READY TO GROW: URBAN EXPANSION PLANNING FOR CITIES HOSTING IDPs AND MIGRANTS

Technical Paper CRRF: Inclusive Urban Development and Mobility - Regional Network and Dialogue Action

By Patrick Lamson-Hall, Urban Planner and Research Scholar, New York University (NYU) Marron Institute of Urban Management

Soweto, South Africa

CONTENTS

OVERVIEW

This report is based on the third peer-learning event in a series of five dedicated to each changing experiences with representatives of partner cities and community stakeholders to strengthen policy development for greater social cohesion.

The meeting was held in Kampala, Uganda on the 28 March 2022.

It included partner organisations from Kakuma and Kaolbeyei (Kenya), Gabiley and Borama (Somalia), Arua and Koboko (Uganda), Jigjiga and Assosa (Ethiopia), and other regional community stakeholders.

The CRRF: Inclusive Urban Development and Mobility - Regional Network and Dialogue Action aims to support secondary cities through regional networking and dialogue so that best practices and lessons learned can be exchanged to identify solutions for improving service provision.

These exchanges are intended to improve the living condition and opportunities for refugees and their hosts as the risks of rivalry and conflict are reduced, resulting in greater well-being and safety.

INTRODUCTION

How fast are cities growing?

The global population has doubled three times since 1900, from 1.6 billion to 7.8 billion today. It will increase to 9.7 billion by 2050 and level off at around 11 billion in the early 22nd century (United Nations 2018).

The global urban population doubled more than four times since 1900, from 224 million to 4.4 billion today. It will increase to 6.7 billion by 2050 and level off at around 8.8 billion in the early 22nd century (ibid).

The global rural population only doubled slightly more than once since 1900, from 1.4 billion to 3.4 billion today. It will decline to 3.1 billion by 2050 and continue to decline to around 2.2 billion in the early 22nd century (ibid).

For every one person who moves to a city in the Global North, 18 people will move to a city in the Global South. When we think about urban growth, it is right to focus on countries in the Global South.

URBAN GROWTH IN THE HORN OF AFRICA

Cities in the Horn of Africa are exploding. The United Nations projects that the total urban population in the region will triple over the next 30 years, increasing by 99 million people to reach 150 million urban residents by 2050. Fifty-nine million new urban residents will be migrants from rural areas (calculated from United Nations 2018).

By studying population change and birth rates using the techniques described in Box 1, we can estimate that rural-to-urban migration is responsible for three fifths of urban population growth in the Horn of Africa (calculated by author from United Nations 2018), among the highest shares in the world. The remaining two fifths of urban population growth is from natural increase – births – in existing urban areas.

The rural-to-urban transition in the Horn of Africa is one of the major demographic shifts that countries undergo as they become wealthier. It is linked to the shift from a traditional, land-based agricultural economy to a modern, skill-based economy.

The economic change that accompanies urbanisation is not just about "industrialisation," but a complex process that includes the construction of infrastructure, the development of services, changes to governance and regulations, and shifts in the skill base and livelihoods of the population. No country has risen to middle-income status without developing a modern economy, and many of the needed activities take place in cities – which may be why no country has created a modern economy without urbanising (Spence, Annez and Buckley 2008; Jedwab and Vollrath 2015).

BOX 1

HOW CAN WE TELL PEOPLE ARE MOVING FROM RURAL AREAS TO CITIES?

We can study the number of people living in rural areas and compare it to the number of people living in cities. In 1980, 86 per cent of the population in the Horn of Africa lived in rural areas. In 2020, 74 per cent of the population lived in rural areas. By 2050, only 54 per cent will live in rural areas.

Over time, the share of the population living in cities is increasing. Demographic studies show that women living in rural areas have, on average, more children than women living in urban areas.* If no one moved from rural areas to cities, the rural population would always grow faster than the urban population. Instead, as the urban population in the Horn of Africa triples, the rural population from 2020 and 2050 will only increase by one third, from 142 million to 194 million. (United Nations 2018)

*This phenomenon is well-documented (Lerch 2019) and there are many reasons it occurs, including women having access to paid job opportunities in cities, higher educational levels for women in cities, less child marriage for women in cities, and better access to family planning and contraception in cities.

UN projections estimate that urbanisation in the Horn of Africa will take place over three generations. The first generation, which started in about 2010, is seeing the share of the urban population increase from around 20 per cent to around 40 per cent in 2040. The second generation will see the Horn of Africa become majority-urban, with the urban share increasing to around 60 per cent by 2070. The third generation will see the end of the urban transition in the Horn of Africa as overall urban share levels stabilise between 75 per cent and 85 per cent (United Nations 2018).

The urban transition has never happened before in the Horn of Africa. It has, however, happened in many other countries and regions. Europe and North America urbanised from the 1800s to the 1950s. The Middle East and Latin America urbanised between the 1920s and the 2000s. East Asia started urbanising in the 1950s, and the process will soon be complete. Only South and Central Asia and Sub-Saharan Africa are still rapidly urbanising (Angel 2012).

Urbanisation will lead to significant changes in livelihoods, social and family structures, governance, and especially cities. Villages will grow into towns, towns will grow into small cities, and small cities will double, triple, or quadruple in population as people relocate from rural areas into urban centres.

Since 2010, more than 6 million people in the Horn of Africa have migrated from rural areas to cities.[1] Every migrant has their own story, but there are some general reasons why people move to cities. **A partial list could include:**

- Livelihood opportunities

- Healthcare and education

- Water, power, and communications

- Entertainment

- Tolerance of alternative lifestyles

- Rural poverty

- Agricultural shifts

- Landlessness

- Climate change

- Conflict and displacement

(i.e., Haug 2008; Okhankhuele and Opafunso 2013; Ishtiaque and Ullah 2013; Hoffman et al. 2019).

Voluntary migrants may not always want to move to cities, but they at least have some control over the timing of their move. They may also have networks of friends or family to help ease their transition, or already be familiar with the city from previous visits from rural areas (Christiaensen and Lozana Gracia 2021).

People who move to cities due to conflict and displacement are leaving through *forced migration*. These people generally lack control over the timing of their move or where they end up living. They may not have even been considering moving to a city and might have difficulty adjusting to urban life. Proactive planning can help this population find a foothold in an urban environment.

Cities across the continent struggle to host these new migrants, who may have trouble finding stable livelihoods or securing decent housing and basic services (Ruiz and Vargas-Silva 2013). Most new urban residents have found housing and work in the informal sector, which makes up as much as 90 per cent of new housing production in Sub-Saharan Africa as a whole (Parbey et al

---

1   Calculated from United Nations 2018 using data from World Bank 2020 and the improved methodology in Lamson-Hall et al. 2022.

MANY NEW URBAN MIGRANTS ARE IDPS

Among the biggest challenges facing cities in the Horn of Africa is the integration of internally displaced people (IDPs), who are often involuntary rural to urban migrants. People displaced from their homes by conflict, climate disasters, or economic collