through national ministries. By providing support at the regional level, it should at least in principle be possible to achieve returns to scale, without undermining local coherence.

1 African urbanization and regional issues

Africa's populations and economic activities are becoming increasingly urban. This transition is referred to as urbanization, and in this report the level of urbanization is defined as the share of a population living in urban areas and the rate of urbanization is the annual increase in this share.

How this transition is handled has important implications for the continent's migrants, but also for economic growth, the persistence of poverty and the shifting of environmental burdens. Many of Africa's emerging urban challenges call for regional responses involving some form of international cooperation. This is in part because how countries respond to the challenges of urbanization has international implications, for example through trade, urban development corridors, migratory movements and environmental impacts. The need for regional inter-urban collaboration is wider than this, however. From urban poor groups organizing to improve their living conditions, to local authorities designing strategies for adapting to climate change, regional cooperation can enhance local action. National governments, regional bodies and international development agencies would do well to support such cooperation, as well as cooperating among themselves.

The core of this report examines Africa's urbanization in terms of four challenges: managing migration, facilitating economic growth, reducing poverty and reducing environmental burdens. As argued in the recent State of the World's Population report subtitled 'unleashing the potential of urban growth', urbanization can play a very positive role in meeting all of these challenges (UNFPA, 2007).

Before turning to these challenges, summarized in Chapters 2–5, this introduction questions the popular notion that when the challenges of urban growth seem unmanageable, it is advisable to curb rural—urban migration, and hence the rate of urbanization. First, claims that too many people are moving from rural to urban areas are rarely based on clear argument and relevant evidence. Second, in the words of a recent review of The Dynamics of Global Urban Expansion, 'though many governments have attempted to control rural—urban migration flows, most, if not all, of these have ended in utter failure' (Angel et al., 2005). These circumstances make a regional dialogue on urbanization particularly critical.

The next section of this introductory chapter presents the limited evidence available on Africa's urbanization trends, and illustrates that they are in line with those experienced in other parts of the world. Indeed, if anything makes Africa's urban growth exceptional, it is the rapid national population growth, not the rate of urbanization.

This is followed by a brief critique of misplaced fears of over-urbanization, again with a focus on Africa. It is pointed out that slums, for example, should not be treated as a symptom of overly rapid migration to urban centres – they can just as well reflect a failure to plan for rapid urban growth, combined with national poverty. Similarly, when estimates of urban population continue to rise while economic growth falters, this is not evidence of excessive urbanization – indeed, to the extent that urbanization does respond to changing economic conditions, this is unlikely to be reflected in the population statistics until there has been a census, often many years later.

This introductory chapter ends with a brief summary of the different types of regional responses to urban challenges that are envisaged in this report. The claim is not that the African region or continent needs to pursue a coordinated urban agenda, or that regional initiatives need to be region wide. The regional initiatives envisaged range from urban networks with little or no government involvement, to formal networks of urban authorities, to bilateral urban cooperation between neighbouring countries, to regional urban programmes

within international agencies, to urban initiatives undertaken through regional intergovernmental groupings such as the Southern African Development Community. Depending on the issue, different forms of regional cooperation may be appropriate. The purpose of these regional initiatives may be to share experiences and develop more effective strategies to meet common challenges, to address cross-border issues related to urban development, or to secure domestic and international support for urban initiatives.

1.1 Urbanization and urban growth patterns in Africa

Globally, about one in two people now live in urban settlements, up from about one in three in the 1950s and one in eight at the start of the 20th century. In the coming decades, as illustrated in Figure 1.1, virtually all population growth between 2007 and 2020 is projected to be in urban areas. Africa is the only major region where rural areas are expected to experience significant population growth, and even in Africa almost two-thirds of the population growth is expected to be urban. Moreover, after Asia, Africa is expected to have the largest urban population growth of any region, with about 200 million more urban dwellers, about twice the Latin American and Caribbean figure. This rapid urban growth presents opportunities as well as challenges, and Africa's economic, social and environmental development all depend on how this growth is handled.

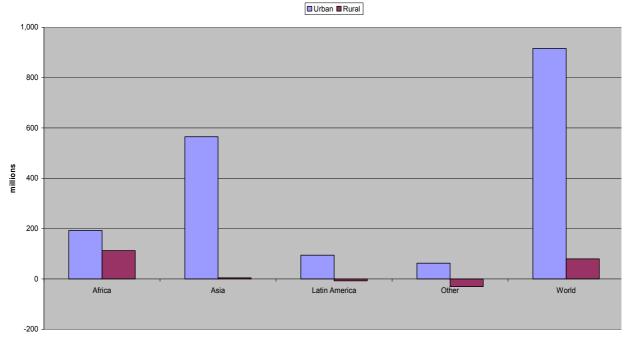


Figure 1.1: Projected population increases between 2007 and 2020

Data source: United Nations Population Division (2008) *World Urbanization Prospects: The 2007 revision* (POP/DB/WUP/Rev.2007), United Nations Department of Economic and Social Affairs, New York.

Note: Japan is included in 'Other', making this category virtually equivalent to what the United Nations Population Division defines as 'More Developed Regions'.

Currently, Africa has the lowest average income and the lowest level of urbanization of all the world's continents, with about 38 per cent of the population now living in urban centres (see Table A1 in the Annex to this report for a global summary of the distribution of the world's urban population). Nevertheless, Africa's urban population already exceeds that of North America, and is projected to exceed Europe's urban population by 2020 (United Nations Population Division, 2008).

Comparing Africa's levels of urbanization with those in other parts of the world can be misleading. Official statistics on urban populations, such as those in Table A1, indicate that Africa's level of urbanization is expected to increase from 36 per cent in 2000 to 40 per cent in 2010 – very similar to Asia, where the level of urbanization is expected to grow from 37 to 43 per cent. However, these official statistics are based on country-specific definitions of 'urban' that vary considerably. A recent attempt to apply a common definition for the year 2000 indicates that these official statistics obscure the fact that using a consistent population threshold (50,000) and density criteria, Africa is far less urban than Asia (World Bank, 2008). In particular, while the 'agglomeration index' used in the latest World Development Report yields roughly the same world urbanization level for 2000 as the estimate of the United Nations Population Division (44 per cent rather than 47 per cent), it yields a considerably lower level for sub-Saharan Africa (roughly 25 per cent rather than 33 per cent) and a far higher level for South Asia (42 per cent rather than 27 per cent) (World Bank, 2008).

It is also important to distinguish what demographers refer to as the urbanization rate (the rate of increase in the share of a region's population that is urban) from the urban population growth rate (which is the sum of the region's population growth rate and its urbanization rate). Africa's urban growth rates are especially high because of high overall population growth rates – the pace at which the urban share is increasing is not exceptional. This holds even with the official urban statistics, and is illustrated graphically in Figure 1.2, which presents estimates of urban growth rates for Africa, Asia, and Latin America and the Caribbean between 1950 and 2050. These urban growth rates are broken down into that part of the growth that reflects the continent's population growth, and that part reflecting its increasing urban share (i.e. urbanization). In all three regions the urbanization rate and the overall urban growth rates have been declining and converging over time. Africa's urbanization rate is still a bit lower than Asia's, but its population growth rate is considerably higher, resulting in a higher overall urban growth rate. These differences are consistent with Africa being at an earlier stage in its urban transitions, and do not imply that Africa's situation is exceptional (Montgomery, 2008).

Figure 1.2: Past and projected urban growth rates in Africa, Asia, and Latin America and the Caribbean, and the contribution of population growth and urbanization 1950–2050

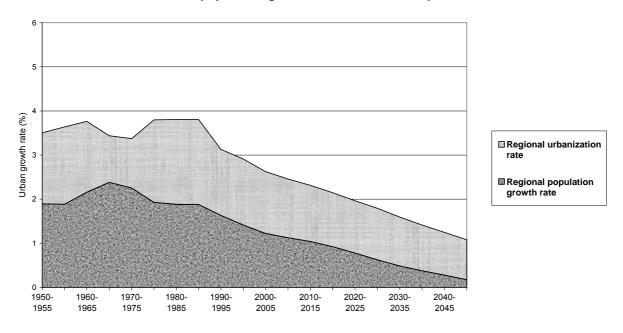
5 Urban growth rate (%) 2 1950-1960 1970 1980 1990 2000-2010-2040-1955 1965 1975 1985 1995 2005 2015 2035 2045

Urban population growth in Africa and its components

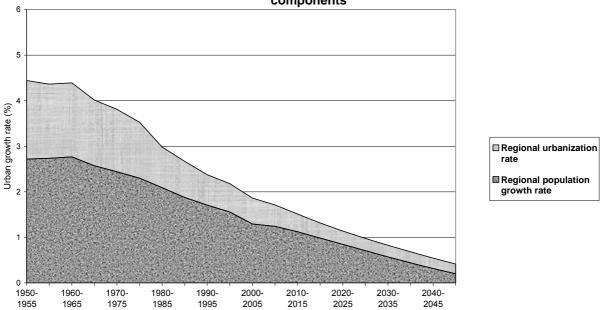
Regional urbanization rate

Regional population growth rate

Urban population growth in Asia and its components







Source: Derived from statistics in United Nations (2008), *World Urbanization Prospects: The 2007 revision*, Department of Economic and Social Affairs, Population Division, New York.

1.2 Concerns about over-urbanization

While there is little evidence that Africa's urbanization is excessive, surveys indicate that government officials, especially in Africa, have strong and increasing anti-urban sentiments. In 1996, 42 per cent of all governments responding to a United Nations questionnaire said that they desired a major change in the spatial distribution of their country's population, a figure that rose to 51 per cent in 2007. African governments are the most concerned, with 63 per cent already desiring a major change in 1996, rising to 74 per cent in 2007 (United

Nations, 2008b). Over this same period, there has been an even sharper increase in the share of governments claiming to have policies to reduce migration to urban agglomerations – from 45 to 65 per cent for the world generally, and from 54 to 78 per cent for Africa (United Nations, 2008b). International development agencies also often display anti-urban sentiments, though probably for somewhat different reasons (Satterthwaite, 2007).

Urbanization can pose serious challenges, but as described below there is very little evidence to support these anti-urban sentiments. Africa is the last continent to go through an urban transition and it faces a challenging combination of high population growth and rapid urbanization. But its urbanization rates are not historically or economically exceptional. There is a danger that in blaming urban problems on urbanization, important policy measures to improve the quality of urban development are being neglected. Moreover, attempts to stem the rural—urban migration are rarely successful and can make it harder for poor groups to escape poverty. Publicly funded rural investments will not be an effective means of reducing poverty or encouraging economic growth if they are justified in terms of the migration they prevent rather than the benefits they bring. More important, if urban slums are misdiagnosed as symptoms of over-urbanization, when in fact they reflect excessive national poverty, it becomes harder to justify slum improvement.

Few governments officially justify the lack of services in slum settlements as a means of discouraging rural—urban migration. However, the fear that slum improvement will simply encourage more rural migrants to move to cities is commonly raised in urban policy circles. Indeed, if over-urbanization was a serious problem, and slum improvement did have a major impact on migration, governments might be justified in discouraging infrastructure improvements in deprived urban areas and striving to improve rural service provision instead. Alternatively, if over-urbanization is not a problem, discouraging infrastructure in deprived urban neighbourhoods will not only hurt urban poor groups, but indirectly may also make life harder for rural residents. After all, many rural dwellers depend on urban remittances, markets or other connections, and may plan to move to urban locations in the future.

It is not difficult to understand why local and even national government officials might prefer less rural—urban migration. The rapid growth of low-income urban populations can seem overwhelming. Most large African cities contain low-income settlements that are unplanned, poorly serviced, and a far more visible face of poverty than distant villages. Official statistics confirm that most urban settlements are not providing even very basic services for their worst-off residents. The term 'slum', for many years avoided on the grounds that it has strong negative connotations but little empirical content, has recently been resurrected by UN-Habitat (2003a). Using a definition that relates a slum dwelling to one lacking one or more of 1) secure tenure, 2) adequate dwelling quality, 3) reasonable access to safe water, 4) reasonable access to basic sanitation, or 4) sufficient living space, it was estimated that 61 per cent of Africa's urban households lived in slums in 2001. This compares with 40 per cent for Asia, and 32 per cent for Latin America and the Caribbean (UN-Habitat, 2003a, page 246).

As indicated in the most recent *State of the World Population* report, subtitled 'unleashing the potential of urban growth' (UNFPA, 2007), the evidence nevertheless suggests that migrants are making an economically rational decision when they move to urban locations. Also, not only do slums contain long-term residents as well as migrants, but rural—urban migrants are often upwardly mobile and are more likely to succeed economically than most or their rural or urban counterparts.

Shelter deprivation is evidence of poverty, but not of excessive urbanization. Moreover, attempts to prevent poor groups from settling in urban areas can easily exacerbate shelter deprivation. While there is little evidence that restrictive planning regulations and standards

can prevent urbanization, there is plenty of evidence that they can be misused and contribute to the spread of poorly serviced informal settlements. Indeed, viewed in terms of the interests of the poor populations themselves, informal and unplanned settlements are more a reflection of inappropriately restrictive planning than of insufficiently rigorous enforcement. Even very poor residents benefit from collective standards, if these can prevent selfish and unsanitary behaviour. But it is inherently difficult for government agencies to design acceptable standards and regulations that the unacceptably poor can achieve, especially if the government is unwilling or unable to subsidize the attainment of these standards.

An alternative basis for claims about over-urbanization lies in statistics showing African countries continuing to urbanize even when their economies perform poorly (Fay and Opal, 2000). Many countries in Africa experienced economic difficulties in the last decades of the 20th century. But it is hard to analyse the relationship between economic change and urbanization on the basis of national statistics, in part because urbanization estimates are based on censuses, which are infrequent, particularly in countries facing economic difficulties (see Table A3 in the Annex). Particularly in Africa, many of the available urban population estimates have been projected on the basis of censuses that are up to or even more than a decade old (Satterthwaite, 2007). That such estimates do not respond to changes in economic circumstances says more about the models the projections are based on than about the relationship between urbanization and economic change. As described in Chapter 4, more detailed studies do provide plenty of examples of migration back to rural areas in response to economic decline. In any case, even if one could define a 'normal' relationship between urbanization and economic performance, one would not expect indicators of the two to follow each other year by year. Rather one would expect slow adjustments as one or the other fell out of line. Moreover, where urbanization and economic growth have occurred simultaneously, it has not resulted in equally distributed growth. Indeed, increased urban poverty can, ironically, be a consequence of growth (Crankshaw and Parnell, 2004).

More careful analyses of the relationship between economic change and urbanization indicate that in Africa, too, urbanization has been associated with economic growth (Kessides, 2006, 2007). The economic growth that Africa did experience in the 1990s was based predominantly on the industry and services sectors, despite the undercounting of the urban informal sector. Moreover, where the data are available, researchers have found the same sort of positive relationship between economic change and urbanization found in other regions (Fay and Opal, 2000; Kessides, 2006).

Misconceptions about the nature of Africa's urbanization challenges are both an obstacle to and a justification for regional responses (though not necessarily continent-wide responses). They are an obstacle to the extent that they inhibit constructive debate about how to improve the quality of urbanization. They are a justification in that they demonstrate the need for a new urban paradigm that can better address urbanization and its policy challenges. Moreover, how governments respond to the urban challenge will have important consequences, locally, nationally, regionally and perhaps even continentally. Several other reasons to consider regional responses to urban challenges are summarized below.

1.3 Regional responses to urban challenges and opportunities

The continued expansion of markets and trade has helped to change the spatial configurations of both development and governance. Globalization has become a catch-all term for describing these changes, and it is often assumed that the role of local institutions is declining in the face of global pressures. Globalization has also ushered in the era of the 'world city' and the notion that even modest cities must compete and cooperate in the international arena. The city-region has also emerged as an important locus for economic

interaction and governance often extending across national boundaries – as with the Maputo Development Corridor between Mozambique and South Africa. Networks of urban authorities and other urban-based organizations play an increasingly important regional and sometimes even global role. Moreover, as argued in the forthcoming World Development Report on 'reshaping economic geography', providing the right infrastructure to shape and connect urban centres is critical to successful regional development, even across national borders (World Bank, 2008).

On the one hand, cities and towns are increasingly getting involved in cooperative efforts to address international and even global problems. In response to climate change (a preeminently global problem) for example, international urban networks have challenged traditional distinctions between local, national and international politics (Bulkeley, 2005; Bulkeley and Betsill, 2003, 2005). On the other hand, international urban cooperation has also become an integral part of the response to addressing very localized problems. For example, in response to slum housing and water and sanitation problems (pre-eminently local challenges) networks of federations of slum dwellers have played an important role, again challenging the traditional nesting of local, national and international politics (Mitlin and Satterthwaite, 2004, and section 4 below).

Regional urban initiatives involving two or more countries can take a number of different forms, and respond to a range of different types of problems. They have the potential to help in:

1. Sharing experiences and strategies in addressing similar urban challenges and opportunities

This is perhaps the most obvious reason for linking up urban initiatives in different countries. Most countries in Africa are in the midst of urban transitions, and as indicated above many government officials are having difficulty coping with their urbanization, believing it to be excessive. If, as argued in this report, attempts to prevent urbanization tend to be counterproductive, it is particularly important that experiences are shared among cities and a process of evidence-based learning be initiated. Local practitioners need to be directly involved in this. Key challenges include managing migration and rapid urban population growth (section 2), securing and sustaining economic growth (section 3), addressing urban poverty and shelter deprivations (section 4) and reducing urban environmental burdens (section 5). While sharing can take place within countries, international groupings will sometimes be more relevant and appropriate. Thus, for example, large or capital cities may benefit from cooperating on their particular challenges, coastal settlements may benefit from cooperating on issues related to sea-level rise, or smaller urban centres may benefit from sharing experiences on decentralization with those in other countries.

2. Coordinating efforts to address cross-boundary challenges and opportunities In many cases, urban challenges in different urban centres are linked, and often the links cross national borders. Historically, the urban transition in most countries has been accompanied by considerable international migration and Africa is no exception. While such movements are central to the success of urban transitions, they can also be a challenge, as recent violence affecting migrants in South Africa attests. There is also scope for cooperation around urban economic regions that cross national boundaries, such as the Maputo Development Corridor between South Africa and Mozambique. Similarly, there are opportunities for urban environmental cooperation in areas where urban burdens from different countries combine, such as Lake Victoria, which borders Kenya, Uganda and Tanzania. While national governments take primary responsibility for most cross-boundary problems, there are times when inter-urban cooperation can play a supportive or even central role.

3. Securing domestic and international support for urban initiatives International visibility can give urban initiatives an advantage. In many cities, and some rather sleepy towns, a great deal of attention is already given to attracting international investment. International connections and visibility can also help to secure domestic support, both public and private. The benefits for economic growth are perhaps the most obvious, but efforts to address urban poverty and environmental problems can also benefit from international exposure and connections. National as well as local government officials are more likely to support urban poverty and environment initiatives if they have international legitimacy and can be expected not only to succeed but to bring credit to the country.

Within the current aid architecture, there are further reasons for supporting urban initiatives through regional development assistance. Regional funding can help to overcome deficiencies in both the quantity and quality of urban development assistance. Most development assistance is based on cooperation between national governments. Urban assistance is rarely separated out as a distinct sector – it is either considered too small or insufficiently sectoral. Unfortunately, many of the most critical urban issues do not fall neatly into the more traditional sectors. As a result, urban development assistance is often limited in quantity, and lacking in coherence. Decentralization can further undermine the coherence of urban development assistance implemented through national ministries. By providing support at the regional level, it should at least in principle be possible to achieve returns to scale without undermining local coherence.

But there are potential disadvantages with supporting urban initiatives at a regional scale. National governments remain the most critical level of government for policy formulation, and poorly designed regional initiatives can undermine national sovereignty. Even where this is not the case, national ministries may be uncooperative, reducing the effectiveness of urban initiatives. To be effective, regionally supported urban initiatives must transcend the interests of particular countries, but must adhere to principles that all of the countries in the region can support.

It is also important to recognize that the donor community has its own difficulties supporting urban agendas. As in other areas, when donors get involved in urban development, they tend to have a short-term focus, and to go through developmental fads, which are presented as innovations. They typically have a preference for supporting their own nationals and an unwillingness to collaborate or to support locally driven processes, notwithstanding countless declarations to the contrary. It is therefore also important that regionally supported urban initiatives transcend the interests and concerns of particular donors, even as they adhere to principles that all donors can support.

Many donors focus their poverty and environment support on rural areas on the grounds that that is where the people and environments are most in need (Satterthwaite, 2007). But the preceding section has shown that ongoing urbanization means that more and more African people live in cities and towns and that a growing proportion of poor are located in urban areas. The following sections go on to demonstrate that how urban development is managed has important implications for both rural and urban poverty, and for the environment.

2 Urbanization and regional migration

The regional, cross-border nature of much of Africa's mobility and migration makes it impossible for any national government to formulate and implement appropriate, supportive policies in isolation. Regional responses are not new and regional alliances have been in place sometimes for several decades. The effectiveness of these regional responses and alliances has not always been up to expectations, however, in part because they have failed to come to terms with the nature of the urban transition that underpins a large part of this migration.

Migration has long played an important role in Africa, and it plays an important economic role today. As such, the anti-migration feelings evident among many African policy-makers are somewhat surprising. There is a danger that the emphasis on rural—urban migration as the driver of urban poverty diverts attention from unresolved problems underlying Africa's high fertility rates, including access to health services and women's education and decision-making power. Intolerance of migrants, and of refugees who are often confused with economic migrants (a problem that also plagues much of the rest of the world), needs to be urgently addressed at both national and regional levels. Good-quality data and related information is clearly needed to support a more informed policy debate on urban growth.

There is also a need to better document and support mobility and migration as key elements of income diversification and, as such, of rural and urban poverty reduction. One lesson from past wars and environmental crises (such as droughts) is that temporary migration to urban centres, often to small local towns within or outside national borders, can be a vital strategy of survival. It is likely that as a consequence of climate change this movement will increase and intensify, and possibly become more permanent. What is not clear is whether it will result in the growth of informal settlements inhabited by impoverished migrants and non-migrants in persistent conflict. Instead, it could provide opportunities not only for survival but also for accumulation of assets and skills to those moving away from natural resource-based livelihoods. What transpires will depend largely on the capacity of local governments to provide basic infrastructure and services, with the support of national and regional governments. International assistance can play a key role in supporting and promoting networking and exchanges between different actors and levels of governance systems, including civil society and the private sector.

The remainder of this chapter examines in more detail how migration relates to Africa's urban challenges, and why responses need to have a regional dimension. The first section re-examines the demographic dimensions of urbanization and the importance of getting a more accurate picture not only of rural—urban migration, and its role, but also of natural urban growth and other forms of regional migration and mobility. The second section begins to examine the relationship between migration and economic transformation. The third considers some of the forms and roles of migration that are often neglected, with a narrow focus on rural—urban migration on the one hand and international migration on the other. The fourth and final section examines regional cross-border migration in different parts of Africa.

2.1 The demographic components of urban growth in Africa

Urban growth rates in sub-Saharan Africa are expected to continue to be higher than global ones for several decades. By 2050, the urban population of Africa is projected to increase by 0.9 billion (United Nations Population Division, 2008). At the aggregate level, as presented in Figure 1.2 above, it is possible to distinguish between urban growth resulting from natural population increase (the excess of births over deaths in urban areas) and that resulting from the increasing share of the population living in urban locations. In terms of specific urban populations, it is necessary to distinguish three components that contribute to urban growth:

net migration to the urban areas, the reclassification of rural settlements as urban and natural population increase. For policy purposes, it is important to understand which component drives urban growth in different regions, nations and cities.

Generally, the contribution of (net) rural—urban migration to urban growth declines as countries become more urbanized. In sub-Saharan Africa, however, despite the low levels of urbanization, very high fertility rates give natural increase more importance than migration in driving urban growth (above, and Vimard, 2008). Moreover, reclassification in Africa has historically been a much more significant component of urban growth than in other regions: between 1950 and 1980, its share was 26 per cent, mainly due to the proliferation of small urban centres. That said, demographic data in the region are patchy at best, hampering research and policy-making.

As indicated in the introduction, African governments provide a negative view of rural—urban migration in response to official surveys. A generally negative view of migration also permeates sub-Saharan African Poverty Reduction Strategy Papers. Population movement is either not mentioned at all, or if it is, it is seen as contributing to population growth, placing pressure on urban areas, breaking down traditional family structures, promoting the spread of crime and diseases such as HIV/AIDS, stimulating land degradation and reinforcing rural poverty. Migration is mentioned as positive by only two countries — Cape Verde and Senegal — both with high levels of international migration and reliance on remittances (Black et al., 2006).

These views refer primarily to net rural—urban migration, which is implicitly assumed to be the main type of movement. While this may be the case in terms of political visibility, it is not necessarily the case in terms of the numbers of migrants involved. Other forms of internal migration are equally if not more prevalent. Data derived from demographic and health surveys suggest that rural—rural migration is the most common type of movement in the surveyed African countries, while urban—rural migration has recently been the most common among men in Burundi, Kenya, Mali and Nigeria (United Nations, 2008a).

2.2 Urbanization, migration and economic transformations

To a large extent, urbanization reflects the transformation of the economic base. The factors behind this transformation are described in more detail in the following chapter. As the shares of GDP derived from industry and services become larger than agriculture's, so does the number of workers employed in these sectors. Especially in nations and regions with low initial levels of urbanization, rural—urban migration plays a major role in transforming the distribution of the population as people move to urban centres where new economic opportunities are concentrated. This has been and currently is the case for much of Southeast Asia and China, where rapid economic growth is related to the expansion of manufacturing and is directly linked to rural—urban migration.

In contrast, African nations' economic base is often seen as predominantly agricultural, although on aggregate agriculture's share of GDP is only 15 per cent in sub-Saharan Africa and even less in North Africa and the Middle East (World Bank, 2007). Services, in contrast, account for half of Africa's GDP. The service sector is dominated by small and microenterprises, often operating with minimal capital, low skills and very limited value adding – in short, what is often referred to as the informal sector. The informal sector is estimated to account for 78 per cent of non-agricultural employment, 93 per cent of all new jobs, and 61 per cent of urban employment (Kessides, 2006, page 12). Employment by sector is generally acknowledged to be the weakest part of most census data for several reasons, including under-reporting (typically for informal sector activities that may be considered semi-legal) and in the case of seasonal or temporary employment. Both are especially relevant to the African urban labour market.

Since the 1980s, economic decline in most African nations has deeply affected migration patterns and hence urbanization trends. In Côte d'Ivoire between 1988 and 1992, net inmigration was higher in the rural areas than in urban centres (Beauchemin and Bocquier, 2004). In Zambia, frequently typified as one of the most urbanized nations in sub-Saharan Africa, levels of urbanization actually fell from 40 per cent in the 1980 census to 36 per cent in the 2000 census (Potts, 2006). These negative impacts are often localized and especially affect areas with limited diversification of the economic base. In Ghana's cocoa-producing Central Region, the collapse of international prices for this commodity in the 1980s triggered out-migration from small towns. When these urban centres' population fell below the threshold of 5,000, the settlements were reclassified as villages, and their remaining inhabitants as rural. As a result, between 1970 and 1984, the proportion of urban population in the Central Region fell from 28.5 to 26.5 per cent, although national rates of urbanization continued to grow (Songsore, 2000).

One of the consequences of economic decline and structural adjustment programmes since the mid-1980s has been the narrowing of the rural—urban income gap (Jamal and Weeks, 1993) and more generally of rural—urban inequality in access to basic services, as urban centres were often worse affected by structural reforms. This has resulted in slowing levels of urbanization as rural—urban migration decreased and growing economic insecurity in the cities triggered urban—rural movement. Nevertheless, Africa's unchanging high rates of natural urban population increase have ensured that urban growth rates have remained high in many countries (Beauchemin and Bocquier, 2004).

2.3 What official data do not show: increasing mobility, multi-local households and diversified livelihoods

Official data on the number of African citizens living outside their country of birth are incomplete and miss significant, undocumented and unrecorded movements, such the often large cross-border flows. Data on internal migration are also less than adequate. Ironically, there seems to be more information on the numbers of those forced to move than on those who move voluntarily: about 20 per cent of the world's refugees are in sub-Saharan Africa (United Nations High Commission for Refugees, 2008), and it is estimated that the continent has as many as 45 per cent of internally displaced persons (Internal Displacement Monitoring Centre, 2008). But this is only part of the picture: mobility, both internal and cross-border and both as a response to local or national economic and political difficulties or as a way to access opportunities located elsewhere, has long been an integral part of labour markets and livelihoods across much of the continent. It is an important livelihood strategy of the poor, but also characteristic of the better-off and of the elites, and exists in widely different demographic contexts.

Temporary movement, often but not necessarily on a seasonal basis, has long underpinned the diversification of income sources by rural households and, importantly, by urban households. Income diversification is likely to become increasingly significant for farmers and pastoralists in drought-prone areas across Africa, from the Sahel to the Horn, as the impacts of climate change start to be felt. Small towns are traditional destinations for rural dwellers during times of drought and other environmental problems. The migration of whole households to local urban centres was documented during the droughts of the 1970s and 1980s (Black, 2001). In most cases, as rainfall patterns recovered, households went back to their home areas. Whether this will be possible in the future remains to be seen.

Migration is a key element of income diversification: research on rural—urban linkages in Mali, Nigeria and Tanzania found that about 50 per cent of rural households interviewed had at least one migrant member (with peaks of 80 per cent in the Sahel) and that remittances were a growing component of household budgets (Bah et al., 2003). This in itself makes

better-paid urban jobs preferable to agricultural wage labour, although the cost of living in cities and towns is often overlooked and can affect migrants' quality of life. This is especially the case for women, who are more likely to feel compelled to send as much money as they can to relatives at home.

At the same time, urban migrants of all income groups routinely invest in assets such as land, housing and livestock in their rural home areas. For the poorer groups, this is a safety net in the face of the instability and insecurity affecting jobs and accommodation, even after a long stay in the city (Kruger, 1998; Smit, 1998). Maintaining close social networks and investing in rural assets enabled households and individuals to engage in return migration flows from the cities to the rural areas and small towns in the 1990s (Jamal and Weeks, 1993; Potts and Mutambirwa, 1998).

Finally, it is important to consider that, for a significant and growing proportion of households, assets and activities are not only spread across rural and urban areas within the same country, but often include urban centres in other nations. This is especially the case in countries where there is a high incidence of international and cross-border movement. An often overlooked dimension is how investments by international migrants shape urban centres in home countries. Investment in property, both residential and commercial, is favoured by many international migrants and contributes, sometimes substantially, to the growth of cities and large towns.

Temporary migration in Africa has sometimes been interpreted as a failure of urbanization. However, those who do not migrate, particularly in rural areas, are the extremely poor, whereas most if not all other groups, from the relatively poor to the elites, incorporate both rural and urban, farm and non-farm components in their livelihoods. Circular migration is thus not a response to a lack of permanent employment opportunities in urban centres, but rather an effective economic and social strategy of accumulation or, at the very least, survival.

2.4 Regional cross-border migration

Migration in Africa has always had an important cross-border component, partly reflecting the arbitrary nature of most national boundaries inherited from colonial administrations, partly drawing on the economic interdependence between ecological zones, and partly encouraged by the creation of regional political and economic alliances in the 1960s and 1970s. Increasingly, people also move between regions: for example, in the past decade relatively substantial numbers of West African citizens have moved, largely to the cities of Southern Africa. While it is very likely for these longer-distance movements to grow in significance, more localized regional dynamics will remain crucial in shaping specific patterns of mobility.

West Africa: The Economic Community of West Africa States (ECOWAS) was founded in 1975 and counts 15 member states. There is technically freedom of movement within the ECOWAS zone, but migrant workers' rights are not always respected. There has also been considerable volatility within the region with regards to the acceptance of migrants: mass expulsion of regional migrants took place in Ghana (1969) and Nigeria (1983 and 1985) and violence against migrants (including second and third generation) broke out in Cote d'Ivoire in the aftermath of the 2000 elections. In all cases, resentment of migrants' presence was fuelled by political interests and builds on unresolved issues such as access to land and tenure systems.

Nevertheless, West Africa has a long history of cross-border mobility linked to factors such as long-distance trade, the need for pastoralists to look for pasture in a drought-prone environment, and the importance of smallholder plantation agriculture that has traditionally

attracted large numbers of migrant farmers. It is estimated that one-third of West Africans live outside their settlement of birth (Black et al., 2006). The majority of African migrants to Europe and the United States are estimated to come from the sub-region. Indeed, nations such as Ghana, Nigeria and Cote d'Ivoire, which after independence were magnets for regional migrants, appear to have become net emigration countries. Apart from Ghana, however, there is a severe lack of good population and migration statistics in the sub-region. In 2007, it was estimated that 43 per cent of the population was living in urban centres (United Nations Population Division, 2008), but given that data on the most populous nation in West Africa, Nigeria, are widely considered to be unreliable, this figure should be treated with caution.

Eastern Africa: Eastern Africa has the lowest level of urbanization in the continent, estimated to be 23 per cent in 2007 (United Nations Population Division, 2008). The subregion has a long history of circular labour migration, much of it between rural areas — plantations, mining areas and pasture lands. Since the 1980s, this mainly seasonal mobility has decreased, and as the result of wars and other outbreaks of violence, flows of refugees and internally displaced persons have started to dominate movement. At the same time, rural—urban migration remains an important component of rural households' strategies of income diversification. Although migration to cities and towns declined in the 1980s following economic decline and the implementation of structural adjustment programmes, it is likely that growing climatic and environmental pressures will reverse this trend. The difference is that rather than moving to urban centres within the sub-region, East Africans are now more likely to move to South Africa and Botswana (Cross et al., 2006).

Southern Africa: the importance of the mining economy in shaping the regional character of the urban population in Southern Africa cannot be underestimated. Indeed, apartheid policy was predicated upon formalizing and managing a colonial migratory labour system, not just from within South Africa, but also regionally, from Lesotho, Swaziland, Botswana, Zimbabwe, Malawi, Zambia and Mozambique. The end of apartheid and the integration of South Africa within the SADC region have resulted in a major increase in cross-border and intra-regional mobility. High rates of rural and urban poverty and high levels of unemployment as well as differential levels of social service provision (health, basic services, etc.) have contributed to make mobility an increasingly important livelihood strategy. This has been compounded by the long-term repercussions of the Mozambican and Angolan civil wars, the flows of refugees escaping civil strife in Central Africa, and political and economic crisis in Zimbabwe. Despite its own poverty and unemployment problems, South Africa remains a preferred destination for many migrants.

This influx of migrants, however, is problematic, especially in low-income urban areas. In 2008, foreign African migrants were the main target of violent attacks in informal settlements in Gauteng and the Western Cape, which killed more than 50 people. The violence prompted a debate on South Africa's perceived growing 'xenophobia'. A recent study of the perceptions of low-income urban South Africans suggests that the root causes of the anti-immigrant sentiment can be traced to frustration for the slow pace of urban service delivery, especially housing – itself one of the most consistent causes of friction in South African society – economic insecurity, with high levels of urban and rural poverty and unemployment, and a general feeling of not being consulted by local and national officials. Competition for resources such as water, sanitation and health services, together with employment and business opportunities, is also a key dimension to the recent spate of conflict (Human Sciences Research Council, 2008).

While these examples demonstrate that regional migration is linked to urbanization and to urban problems, they do not in themselves indicate the need for regional inter-urban cooperation. What they do demonstrate is the importance of having an urban dimension to international cooperation on migration issues. They also demonstrate the importance of

taking a regional perspective on some urban issues. National governments ought to work to prevent urban prejudice against rural—urban migrants, both because it is inherently problematic and because it can undermine national development. But without some sort of higher level support, national governments have less incentive to prevent urban prejudice against those who originate in other countries, though much of this migration is also an integral part of the regions urban transition.

3 Urban systems and economic growth

Throughout the world, economic growth and rising living standards have gone hand in hand with urbanisation. The transition from agricultural to industrial economies has involved transforming the economic and population geography of nations. The biggest puzzle about Africa's rapid urbanisation is why it has not been accompanied by greater economic dynamism. No less than 43% of its urban population lives below the population line (UN-Habitat, 2008). What has stalled the economic forces that would otherwise have created more jobs and higher incomes? And how do Africa's highly populated cities manage to sustain themselves and avoid disorder without a stronger economic base? More importantly, what can be done to overcome the economic weaknesses of African cities and to stimulate faster growth and development?

This section considers some of the distinctive features of African urban economies and explores the role that enhanced regional collaboration could play in facilitating economic prosperity. It begins by outlining the argument that cities are crucial to economic development and then moves on to consider its applicability to the African context.

3.1 The economic argument for urban growth

Cities have traditionally functioned as sites of economic growth and crucibles of social and cultural progress. Urbanization has been intimately bound up with the shift from predominantly agricultural economies to industrial and service-based economies. Economic progress has depended on more people living in cities (to expand the supply of labour and entrepreneurs) and it has generated the resources to support urbanization (through essential infrastructure and services). The outcome of this virtuous circle has been rising national productivity, higher average incomes and greater all-round prosperity.

The economic rationale for urbanization can be reduced to two basic concepts – the *division* of *labour* and *economies* of *scale*. The former was introduced by Adam Smith and explains the benefits for productivity that arise from specialization between producers. It accounted for the great leap forward from craft production to factory production that gave rise to the industrial revolution. *Economies of scale* relate to the efficiencies that result from larger units of production. Larger firms can spread their fixed costs (rent, rates, R&D, etc.) over a larger volume of output and buy their inputs at lower prices. *External economies of scale* (or *'agglomeration economies'*) relate to the benefits that firms derive from locating near to their customers and suppliers in order to reduce transport costs. They also include proximity to a large labour pool, competitors within the same industry and firms in other industries.

The gains from spatial concentration can be summarised as three functions: matching, sharing, and learning (Gill et al., 2007). Cities enable firms to match their distinctive requirements for labour, premises, suppliers and business services better than smaller towns, simply because there is a bigger choice available. They also give firms access to a bigger and better range of shared services and infrastructure, such as more frequent air or shipping connections to global customers and suppliers. Finally, firms benefit from the superior flows of information and knowledge in cities, promoting more learning, creativity and innovation, and resulting in more valuable products, processes and services. As a result, 'urban areas... epitomize the process of *endogenous* growth whereby resources are used more productively and in new ways' (Kessides, 2006, page 13).

These benefits of agglomeration are often offset by rising congestion, limited natural resources and higher labour and property costs in cities – 'agglomeration diseconomies'. Their immediate effect is to reduce urban productivity and hold back growth. Over time, however, they tend to encourage the decentralization and dispersal of lower value, land-

intensive activities (such as routine production, distribution and warehousing) away from large cities. This results in the steady upgrading of urban economies to higher value-added industries and more highly skilled functions, with benefits for average incomes and living standards. Rising urban prosperity also provides the resources for improved social and cultural amenities, public infrastructure and services.

The process of deconcentration benefits surrounding towns and rural areas from the spillovers of investment and jobs, and the large and prosperous markets available in cities. The hinterland can supply primary products, energy, water, recreational amenities and standardized goods and services for urban consumers. Workers can also commute or migrate to urban labour markets, generating valuable remittances for their place of origin. This is just one of a number of 'livelihood portfolios' or safety nets that urban activities can contribute to rural households (Ellis and Harris, 2004). Unsurprisingly, it has been found that rural poverty is lower and high-value agricultural production more common closer to urban centres (Kessides, 2006). The broad message is that the growing interdependence between cities and their surrounding regions can be used to support wider national goals of rural development and poverty reduction.

3.2 The relevance to Africa

The World Bank has recently advocated giving urbanization a much higher profile in development policy, particularly in Africa. The landmark 2009 World Development Report marshalled considerable research and worldwide evidence to make a strong economic case for cities:

Growing cities, mobile people, and vigorous trade have been the catalysts for progress in the developed world over the last two centuries. Now these forces are powering the developing world's most dynamic places. (World Bank, 2009, page13)

The Report argued that economic growth is inevitably unbalanced and focused in the major cities as a result of agglomeration forces. Governments should support and not constrain urbanization, through improved infrastructure and more efficient land markets. Responsive public services in rural areas should equip people with the skills to access jobs in the main urban areas while preventing forced migration through lack of local facilities. Lagging regions and rural areas should benefit from urban prosperity through remittances and circular migration, which should be actively encouraged. Improvements in transport connectivity could facilitate greater 'economic integration' between cities and their hinterlands. Finally, efforts should be made to reduce the obstacles to cross-border trade between countries in order to open up markets and enable stronger flows of information, capital, goods and people.

Africa was singled out for special attention. With the most dispersed and least urbanized population in the world, the highest transport costs, and the greatest proliferation of national borders because of its colonial legacy, the continent has to promote higher densities, shorten distances and lower divisions between nations to stimulate economic growth. Antiurban sentiments also need to change: 'urbanization, done right, can help development more in Africa than elsewhere' (World Bank, 2009, page 285). Inefficient urban land markets and poor basic services obstruct functional urban systems and development. Deficient rural facilities prompt unskilled rural—urban migration, which concentrates poverty in cities and creates squalor, social tensions and instability. Poor transport impedes urban—rural and international economic interactions (Naude and Matthee, 2007). Finally, bureaucracy creates major barriers to trade and resource flows, which also holds back economic development.

The Report's fundamental assumption was that economic prosperity would emerge almost naturally through the growing concentration of population and reduced divisions between

places. The state's role was essentially enabling – providing public goods, infrastructure and universal basic services. A major weakness was the vagueness about timescales and how long this organic process might take to raise incomes above the poverty line and remove widespread hardship. The references to historical experience in Europe and North America suggested it might take generations. At the end there was a hint that 'this Report spotlights the importance of starting small and keeping expectations realistic. Regional integration takes time' (World Bank, 2009, page 285). More direct measures by local or national governments impatient to accelerate economic development were not endorsed because this was not viewed as an appropriate role for the state.

3.3 The development of dynamic urban economies

The analytical framework of agglomeration economies and the concepts of density, distance and division are useful reminders of the spatial dimensions of economic development and of the leading role of cities. They also provide some clues as to why economic progress in Africa has been slow and some suggestions for improving the situation. However, the ideas are too general and lacking in concrete points of reference to offer more detailed insights into the economic trajectories of cities. They offer no explanation for why the economy of African cities stalled or even declined during the 1980s and 1990s. Urban economies are treated as a black box, without unpacking the content and dynamics. A more elaborate framework is needed to explore the changing structure of urban economies and to interrogate Africa's specific challenges.

Drawing on extensive historical observation, Jane Jacobs (1969) identified a series of stages through which many city economies develop. The foundation for durable growth is basic infrastructure, services and goods, including a stable food supply, water, shelter, security, transport and communications. With these in place cities can grow more rapidly. The next stage emerges with the growth of external trade (imports and exports) and supporting facilities such as storage and distribution (logistics). In the third phase, growth is strengthened by the replacement of imported goods with local production (import substitution). This adds diversity and scale to the urban economy. The fourth stage involves greater innovation through the creation of wholly new products and services for new markets. In the fifth phase of economic renewal, the old skills and activities are refreshed with new ideas and investment, thereby avoiding obsolescence.

This is a helpful account of the growing diversity of successful urban economies. As they grow and develop, the different activities become more inter-dependent, which increases the city's overall resilience and adaptability. It emphasizes that cities are open, externally-oriented systems in which trade with other places is vital. But real prosperity (and a strong local multiplier) depends on local production of goods and services – cities must add value to natural resources and products made elsewhere, and not simply distribute and exchange them. The more efficient, resourceful and innovative their productive enterprises are, the more wealth and jobs will be generated.

3.4 Africa's urban economic trajectories

To what extent have African cities developed along these lines? If they have not, why has progress stalled? The phases are not neatly sequential and overlap in practice, although there is an underlying logic from the simpler activities to the more sophisticated. Have African cities progressed from a basic trading function towards higher value-added activities – manufacturing, marketing, design, R&D, head offices, business services? To what extent has production moved beyond craft-based processes to a fuller division of labour with internal economies of scale, and from mass production of low-value goods to more flexible, small batch and bespoke production of higher value goods? In short, how elaborate are African urban economies?

Unfortunately, the detailed research required to answer these questions does not exist. We know that the overall productivity of most African economies (GDP per head) is very low by international standards. An edited collection by Bryceson and Potts (2006) offers some evidence for why most African cities do not have dynamic economies. Urban population growth has out-stripped economic development, having been driven by rural poverty, conflict and natural growth rather than economic opportunity. Positioned as coastal ports or major rail depots, most large African cities have good strategic locations to engage in national and international trade. However, productive investment is low by the standards of cities elsewhere in the world. Labour specialization is also undeveloped, with rudimentary production processes, especially in the sizeable informal economy. The purchasing power of most urban residents is very low, so consumer demand is a weaker motive force for development and modernization than elsewhere. 'In short, their economic content lacks the dynamism, specialisation, diversity and economies of scale normally associated with urban life' (Bryceson and Potts, 2006, page 324).

Looking at each stage of urban economic development, starting with the foundations, there are clear deficiencies in the basic infrastructure and services of many African cities, including a reliable electricity supply, water supply, telephone service and efficient transport systems (World Bank, 2009). This discourages inward investment since these factors are often taken for granted in business locations elsewhere. A complete lack of electricity, no business premises and poor security are particular problems for enterprises seeking to start up and grow in the large informal urban settlements. Most informal enterprises are limited to the retail trade (hawkers and spaza shops) (Rogerson, 1997), with no value-added processes and little scope for upgrading without essential infrastructure and facilities.

The second stage of producing goods for wider markets (tradeables) is normally vital for stronger and sustained growth. Many African cities began to develop manufacturing industries after independence in order to diversify from exporting agricultural products and minerals. However, for reasons such as enforced structural adjustment programmes and poor implementation, this was generally unsuccessful (Rakodi, 1997; Bryceson and Potts, 2006). Africa's share of world exports declined from 7 per cent in 1970 to 2 per cent in 2000 (African Development Bank, 2007). Most cities retain a residual manufacturing sector confined to consumer goods for domestic markets (typically food processing, furniture, soap, beer, textiles, cigarettes, cement and other building materials). Beneficiation of Africa's abundant primary commodities has been slow to develop through lack of capital and knowhow, and high tariffs on value-added agricultural exports to Europe and the USA. Consequently, 60 per cent of the continent's total exports are still primary products (African Development Bank, 2007).

Trading activities tend to dominate urban economies, including retail, logistics and import–export. Many cities have become major gateways or depots through which increasing volumes of oil and industrial goods are imported. Exports have dwindled from most port cities, except for those through which mineral exports are channelled. Mombasa, Mogadishu and Dar es Salaam are good examples of ports dominated by imported goods. Luanda, Beira and Maputo have a better balance of exports, including oil and minerals. Airports have also expanded, bringing in tourism and enabling international travel by business, and political and donor organizations. Trading activities do not provide a strong economic base because of their low value added, high volatility and low multiplier effects. The jobs are less well paid and tend to be more insecure than in manufacturing.

The third phase of replacing imported goods with local production has generally failed to take off. A minor exception is the growth of urban agriculture in many African cities, including cultivation of crops and keeping livestock. Garbage picking and waste recycling might be placed in the same category. However, these are very small-scale subsistence activities

undertaken in response to declining household incomes, rather than a basis for economic expansion (Rogerson, 1997). Reductions in national tariff barriers and falling transport costs associated with containerization have instead resulted in a flood of cheap imports, particularly from Asia. Chinese textiles, clothing and household goods have wiped out some of the residual local production in many African cities. Deindustrialization continues in countries such as South Africa, which developed a large, diverse domestic manufacturing sector under apartheid import protections, but subsequently removed them too quickly for many firms to adapt to global competition (OECD, 2008).

The fourth and fifth stages of innovation and renewal have also been limited in extent. The most obvious manifestation of creativity has been in the informal economy and concerned with replacing or filling gaps in the formal, waged economy, and with household survival. For example, informal retail enterprises have provided goods unavailable in the formal sector (such as traditional medicines), in smaller quantities, or in locations where formal outlets are sparse (such as informal settlements). Small informal manufacturing enterprises have also emerged following the closure of larger formal businesses where people had acquired relevant skills, such as clothing. There has also been some outsourcing of work to informal firms in order to circumvent labour regulations and to cut costs.

Unsurprisingly, the rewards and conditions of informal work tend to be inferior, reflecting the lack of capital, skills and technology. Growth takes an extensive character (proliferation of more of the same small-scale units), rather than higher productivity, so it is questionable whether this is really innovation. It also means that informal enterprises tend to operate in saturated markets and generate low incomes for their proprietors and workers. Consequently, most experts believe that there is little scope for a dynamic informal economy of growth-oriented firms to emerge in Africa without concerted state support in the form of credit, technical assistance and skills training (Rogerson, 1997; Bryceson and Potts, 2006; Gill et al., 2007, page ix). In practice, many local and national governments have been unsupportive if not hostile to informality. Rogerson argues there is potential for this sector to enhance urban productivity if a model of 'flexible specialization' can be developed involving local clusters of small enterprises that form networks and collaborate to recreate a division of labour and scale economies, along the lines of the 'industrial districts' in several European countries.

3.5 Recent recovery

Studies of African urban economies are invariably negative about the past and pessimistic about the future. It is often argued that globalization has stalled economic progress. Multinationals are deemed to have exploited the continent's natural resources and bodies such as the IMF and World Bank have dictated unfavourable policy packages (see, for example,. Rakodi, 1997). Yet, in recent years there have been signs of change with brighter prospects than for decades, at least until the global downturn. The average rate of economic growth across sub-Saharan Africa increased from 3.5 per cent in 2000–02 to 5.7 per cent in 2005 (African Development Bank, 2007). Foreign Direct Investment (FDI) increased from \$7 billion in 2000 to \$31 billion in 2008, according to the IMF. UN-Habitat (2008) estimate that Africa's cities produce 55 per cent of the continent's GDP with 39 per cent of its population.

The principal cause of the turnaround was strong global demand for primary commodities, especially oil, gas, metals and minerals (such as diamonds and coal). But Africa's four main exports are non-renewable and create few direct jobs, so the basis of the recovery has been narrow. To create and sustain wealth in the long term these resources have to be converted into other forms of capital, preferably tradeable industries that will outlast the minerals. Governments have gained large revenues from the exports, but not reinvested sufficiently in diversification to spread the benefits more widely. Weak institutional capacity and poor governance are partly to blame (African Development Bank, 2007). Another effect of the

export boom has been to stimulate urban consumption and inflate house prices and speculative property development. Nigerian cities have experienced this for some time. Angola's capital Luanda is the latest example.

Booming exports have reflected strengthening economic ties with Asia. Exports to China grew by almost 50 per cent each year between 1999 and 2004, followed by India. Both countries want access to African raw materials, minerals and fuel, and African markets for their manufactures. It is widely hoped that this will create new development opportunities for Africa, with a fairer East–South nexus than the old North–South relationships (Murray, 2008). Africa's cities have a big role to play in broadening and deepening trade and investment patterns beyond primary products and short-term consumption that sucks in luxury imports and creates macro-economic imbalances.

FDI can help countries to diversify at lower cost and with less risk than starting from scratch. The traditional sources of FDI have been Europe and the USA, but China, India, Malaysia, Brazil and South Africa are increasingly important. India is keen to sell Africa its ICT products, including telephony and mobile internet services. Over the past five years it has offered lines of concessionary credit to Africa worth \$2.5 billion. China has increased its investment commitments in Africa from less than \$1 billion per year before 2004 to \$8 billion in 2006 (World Bank, 2008). Over 800 joint Chinese–African projects have been set up, with large investments in oil, timber, minerals and hydropower in ten countries. China is also financing the building or rehabilitation of 3,000 kilometres of railway lines across the region, including reopening the Benguela railway linking Zambia and the DRC to the Angolan port of Lobito. The challenge is to ensure that such investments help with industrial diversification and urban economic development, and don't simply accelerate the exploitation of Africa's natural resources.

Box 3.1: South Africa's regional role

South Africa has become a major investor elsewhere in Africa over the last decade. Its direct investments have mostly been in consumer-focused businesses in urban areas – retailing, breweries, fast food, mobile phones, banking and construction. South African Breweries is a good example. It now has 19 breweries in ten other African countries, plus many more distribution depots and administrative facilities. Conscious not to be seen as the new colonialists, it has also invested in developing local supply chains with farmers, joint ventures with other brewers and active social responsibility, community development and health programmes.

3.6 The regional agenda

There is a range of economic challenges and opportunities for African urban economies arising at the regional level, i.e. cutting across national boundaries. They can be grouped into three categories.

First, there are many common economic issues faced by cities in different countries. One of the most important is to secure government recognition for the contribution of cities to national prosperity. Regional cooperation among local authorities could strengthen the case for positive urban planning and coordination of investment in housing, transport and industrial development. Networks of local authorities could share experience of negotiating arrangements with foreign investors to fund economic and physical upgrading programmes. Cities in similar geographical circumstances (e.g. coastal or mining areas) could exchange knowledge of opportunities to beneficiate minerals or create jobs through environmental projects, clean energy and the 'green economy'. Those with large informal economies could collaborate on experiments to support their growth and development, perhaps through enterprise networks, supplier development and public procurement programmes. The

provision by governments or international bodies of minor incentives for inter-city cooperation might be important to overcome initial barriers and could have valuable knock-on effects in promoting goodwill and building long-term relationships.

Second, some cities are functionally connected through flows of trade, labour migration or capital so their economic fortunes are more obviously interdependent. There may be scope to instigate forms of joint decision-making and collaboration at the regional scale to reduce transport and transit barriers, harmonize national regulations and product standards, and improve economic integration (see boxed illustration). For example, one city may be the port of another city, or the source of a key input to its economy (such as coal, energy or water supply). It takes an African exporter about 40 days to cross the border into a neighbouring country compared with 22 in Latin America (World Bank, 2009). There may be scope to develop single, integrated regional production networks based on complementary industries and supply chains in different cities where individual places lack critical mass. A collaborative approach might make industrial diversification easier and more sustainable through shared learning and the development of clusters of related products. There would be cost advantages from the scale economies and opportunities for specialized niche production and service providers. The larger markets would be more attractive to external investors and mobile talent. The way to start may be to build on existing agricultural products or mineral resources. In short, regional integration could help particular parts of Africa become more globally competitive.

Box 3.2: A cross-border development corridor

The Maputo Development Corridor is a good example of an attempt to provide a seamless road and rail connection between Gauteng and the port of Maputo. The project has been driven by national government and focused on transport and transit issues, including more efficient border posts and port upgrading. The structure promotes fast-track design and implementation of bankable private investment projects. Local and regional authorities feel somewhat excluded from this top—down process and are critical that more effort has not been devoted to a broader economic and social development agenda (including jobs, skills and public facilities) at appropriate towns in the corridor's catchment area (Soderbaum, 2001).

Third, some cities in different countries form part of the same continuous built-up area or corridor as a result of physical expansion or because they have always straddled national borders. These cities share much in common because their ecosystems are integrated and their economic systems have the potential to be. Cross-border agreements are particularly important, probably between local municipalities and involving higher level regional, national or international authorities. There are major opportunities for productivity gains through well-functioning labour and housing markets, smooth flows of goods, services, capital and ideas, and joint marketing and shared facilities to attract FDI and tourism. A range of shared regional services and pooling of infrastructure should also be possible, including higher education and training, research centres, common utilities (power generation and telecommunications systems) and transport hubs (such as airports).

Box 3.3: Twin cities across borders

There are many examples in Africa of cities that are close to each other but separated by a border. The New Partnership for Africa's Development (NEPAD) has identified considerable scope for corridor development in the lower Congo including Kinshasa-Brazzaville because of enormous hydroelectric power potential. Another example is the Lagos-Cotonou-Lome corridor, perhaps extending to include Accra and Abidjan. The Southern African Development Community has identified a range of corridor initiatives, including Nacala (linking Mozambique and Malawi) and Namibe (linking Angola and Namibia).

4 Urban land, poverty and informality

Regional activities, cutting across national boundaries, have an essential contribution to make to enabling hundreds of millions of urban dwellers in Africa to secure basic services, secure tenure and housing improvements. Similar problems are found in many countries in the region, including over-specified standards and a reification of formality. The fears about excessive rural—urban migration described in the previous sections have inhibited a thorough reform of urban settlement regulations, many of which originate as far back as the colonial period. In the absence of appropriate shelter policies, the problems of low incomes are exacerbated by illegality, denial of basic services and tenure insecurity.

Regional dialogue on the challenges of urban poverty can be based on:

- networks ranging from informal to intergovernmental;
- **participants** ranging from local organizations of the urban poor to national governments and international agencies; and
- agendas ranging from cross-border issues to local issues common to a selection of cities.

As with other urban challenges, the appropriate form of regional dialogue depends on both the nature of the challenge and who has an interest in resolving it.

This chapter focuses on poverty issues that are common to a wide range of African urban centres and could easily become the focus of formal dialogues among local authorities as well as the actors conventionally associated with regional cooperation: national governments, international development agencies, international NGOs and regional organizations. Such dialogues are particularly useful when there is broad-based interest in supporting new approaches.

The chapter also illustrates the role that organizations of the urban poor can play in regional dialogue, using as an example the work of one women-led people's movement, which is catalysing a willingness among national and local government to support new approaches. Such regional activities help to give politicians and officials the motivation to leave behind conventional but ineffective approaches; they can see the potential offered by such approaches more easily in a different context and, with communities and their peers in other countries, they discover new forms of African solidarity that give them the courage to break with the past. Development assistance has made a critical contribution to this regional process.

4.1 The common challenges

Urban poverty is a continental problem; incomes generally are low and significant proportions of the population have very low incomes. In some countries, urban dwellers are still a relatively small percentage of the population (and hence the urban poor are relatively less significant than the rural); in others, this is not the case. Income-based poverty measures tend to underestimate the scale of urban poverty. A focus on income-poverty also distracts attention from the fact that several critical dimensions of urban poverty, including inadequate access to land and services, reflect more than a lack of income.

4.1.1 Access to land

Land acquisition, tenure and other aspects of shelter are overwhelmingly informal in African towns and cities, particularly in sub-Saharan Africa. In many cases, this is true for higher income groups as well as for those with low and very low incomes. In 2002, Dar es Salaam had a population of 2.5 million of which 70 million were living in informal settlements (Sheuya, 2007). In Angola, three-quarters of the urban population live in informal peri-urban

'musseque' settlements and over 80 per cent of these residents have no clear legal title to the land that they occupy (Cain, 2007).

There are major shortcomings in the quality of housing and services. Angola's housing shortfall is over 875,000 units and 65 per cent of existing housing lacks basic services such as water and sanitation and is in need of major upgrading (Cain, 2007). In Tanzania, it is estimated that 98 per cent of the housing stock in urban areas is constructed on an incremental basis (Mutagwaba quoted in Government of Tanzania and UN-Habitat, 2003, page 31). What is particularly notable is that this is largely unchanged from the figures quoted for 1978 (Okpala, 1994). Yet most official housing policies in Africa neither recognize the fact that most poor people have no alternative but to build their own shelter, nor do they design strategies to support them.

There are multiple mutually reinforcing causes of informality in tenure, shelter and services. Some institutional difficulties are related to the nature of government and what is possible in a low-income economy with a low taxation capacity and customary law and traditions overlapping with the jurisdictions of the modern state. There are also problems related to the demographic transition, particularly when rural—urban migration is believed to be excessive by government officials, who are then loath to plan for permanent settlement. There may be a lack of state willingness as well as capacity to zone and service adequate areas of urban land. Markets are also often not functioning effectively, especially for poor groups. In the absence of state actions or market opportunities, families have to work outside of the formal systems to acquire land. While there are particular nuances to this situation across the continent, what is evident is the ubiquitous lack of affordable formal solutions.

The problems related to the affordability of middle-income groups are indicated by the fact that, even in South Africa, 75 per cent of households earn too little to be considered for mortgage loans; this is already considerably higher than the 40 per cent of households that cannot afford mortgage loans in Mexico and Panama. Research in Zimbabwe, Ghana and Tanzania has highlighted the scale of this problem:

- nine out of ten low-income home seekers on the housing waiting list in Harare in 1996 had a monthly income of less than Z\$900, the minimum income required to buy a plot in the Kuwadzana 5 low-income housing project (Kamete, 2000, pages 249– 51).
- 'The average cost of a decent low-income family house in Ghana (about 50 million cedis) is more than ten times the average annual salary of most key workers in Ghana' (Kofi Karley, 2002, page 27).
- In Tanzania, a two-bedroom low-cost house required, in 2002, a monthly repayment equal to 100 per cent of the value of a minimum government salary (Government of Tanzania and UN-Habitat, 2003, page 32).

Incremental development is a sensible response to this limited affordability but this is difficult due to the regulations of housing finance agencies and state. For example, the Kenyan Banking and Building Societies Act explicitly forbids financial institutions from lending for plots of land with no or partially constructed housing on them (Malhotra, 2003, page 225). The requirement to construct with modern building materials is also commonplace (Datta, 1999, page 204; Okwir, 2002, page 95, for Botswana and Uganda respectively).

Carol Rakodi and Clement Leduka (2004) analysed the land tenure situation in six cities in Anglophone Africa and concluded that formal systems are not meeting the scale of need. Informal tenure is dominated by forms of market transaction, except for a small number of groups able to access customary land on preferential terms. There are few opportunities for those unable to afford the informal market in their six cities; only in Kampala were citizens able to secure land at no cost, and this in the valley bottom of wetland areas at risk of both

flooding and eviction. Women, they argue, are particularly disadvantaged, and many only secure land through marriage.

Families unable to secure tenure (informal or formal) have to rent. In addition to the shelter needs of long-term city dwellers, there is an ongoing demand for rental accommodation from temporary migrants and/or occasional workers (UN-Habitat, 2003a, page 110). To respond to such needs, there is a vibrant informal rental market in many low-income settlements. Sometimes small-scale landlords rent rooms on land where they are also living. Elsewhere, absentee landlords dominate, which often leads, as in some Nairobi settlements, to problems with the quality of accommodation due to the lack of incentive to invest (Gulyani et al., 2006).

4.1.2 Access to services

The water and sanitation coverage in Africa varies from country to country but the worst affected urban deprivation is in the sub-Saharan region. In terms of water, recent WHO/UNICEF (2008) statistics show that an estimated 52 million people in urban sub-Saharan Africa did not have access to improved water sources and depended on unimproved sources such as unprotected wells, tanker-trucks, and surface water. Only 35 per cent of the urban population in sub-Saharan Africa is reported to have access to piped water on premises. The distances to safe water sources result in long, tiring and time-consuming journeys for those responsible for collecting water, generally women and children. The safe water sources are unreliable and the water supply is often intermittent.

Access to improved sanitation is very low and only 52 per cent of the urban population has access to improved sanitation facilities and of these, a number of people share the facilities. An estimated 8 per cent of the African urban population practises open defecation due to a lack of alternative sanitation facilities (WHO/UNICEF, 2008). Although the sanitation coverage is much lower in the rural areas compared to the urban areas, those living in urban areas face a greater risk to health due to higher population and poor environmental conditions (Mulenga et al., 2004; UN-Habitat, 2003b).

Dry sanitation methods are common in low-income settlements, because they do not use water as a carrier. There is a chronic shortage of water and water infrastructure in most African countries. The ordinary unimproved pit-latrine is affordable, simple to build and serves the purpose of excreta disposal – and is used by as many as 201 million people across Africa (WHO/UNICEF, 2008). Up to 70 per cent of people living in urban areas of sub-Saharan Africa depend on this system. Several studies in Africa have shown that water (not sanitation) is the priority of local residents (Mulenga et al., 2004). And yet from a public point of view, sanitary improvements have a greater impact than water supply or quality improvements (Bateman et al, 1993). If current trends continue, Africa is unlikely to achieve the Millennium Development Goal (MDG) target for sanitation by 2015 (WSP, 2006).

As is the case with shelter, legislation limits the type of sanitation systems that can be used in urban areas and as a result inhibits the possibility of using locally developed low-cost systems. In Zimbabwe, for instance, the Urban Councils Act of 1996 compels sanitation agencies to provide only waterborne sewerage systems in urban areas, regardless of their limited resources and despite the inability of the residents of low-income settlements to pay for such costly services.

4.2 Addressing illegality and informality with the help of regional networks of informal groups

Some informal settlements of urban poor reflect their historic status as the residential areas of secondary citizens (native locations) as defined by colonial government. In the decades following the end of colonial rule, the status of the urban poor has remained a problem. The

newer informal settlements are often on land not considered suitable for housing, or developed in ways that contravene planning regulations. The secondary status of many low-income settlements is reinforced by the lack of official maps and other forms of baseline data about these areas. This lack of data allows government agencies to ignore slums and squatter settlements and continue to deny residents access to services and other state facilities. The pressure, from other quarters, to take action against these settlements may also be reduced, and residents may be reluctant to draw attention to their situation. In the long run, however, governance outcomes are only likely to improve under pressure from local residents. Without the meaningful extension of an urban citizenship to all residents, including the urban poor, it is difficult to see how such pressure can be brought to bear.

Some groups have made progress in addressing the lack of information about these areas as a first step to citizenship. Organizations such as Development Workshop in Angola and Shack/Slum Dwellers International (SDI) affiliates have encouraged residents to develop their own information base to help drive local action. Local groups may be supported by professionals using high-tech equipment such as GIS technology; however, much of this work is done locally, drawing maps and enumerating local citizens. Through such processes, communities become more knowledgeable about their situation and are more able to address their own problems. At the same time, such information can provide the basis for constructive negotiation between citizens and the state.

Improving conditions for the landless, homeless and impoverished requires investment and typically requires regulatory reforms that secure the legalization of incremental development and the provision of basic services into low-income settlements. Organizations of landless and homeless citizens have played a central role in catalysing this process – and the importance of working at a regional and continental level is evident. As a transnational network of people's organizations, SDI illustrates what is possible with regional initiatives that involve government agencies but are not rooted in intergovernmental networks.

SDI members are grassroots federations that bring together women-led savings schemes based in settlements with insecure tenure and inadequate shelter. SDI's methodology uses savings to rebuild neighbourhood social capital, peer exchanges to offer skills, ambition and confidence to the urban poor, and federative structures to institutionalize learning and negotiate political deals with local, city and national governments. A common initial challenge is to find ways in which local residents can work together to achieve a locally determined development plan. SDI believes the solutions have to emerge from the shack/slum dwellers themselves. In Africa, there are nine countries with savings schemes. federations and support NGOs (Ghana, Kenya, Malawi, Namibia, South Africa, Tanzania, Uganda, Zambia and Zimbabwe); a number of other countries in which savings schemes have been established (Angola, Mozambique, Swaziland); and most recently local associations in Sierra Leone and Nigeria have begun to participate in the network. The activities are primarily centred on tenure security, basic services, and in some contexts housing and/or income generation. Donor finance is used to catalyse state contributions – aiming at solutions that can be replicated at scale. What is remarkable is the rapid spread of SDI organizing methodologies. Ten years ago, there were only affiliates in Namibia and South Africa with the very beginnings of savings schemes in a very few urban centres in Kenya and Zimbabwe. As elaborated below, SDI's experience illustrates the potential of regional action in addressing urban poverty.

4.3 Accessing subsidies to land and services

In most African countries adequate access to basic services would require substantial subsidies; low-income urban residents simply cannot afford to pay the market price for services widely accepted to be adequate. Despite this scale of need, outside of South Africa most governments are either unable, or unwilling, to provide subsidies for shelter

improvements. The programmes that do exist are very small in scale relative to the size of needs, reflecting a limited state capacity to support the income redistribution required. This is the sort of common regional challenge that deserves both policy debate and support at regional as well as local and national scales.

4.3.1 The availability of multiple kinds of subsidies

In terms of water, subsidies are limited to those who have access to piped supplies. Some of the informal vendors may also access piped water at a subsidized rate, but the price at which they deliver to their customers is generally considerably above the piped water costs. The free basic water policy in South Africa appears to be effective in the larger cities (Muller, 2007), but it is less successful in smaller towns (Brown, 2005).

Subsidies for sanitation are rare. While there are many NGO programmes that assist households to secure access, these are small relative to need. In inner city areas there may be public toilets. The majority of urban dwellers manage without adequate sanitation. The consequences are very severe for health and hence livelihoods (Satterthwaite and McGranahan, 2006).

There are a number of different types of state intervention to address shelter deficiencies. Governments have tried both the construction of formal dwellings and tenure solutions without the full costs of complete housing. The most significant problem is insufficient scale. In Malawi, there were 35,000 applicants on the waiting list in 1981 while the rate of plot delivery was 600 per annum (Manda, 2007). A similar picture emerges in Tanzania: between 1995 and 2001 there were 243,473 applications for plots but only 8,029 plots were surveyed and made available (Anyamba and Nordahl, 2005, page 27). In Kenya, site and service programmes are now non-existent (Alder and Mutero, 2007). Even in South Africa, notwithstanding the delivery of just under 2 million subsidized housing units, public sector delivery of subsidized housing has decreased substantially. Having peaked in 1997–98, delivery has since been on a steady decline, with 2006–07 the lowest on record (Rust quoted in Baumann, 2007, page 6). The frustration of citizens was summed up in a recent and poignant request by young people to a shelter researcher in Botswana that the government should allow them to inherit their parents' place on the housing waiting list (Kalabamu, 2006, page 226).

4.3.2 Strategies to secure subsidies, the contribution of regional bodies While this paints a pessimistic picture, a number of regional initiatives exist – and evidence suggests that their regional nature is significant in achieving success. Historical experience, commonality of context and prevailing racist attitudes in many globalized encounters have served to create a situation in which African politicians and officials look to their peers for advice and solidarity. SDI affiliates have proved adept at building on successes in one place and replicating them in another. In respect of land negotiations, the experiences in Malawi exemplify this capacity and are representative of the situation in the more mature affiliates. The first land provided for free by Lilongwe City Council was secured in 2005, with 200 houses constructed and more land promised. By June 2008, the following land allocations had been secured free of charge: Mzuzu (600), Karonga (30), Rumphi (20), Salima (100), Kasongo (200), Blantyre (950), Neno (100) and Zomba (200) (Nkhome, 2008). Table 4.1 elaborates the regional contribution in this case and for other affiliates. SDI's strategy is to negotiate free land and subsidized infrastructure, using exemplar or precedent-setting developments to consolidate a strategy that is effective in addressing the needs of local groups. Once a development model is in place, affiliates seek to scale it up to a level appropriate to need. Regional strategies, based around exchange visits between Federation members and national and city politicians and officials, have proved critical to spreading land acquisition strategies. Ministerial support has been forthcoming in a number of countries and Minister Sisulu of South Africa chairs the board of SDI's International Urban Poor Development Fund, thereby creating a favourable context in which to negotiate for change.

Table 4.1: The shelter financing strategies of SDI African affiliates					
	Source of funds for	Significance of regional exchange and networking			
	shelter				
	improvements				
South Africa – from mid- 1990s	State subsidy of land, infrastructure and housing. Loan capital available in uTshani Fund.	The South Africa programme drew on experiences of SDI in India to demonstrate to the state that communities were able to organize their own development activities – this resulted in the People's Housing Process. Minister Sisulu, the present Housing Minister, has used the platform of SDI to engage fellow ministers and promote community development (see below).			
Namibia – from mid- 1990s	Land from local authorities at low cost. Infrastructure financed through fund loans and savings. Low-interest housing loans from state programme using Twahangana Fund as a conduit.	Federation influence over the land development policies of Windhoek City Council was strengthened by an exchange to Port Elizabeth, which demonstrated to politicians and officials the power of community-led development. Namibian government officials and politicians regularly participate in international exchanges.			
Zimbabwe – from late 1990s	Land sold by local authorities at a discount. Federation members take fund loans for housing and infrastructure.	Initial attempts to engage the state involved exchanges with South Africa. More recently, SDI's willingness to continue to engage the Zimbabwean state and bring exchanges with politicians and officials to the country has resulted in allocations of land to Federation groups across the country.			
Kenya – from 2001	Land initially available at no cost from the state. Shelter investment financed with fund loans. Tried to provide one-room houses with infrastructure (Kabimoto).	Exchanges have provided a positive mechanism to engage the state. An exchange with SDI's Indian affiliate profiled their work with railway slum dwellers and resulted in a similar resettlement initiative in Nairobi with SDI's Kenyan affiliate.			
Malawi – from 2005	Land for free (but peripheral location). Fund loans for infrastructure and housing.	SDI participation in regional meetings such as the 2006 SDI conference in Cape Town helped to ensure that the affiliate rapidly linked up to government ministries. Presence of Sisulu at that conference attracted ministerial interest. Follow-up negotiations at the housing policy stakeholders meeting in Windhoek (November 2006) when ministerial meetings were held.			
Uganda to start in 2008 Zambia began in late 2007	Land for free. Fund loans for housing and infrastructure.	Regional hubs established by SDI are proving to be effective in supporting the strengthening of affiliates. Local government persuaded to offer land to savings schemes after observing successes elsewhere.			

Source: the first two columns are drawn from Mitlin (2008), the final column is for this paper.

4.4 Securing regulatory reform

As noted above, in most African countries the institutional and legal frameworks are not supportive of the shelter and livelihood strategies of low-income urban dwellers. Legal and regulatory frameworks do not create an enabling environment for local citizens, either as private entrepreneurs or as community-managed entities to the improvement of their localities. While reforms have to be negotiated at the local level, it is essential that these ideas are reinforced at the regional level.

4.4.1 Experiences to date

There are few examples of regulatory reform repeated across Africa although individual countries have made minor initiatives in this area. It has been noted that efforts to reform standards in Zimbabwe and Kenya have come up against a common regional challenge: 'to transform a largely colonial regulatory framework into an enabling and supportive set of codes and procedures' (Yahya et al., 2001, page 139). Once more SDI affiliates provide examples of where reforms in one country have been replicated elsewhere. SDI members across southern Africa, for example, find themselves negotiating for permission to settle at double densities (two families per plot) on minimum plot sizes that are often 250–300 square metre plots or more. Their experience is that secure tenure and access to basic services is simply too expensive if planning regulations are followed. Smaller plots reduce both land and services costs. As a result of SDI activism, this policy has been replicated in Malawi, Namibia, South Africa, Zimbabwe and Zambia and is about to be introduced in Tanzania.

4.5 Development assistance as an institutional catalyst for regional change

Development assistance has an important role to play in supporting the sort of regional initiatives described above. The lack of local and national finance available in many African cities means that development assistance can also make a significant contribution to the financing challenge. Unfortunately, development assistance in Africa has tended to promote high-cost approaches, supported by high-cost professionals. At times it has suppressed rather than stimulated alternative sources of finance, from the state or from communities. A central challenge will be to support affordable solutions, blending development assistance with state or, often more important, community finance.

5 Urban environmental challenges

This section reviews the environmental challenges facing urban areas in Africa with a particular interest in identifying regional dimensions to problems (for instance urban centres from different nations that draw on a common resource base) and solutions (including innovation and learning networks for African cities). It covers all scales and types of environmental problems – and also includes an interest in the issues raised by disasters and by climate change (including current and future impacts and responses through adaptation and mitigation)

5.1 The range of environmental problems facing urban areas in Africa

Most of the more serious environmental problems in urban areas in sub-Saharan Africa are local 'brown agenda' issues where action is needed to reduce direct threats to human health and well-being by improving the quality of people's living environments (e.g. better provision for water and sanitation, support for better quality and safer housing for low-income groups and less industrial pollution) and reduce risk from physical hazards including motor vehicles, accidental fires and floods.

The key regional issue here is the lack of attention by national governments to providing the legislative and fiscal base for effective urban governance (including addressing the above environmental problems) and the very low priority given by most international funding agencies (including regional funding agencies such as the African Development Bank) to supporting this. The net result is an enormous deficit in most nations in urban infrastructure and service provision (which underpins the very poor quality living and working environments for most urban dwellers) and little capacity or willingness to address local pollution issues and occupational health and safety issues. These large deficits in provision for infrastructure and services also inhibit economic growth and a capacity to attract foreign investment for manufacturing and higher value-added production than natural resources.

For larger cities or urban centres with highly polluting industries, there are likely to be serious environmental issues that go beyond the local in two areas: the natural resource demands they concentrate (especially for fresh water) and the pollution generated within their boundaries that impact on the wider region (for instance through polluted water bodies or air pollution). These can have international dimensions, as will be discussed in regard to shared river basins or other water bodies.

Within environmental policies, more attention is now being paid to the 'green agenda', which focuses on reducing more indirect threats to human well-being by preventing resource degradation and the loss or deterioration of natural life-support systems. This has increasing importance because of the inadequacies in environmental management and because increasing demand is putting unsustainable pressures on water resources in many parts of the region. There are also important links between brown and green agenda issues – for instance as measures to improve provision for water are hampered by declines in freshwater availability from poor watershed management. One of the challenges for urban environmental improvement in Africa is to combine the two agendas. Particularly in low-income urban communities, this places local engagement and participation at the centre of urban environmental improvement – as drivers of the 'brown' agenda and partners in the 'green' agenda.

There is also the issue of climate change, both in the contribution of African urban centres to greenhouse gas emissions and in the risks that climate change brings to such urban centres. Most sub-Saharan African nations have very low levels of greenhouse gas emissions per person. Although there is very little disaggregated data on emission sources for sub-Saharan

Africa, it is likely that a high proportion of greenhouse gas emissions come from deforestation and agriculture. The key drivers of high levels of greenhouse gas emissions in high-income nations are much less evident in sub-Saharan Africa – for instance high consumption levels of electricity, heavy use of private automobiles, large industrial sectors and heavy demand for space heating from residential and commercial sectors. The main priority for climate change in sub-Saharan Africa is to support adaptation because of the vulnerability of agriculture and much of the population to changes in precipitation (and freshwater availability) and extreme weather events – although there is scope for mitigation – both in focusing on the particular industries or thermal power stations that have high greenhouse gas emissions and in encouraging and supporting less carbon-intensive patterns of urban development.

Priorities for reducing emissions have to be in the wealthiest nations and in the low- and middle-income nations with large and rapidly expanding economies. But the large and growing body of scientific evidence suggesting the need for large cuts in total greenhouse gas emissions will require action from all nations. For Africa, with so many rapidly growing urban areas, this means encouraging and supporting urban expansion and building designs that de-link improved living standards from increased emissions of greenhouse gases. Acting on this now, within a 'brown' agenda commitment to much-reduced environmental health burdens, can significantly reduce future greenhouse gas emissions. Depending on how international negotiations on climate change proceed, measures to reduce greenhouse gas emissions could also provide the basis for financial transfers from other countries. One of the key international issues of the next five to ten years is the scale and institutional organization of funds for adaptation – especially the extent to which these align with or are separate from funds for development.

Africa's population faces the largest environmental health burden of any of the world's regions. The World Health Organization has estimated the contribution to the burden of disease of a selection of environmental risk factors: unsafe water, sanitation and hygiene, outdoor air pollution, indoor smoke from solid fuels, lead and global climate change. The results are displayed in Figure 5.1. Overall, the burden of disease per person from these environmental health risks was about 75 times higher in Africa than in Western Europe. While urban Africans are on average healthier than rural Africans, and there is enormous variation across the continent, such figures probably do reflect the environmental health disadvantage of deprived urban settlements, without adequate water, sanitation, waste removal or clean fuels.

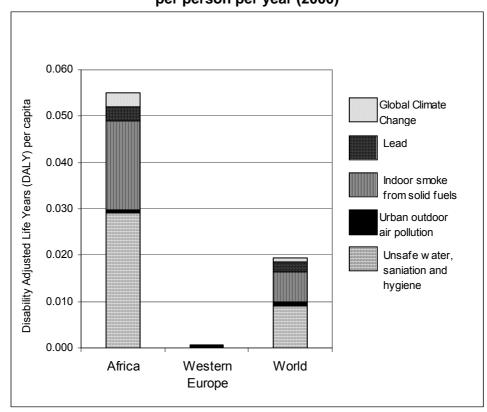


Figure 5.1: Comparing environmental health risks in disability-adjusted life years lost per person per year (2000)

Source: Based on Ezzati et al. (2002).

By contrast, Africa has one of lowest ecological footprints of any of the world's regions. An ecological footprint measures a population's natural resource consumption, in terms of the area required to produce the food and fibre it consumes, absorb the waste it produces (including carbon dioxide) and provide the space for its infrastructure. On average, Africa's ecological footprint was estimated at 1.2 hectares per person, compared with Western Europe's 5.1 hectares (WWF, 2004). Such averages hide very large variations between cities and between the relative contributions of different groups within cities. For instance, Cape Town, one of Africa's wealthiest cities, has an average ecological footprint of 4.28 hectares per person – comparable to the average for Canada. Most urban centres in lowincome nations in Africa will have a much lower ecological footprint than this; in general, the smaller the high-income population and the larger the low-income population, the smaller the ecological footprint. Most low-income urban households in Africa have very small ecological footprints because their consumption levels of fuel, water and resource-intensive goods are so low, they use the most fuel-efficient forms of transport and they generate very little waste. In Cape Town, the wealthiest group of residents (representing 7 per cent of Cape Town's households) have an ecological footprint that is at least 15 times higher than that of the lower-income population (Swilling, 2006).

5.2 Regional environmental issues

There are a number of environmental issues that, in terms of scale and impact, lie in between the local environmental health burdens often associated with urban poverty, and global ecological footprints associated with affluent urban lifestyles. There is little information systematically collected on these issues. There is evidence that larger urban centres of Africa have to get their water from greater distances (Showers, 2002). There is somewhat ambiguous evidence that urban wood demands are leading to deforestation around urban areas where charcoal is used; there is evidence that large quantities of wood are used in the

production of charcoal for urban consumption. But the impact on the forests depends on how the wood for charcoal production is harvested, which is not well documented (Hosier, 1993). Urban and industrial pollution are responsible for various downstream, or downwind, environmental problems – see Box 5.1. And peri-urban areas around major cities often face a wide range of environmental burdens, and often include development that is beyond the responsibilities of the urban authorities as it lies outside their jurisdictional boundaries.

Box 5.1: Examples of urban-, industrial- and mining-related pollution in sub-Saharan Africa

Gold mining and mercury emissions in northern Guinea: Serious occupational health and environmental hazards from artisanal (small-scale) gold mining communities in northern Guinea. Over 40,000 people are involved every year in gold mining activities and the unregulated burning of mercury amalgam is the primary method for gold extraction.

Sewage contamination of Maputo Bay: The capital of Mozambique, Maputo lies on Maputo Bay. City residents rely on considerable amounts of fishery resources, both for consumption and economic reasons. Maputo Bay beaches also serve many residents and tourists as a leisure spot throughout the year. The waters inside the bay are polluted by untreated sewage coming from new developments in the city that are not connected to the existing sewage and drainage facility and water treatment plant. Groundwater contamination from pit latrines and storm water effluent are polluting the bay to the extent that swimming is inadvisable in all but the most distant areas. There is a general ban on the consumption of shellfish from the bay.

Pollution of the Msimbazi River, Dar es Salaam: This river flows across a third of Dar es Salaam city and eventually discharges into the Indian Ocean. The river is an important water resource for residents of some of Dar es Salaam's poorest neighbourhoods who use it for drinking, bathing, support for agriculture and industry, and as an environmental buffer. Many industries continue to pour unwanted end products from human and industrial activity into the river.

Pollution of the Kafue River: The river, part of the Zambezi basin, is a source of potable water for over 40 per cent of Zambia's population. It is also host to wildlife and birds. For decades, industries such as copper mines, metallurgical plants, textile plants, fertilizer factories, sugar processing plants, cement factories, various agricultural activities, and the Kafue Sewage Treatment Plant (KSTP) have polluted the river. High incidences of gastroenteritis, intestinal worms and diarrhoeal diseases mostly in children have been reported from communities around the river and have been linked to drinking water from certain parts of it.

Maamba coal mines, Zambia: Since 1967 coal has been continuously produced by the Maamba Collieries in Southern Zambia near Lake Kariba. Gaseous emissions from burning spoil dumps at the mines are considered responsible for respiratory conditions in the surrounding areas. Respiratory disease data for four health centres in the Sinazongwe District (Maamba, Sinazongwe, Sikaneka and Siatwinda) show that Maamba had the highest incidence of non-pneumonic respiratory diseases for 2002, 2003 and 2004. Maamba also recorded higher incidences of skin, eye, nose and throat diseases when compared to other areas.

Source: These examples are drawn from the website of the Blacksmith Institute; in most of the above examples. This Institute supports and works with local organizations to address these problems; in some of these places, external funding is also helping. See http://www.blacksmithinstitute.org/

5.3 Shared water resources

Table 5.1 lists the longest rivers in Africa and the different countries in their drainage basins. The fact that most have drainage basins in several nations is obvious and for many of these rivers there are already difficulties in getting agreement in their management and in the allocation of water. Many smaller rivers also have shared drainage basins and comparable problems – for instance the Incomati and Maputo river basins have significant water transfers, which means attention to interstate relations between South Africa, Swaziland and Mozambique (Singh, Dieye, and Finco, 1999).

Table 5.1: Africa's longest rivers and the countries that are within their drainage basin

River	Length (km)	Outflow	Countries in the drainage basin
Nile	6,650	Mediterranea n Sea	Ethiopia, Eritrea, Sudan, Uganda, Tanzania, Kenya, Rwanda, Burundi, Egypt, Democratic Republic of the Congo
			Democratic Republic of the Congo, Central African Republic, Angola, Republic of the
Congo - Chambeshi	4,700	Atlantic Ocean	Congo, Tanzania, Cameroon, Zambia, Burundi, Rwanda
Niger	4,200	Gulf of Guinea	Nigeria (26.6%), Mali (25.6%), Niger (23.6%), Algeria (7.6%), Guinea (4.5%), Cameroon (4.2%), Burkina Faso (3.9%), Côte d'Ivoire, Benin, Chad
Zambezi	2693	Mozambique Channel	Zambia (41.6%), Angola (18.4%), Zimbabwe (15.6%), Mozambique (11.8%), Malawi (8.0%), Tanzania (2.0%), Namibia, Botswana
Ubangi - Uele	2,300	Congo	Democratic Republic of the Congo, Central African Republic
Kasai	2,153	Congo	Angola, Democratic Republic of the Congo
Orange	2,092	Atlantic Ocean	South Africa, Namibia, Botswana, Lesotho
Limpopo	1,800	Indian Ocean	Mozambique, Zimbabwe, South Africa, Botswana
Senegal	1,641	Atlantic Ocean	Senegal, Mali, Mauritania
Blue Nile	1,600	Nile	Ethiopia, Sudan
Okavango	1,600	Okavango Delta	Namibia, Angola, Botswana
Volta	1,600	Gulf of Guinea	Ghana, Burkina Faso, Togo, Côte d'Ivoire, Benin
Jubba - Shebelle	1,580	Indian Ocean	Ethiopia, Somalia

Source: Drawn from http://en.wikipedia.org/wiki/List_of_rivers_by_length

Lake Victoria provides an example of a key resource that is shared between nations. The lake's basin provides a livelihood for a population of around 30 million – and it is a source of food, energy, drinking and irrigation water and transport – and a sink for human, agricultural and industrial wastes. The gross economic product of lake's catchments is around US\$5 billion annually. This means that it provides the livelihoods for around a third of the population of the nations that surround it (Kenya, Uganda and Tanzania) and around a third

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¹ This draws information from Sida (2007), Kayombo and Jorgensen (2006) and Alabaster (2005); also see http://www.gefweb.org/COUNCIL/council7/wp/lakevic.htm.

of these nations' total gross domestic product. Most of this production is through fisheries and agricultural production – see for instance areas of coffee and tea in Kenya and Uganda – although there are also several large and many small urban centres on or close to the lake, many with rapidly growing populations. These include Kisumu (c. 500,000 inhabitants) and Homa Bay (c. 32,000) in Kenya, Entebbe (over 90,000) in Uganda and Mwanza (over 200,000) and Bukoba (c.70,000) in Tanzania. There are also many other smaller urban centres on or close to the lake.

The lake is suffering from falling water levels, pollution (including massive algal blooms), water hyacinth invasion, oxygen deletion and over-fishing. Some areas of the rivers feeding the lake and the shoreline are heavily polluted by municipal and industrial discharges. In and around the city of Mwanza, for instance, there is increasing pollution from fish and oil processing plants, textile plants, tanneries and mines that discharge untreated waste. And the lack of a sewage collection system in Mwanza means that domestic waste is also dumped directly into the lake.

In early 2006, the drop in the lake's water levels reached crisis point and necessitated the government of Uganda cutting water releases, which also cut power generation. Sanitary survey and water quality assessments in 244 shoreline settlements showed that water-borne and other water-related diseases are very common in about 90 per cent of the settlements; common diseases occurring mainly in the rainy season include cholera, typhoid and dysentery. Most of these centres are also experiencing unplanned, spontaneous growth combined with run-down and often non-existent basic infrastructure and services. The most affected are the poor living in urban and peri-urban areas, most of whom are outside the reach of municipal services.

The need for good environmental management involving the three national governments and the local governments within the lake's basin is obvious. This has long been recognized and there have been various donor-funded initiatives supporting large numbers of development initiatives in and around the lake. A Lake Victoria Environmental Management Project is under way, which seeks a comprehensive programme for the lake's rehabilitation and better coordination between donors. This has included support for the Lake Victoria Region Local Authorities Cooperation (with more than 60 local authorities represented) and support for city development strategies developed for poverty reduction and environmental management.

5.4 Disasters and the changes to environmental problems facing African urban areas brought by climate change

A review of data on disasters in Africa over the last 30 years suggests a large increase in the number occurring in urban areas and a large increase in the deaths and serious injuries that have resulted from extreme weather events. A large part of the increase in disasters and their impacts in urban areas is associated with the rapid growth in urban populations living in poor-quality housing in unsafe sites lacking protective infrastructure, including effective storm and surface drains.

A growing number of case studies of African cities are pointing to their vulnerability to extreme weather events that are likely to become increasingly frequent and/or severe with climate change (Satterthwaite et al., 2007), and to changes in precipitation. One regional study of African cities highlighted the increased risks and increased impacts from flooding (Douglas et al., 2008). Many of sub-Saharan Africa's largest cities are ports, on the coast, and so at risk from sea-level rise (see Box 5.2). Many parts of Africa that are already facing serious problems with freshwater supplies are likely to experience reduced precipitation.

Box 5.2: Examples of African cities at risk from flooding and climate change

COTONOU (Benin): Cotonou is Benin's largest urban centre, its main port and a key part of the national economy; it has around 700,000 inhabitants. Large sections of the city economy and of its residential neighbourhoods are particularly vulnerable to sea-level rise and storm surges. The continued advance of the sea, coastal erosion and the rise in sea level, exacerbated by human activity on the coast, have medium- and long-term consequences that are already threatening vulnerable communities and disrupting the least protected sensitive ecosystems. Some roads, beaches and buildings have already been destroyed by the coastline's regression in the last ten years (Dossou and Glehouenou-Dossou, 2007).

BANJUL (Gambia): Banjul has more than half a million inhabitants. Most of the city is less than 1 metre above sea level and flooding is common after heavy rain in the city, in settlements established on reclaimed land in dried-up valleys, and in settlements close to mangrove swamps and wetlands. Problems with flooding are likely to increase under a warmer climate with an increase in the strength and frequency of tropical storms. In the coastal zones of the Gambia, a sea-level rise of 1 metre is likely to inundate 92 square kilometres. Shoreline retreat would vary from around 100 metres in the harder-cliffed zone to 839 metres in the gently sloping, sandy plain near Sanyang Point (Jallow et al., 1999).

MOMBASA (Kenya): Mombasa is Kenya's second-largest city (with over 700,000 inhabitants) and the largest seaport in East Africa, serving many counties other than Kenya. An estimated 17 per cent of Mombasa's area (4,600 hectares) could be submerged by sealevel rise of 0.3 metres, with a larger area rendered uninhabitable or unusable for agriculture because of waterlogging and salt stress. Sandy beaches, historic and cultural monuments and several hotels, industries and port facilities would also be negatively affected. Mombasa already has a history of disasters related to climate extremes, including floods that cause serious damage and often loss of life nearly every year (Awuor et al., 2008).

PORT HARCOURT (Nigeria): An extreme 10-hour rainfall in July 2006 drove 10,000 residents out of their homes and caused widespread traffic chaos. The Niger delta frequently experiences flood problems that are aggravated by structures such as the Port Harcourt–Patani–Warri highway that cuts across natural drainage lines and acts as a barrier to floodwaters. Blockage of channels by debris and obstruction of floodways by new construction were seen as the main obstacles contributing to Port Harcourt's flooding. The city has more than 1 million inhabitants (Abam et al., 2000).

5.5 Regional dimensions in responses to urban environmental problems

It is obvious that the core issue for urban environmental problems in sub-Saharan Africa is more competent, better resourced, more accountable urban governments with a capacity and willingness to work with other stakeholders – especially the urban poor. The issue is thus what will drive national governments and international agencies to support this in appropriate ways. It is by no means clear that simply increasing funding for urban governments in programmes organized and managed by international funding agencies will address these issues. What is needed is support for locally driven city and municipal innovation within the region and support for the documentation and sharing of these experiences. This needs to include supporting civil society innovations – and where possible partnerships between local governments and civil society organizations. There is also an obvious need to support institutional capacity to manage shared natural resources between nations – as illustrated by the shared river basins and the experience with Lake Victoria outlined above.

It is also worth remembering the point highlighted in other sections: that the regional role of the urban system within sub-Saharan Africa should be better understood – as certain key cities serve important regional functions (for instance how several nations depend on the ports of Mombasa, Dar es Salaam and Durban) and provide markets and services beyond their national boundaries. Supply chains for food, other agricultural commodities and manufactured goods criss-cross the region – for instance along the coastal region stretching from Dakar in Senegal to Douala in Cameroon and linking the coastal region to major cities inland. Many of the more prosperous cities in the region have large immigrant populations (mostly from other nations nearby) whose remittances have considerable importance for their home countries. In this sense, the whole region needs a well-functioning, interconnected urban system to allow it to prosper within a globalized economy.

There have been and there continues to be a range of international programmes supporting urban environmental innovation in sub-Saharan Africa – but often these do not come with funding for identified solutions. Or their priorities are dictated by international concerns, not local concerns (as in, for instance, the priority given by various international agencies to climate change mitigation in cities, not adaptation).

One of the most significant international innovations in addressing urban environmental problems in the 1990s was the emergence of a new kind of city-wide initiative, the Local Agenda 21. LA21s came out of the 1992 UN Earth Summit in Rio de Janeiro. They were seen as the means by which local action plans could be developed within each city and town to implement the many recommendations within Agenda 21 – the 'action plan' that governments endorsed at the conference. They were meant to support 'good local governance' for environment and development. The more successful cases have been associated with politicians and civil servants with strong commitments to democratic practices, greater accountability to citizens, and partnerships with community-based organizations (CBOs) and NGOs. But LA21s remain at the periphery of urban governance probably more so in Africa than elsewhere (see for instance: Mwangi, 2000; Roberts and Diederichs, 2002). Some 'local' environmental initiatives were promoted from the outside – perhaps in the form of a 'sustainable city' project or a 'localizing Agenda 21' project of UN-Habitat, or a Local Agenda 21 sponsored by ICLEI. At meetings held to examine some of these experiences, common complaints were that the agenda was not really African. On the other hand, many of the principles of LA21 remain at the centre of urban governance innovations, and many of the experiences with LA21-like activities were very positive. Moreover, many locally driven activities have in effect adopted the principles of LA21 without the label – at least in the sense that they are furthering the environmental improvement of Africa's cities (see Swilling, 2006).

There are a number of international initiatives under way in Africa to support urban innovation and cross-city learning, including several related to climate change. At present, there seems to be little coordination between these. Clearly, the level of support for climate change-related issues is likely to increase very considerably. What is clear is that the different internationally sponsored region-wide initiatives need better coordination and many need to be more driven by Africans. They also need to be far more rooted in local concerns and priorities – so, for instance, support for cities' adaptation to climate change is rooted in local development concerns. It is hardly possible to develop a city adaptation programme if the city authorities refuse to work with the 30–50 per cent of their populations who live in informal settlements (and who generally concentrate most of the inhabitants most at risk and suffer most from the deficiencies in infrastructure provision). They also need to focus more on innovation in Africa – as in, for instance, the innovative climate change adaptation programme developed in Durban (Roberts, 2008).

6 ANNEX

Table A1: The distribution of the world's urban population by region 1950–2010

19	50-2010						
Region or country	1950	1970	1990	2000*	Projected for 2010		
Urban populations (millions of inhabitan	ts)						
World	737	1,332	2,275	2,854	3,495		
High-income countries	427	652	818	873	925		
Low- and middle-income countries	310	680	1,456	1,981	2,570		
			,		,		
Africa	33	86	204	295	412		
Asia	237	485	1,015	1,373	1,770		
Europe	281	412	509	520	530		
Latin America and the Caribbean	69	164	314	394	471		
Northern America	110	171	214	250	286		
Oceania	8	14	19	22	25		
Urbanization level (percentage of popul	ation living	in urbar	n areas)				
World	29.1	36.0	43.0	46.6	50.6		
High-income countries	52.5	64.6	71.2	73.1	75.0		
Low- and middle-income countries	18.0	25.3	35.1	40.2	45.3		
Africa	14.5	23.6	32.0	35.9	39.9		
Asia	16.8	22.7	31.9	37.1	42.5		
Europe	51.2	62.8	70.5	71.4	72.6		
Latin America and the Caribbean	41.4	57.0	70.6	75.3	79.4		
Northern America	63.9	73.8	75.4	79.1	82.1		
Oceania	62.0	70.8	70.6	70.4	70.6		
Percentage of the world's urban popular	tion living i	n:					
World	100.0	100.0	100.0	100.0	100.0		
High-income countries	58.0	49.0	36.0	30.6	26.5		
Low- and middle-income countries	42.0	51.0	64.0	69.4	73.5		
Africa	4.4	6.5	9.0	10.3	11.8		
Asia	32.1	36.4	44.6	48.1	50.6		
Europe	38.1	30.9	22.4	18.2	15.2		
Latin America and the Caribbean	9.4	12.3	13.8	13.8	13.5		
Northern America	14.9	12.9	9.4	8.8	8.2		
Oceania	1.1	1.0	0.8	0.8	0.7		
tatistics for 2000 are an aggregation of national statistics, many of which draw on national							

^{*} The statistics for 2000 are an aggregation of national statistics, many of which draw on national censuses held in 1999, 2000 or 2001 – but some are based on estimates or projections from statistics drawn from censuses held around 1990. There are also some nations (mostly in Africa) for which there are no census data since the 1970s or early 1980s so all figures for their urban (and rural) populations are based on estimates and projections.

Source: Derived from statistics in United Nations (2008) *World Urbanization Prospects: The 2007 revision*, Department of Economic and Social Affairs, Population Division, New York.

Table A2: The distribution of the Africa's urban population by sub-region, 1950–2010

Region or country	1950	1970	1990	2000*	Projected for 2010	
Urban populations (millions of inha	bitants)					
Africa	32.5	85.9	204.0	295.1	412.2	
Sub-Saharan Africa	19.9	57.1	146.6	222.7	323.5	
Eastern Africa	3.5	11.4	35.3	53.4	78.8	
Middle Africa	3.7	10.3	24.0	36.3	55.6	
Northern Africa	13.2	31.2	64.3	84.4	107.3	
Southern Africa	5.9	11.1	20.4	28.0	33.3	
Western Africa	6.3	22.0	59.9	93.0	137.2	
Urbanization level (percentage of p	onulation living	in urhan	aroas)			
Africa	14.5	23.6	32.0	35.9	39.9	
Sub-Saharan Africa	11.1	19.5	28.2	32.8	37.3	
Eastern Africa	5.3	10.4	17.9	20.7	23.7	
Middle Africa	14.0	24.9	32.5	37.2	42.9	
Northern Africa	24.8	36.3	44.7	48.4	52.0	
Southern Africa	37.6	43.7	48.8	53.9	58.8	
Western Africa	9.9	21.4	33.2	38.8	44.6	
centage of Africa's urban population	living in:					
Africa	100	100	100	100	100	
Sub-Saharan Africa	61.3	66.5	71.8	75.5	78.5	
Eastern Africa	10.6	13.2	17.3	18.1	19.1	
Middle Africa	11.2	11.9	11.7	12.3	13.5	
Northern Africa	40.7	36.3	31.5	28.6	26.0	
Southern Africa	18.1	12.9	10.0	9.5	8.1	
Western Africa	19.4	25.6	29.4	31.5	33.3	
Percentage of Africa's urban popul population in 2000	ation in the nati	ons with	the large	est urban	1	
Nigeria	10.7	14.2	16.3	18.0	19.1	
Egypt	21.4	17.3	11.8	9.6	8.3	
South Africa	17.8	12.5	9.3	8.8	7.4	
			+		1	

^{*} The statistics for 2000 are an aggregation of national statistics, many of which draw on national censuses held in 1999, 2000 or 2001 – but some are based on estimates or projections from statistics drawn from censuses held around 1990. There are also some nations for which there are no census data since the 1970s or early 1980s so all figures for their urban (and rural) populations are based on estimates and projections.

Source: Derived from statistics in United Nations (2008) *World Urbanization Prospects: The 2007 revision*, Department of Economic and Social Affairs, Population Division, New York.

Table A3: Urbanization levels for African regions and countries 1950–2000 (based mostly on censuses) and 2010 and 2030 (based on projections)

mostly on cen	suses)	anu zu	i u anu	2030 (I	Jaseu (ינטוק וויכ	- Cuons
Region or nation	1950	1970	1990	2000	2010	2030	Last census used
Africa	14.5	23.6	32.0	35.9	39.9	50.0	
Sub-Saharan Africa	11.1	19.5	28.2	32.8	37.3	48.2	
Eastern Africa	5.3	10.4	17.9	20.7	23.7	33.7	
Middle Africa	14.0	24.9	32.5	37.2	42.9	55.3	
Northern Africa	24.8	36.3	44.7	48.4	52.0	61.3	
Southern Africa	37.6	43.7	48.8	53.9	58.8	68.8	
Western Africa	9.9	21.4	33.2	38.8	44.6	56.5	
Réunion	23.5	41.7	81.2	89.9	94.0	96.3	1999
Djibouti	39.8	61.8	75.7	83.3	88.1	92.0	1983
Gabon	11.4	32.0	69.1	80.1	86.0	90.6	1993
Western Sahara	31.0	42.1	86.2	83.9	81.8	85.9	2004
Libyan Arab Jamahiriya	19.5	49.7	75.7	76.4	77.9	82.9	1995
Tunisia	32.3	43.5	57.9	63.4	67.3	75.2	2004
Algeria	22.2	39.5	52.1	59.8	66.5	76.2	1998
Congo	24.9	39.1	54.3	58.3	62.1	70.9	1996
South Africa	42.2	47.8	52.0	56.9	61.7	71.3	2001
Liberia	13.0	26.0	45.3	54.3	61.5	73.7	1984
São Tomé and Príncipe	13.5	29.5	43.6	53.4	62.2	74.0	2001
Cape Verde	14.2	19.6	44.1	53.4	61.1	72.5	2000
Botswana	2.7	7.8	41.9	53.2	61.1	72.7	2001
Morocco	26.2	34.5	48.4	53.3	56.7	65.9	2004
Cameroon	9.3	20.3	40.7	49.9	58.4	71.0	2004
Angola	7.6	15.0	37.1	49.0	58.5	71.6	1970
Gambia	10.3	19.5	38.3	49.1	58.1	71.0	1993
Seychelles	27.4	39.1	49.3	51.0	55.3	66.6	None
Ghana	15.4	29.0	36.4	44.0	51.5	64.7	2000
Côte d'Ivoire	10.0	28.2	39.7	43.5	50.1	62.8	1998
Nigeria	10.2	22.7	35.3	42.5	49.8	63.6	1991
Egypt	31.9	42.2	43.5	42.6	42.8	49.9	2006
Mauritius	29.3	42.0	43.9	42.7	42.6	51.1	2000
Senegal	17.2	30.0	39.0	40.6	42.9	53.2	2002
Sudan	6.8	16.5	26.6	36.1	45.2	60.7	1993
Mauritania	3.1	14.6	39.7	40.0	41.4	51.7	2000
Benin	5.0	16.7	34.5	38.3	42.0	53.7	2002
Togo	4.4	21.3	30.1	36.5	43.4	57.3	1981
Saint Helena	51.6	46.5	41.6	39.2	39.5	49.8	1998
Equatorial Guinea	15.5	27.0	34.7	38.8	39.7	49.4	2001
Central African Republic	14.4	27.3	36.8	37.6	38.9	48.4	2003
Sierra Leone	12.6	23.4	32.9	35.5	38.4	49.0	2004
Zimbabwe	10.6	17.4	29.0	33.8	38.3	50.7	2002

							1
Somalia	12.7	22.7	29.7	33.2	37.4	49.9	1975
Namibia	13.4	22.3	27.7	32.4	38.0	51.5	2001
Zambia	11.5	30.4	39.4	34.8	35.7	44.7	2000
Mozambique	2.4	5.8	21.1	30.7	38.4	53.7	1997
Guinea	6.7	16.0	28.0	31.0	35.4	48.6	1996
Democratic Republic of the Congo	19.1	30.3	27.8	29.8	35.2	49.2	1984
Mali	8.5	14.3	23.3	27.9	33.3	47.4	1998
Guinea-Bissau	10.0	15.1	28.1	29.7	30.0	38.6	1991
Madagascar	7.8	14.1	23.6	27.1	30.2	41.4	1993
Comoros	6.6	19.4	27.9	28.1	28.2	36.5	2003
Chad	4.5	11.6	20.8	23.4	27.6	41.2	1993
United Republic of Tanzania	3.5	7.9	18.9	22.3	26.4	38.7	2002
Swaziland	1.8	9.7	22.9	23.3	25.5	37.0	1997
Lesotho	1.4	8.6	14.0	20.0	26.9	42.4	2006
Kenya	5.6	10.3	18.2	19.7	22.2	33.0	1999
Eritrea	7.1	12.6	15.8	17.8	21.6	34.4	1984
Burkina Faso	3.8	5.7	13.8	16.6	20.4	32.6	1996
Rwanda	1.8	3.2	5.4	13.8	18.9	28.3	2002
Malawi	3.5	6.1	11.6	15.2	19.8	32.4	1998
Niger	4.9	8.8	15.4	16.2	16.7	23.7	2001
Ethiopia	4.6	8.6	12.6	14.9	17.6	27.4	1994
Uganda	2.8	6.7	11.1	12.1	13.3	20.6	2002
Burundi	1.7	2.4	6.3	8.3	11.0	19.8	1990

Source: United Nations (2008) World Urbanization Prospects: The 2007 revision, File 2: Percentage of Population at Mid-Year Residing in Urban Areas by Major Area, Region and Country, 1950–2050, Department of Economic and Social Affairs, Population Division, POP/DB/WUP/Rev.2007/1/F2.

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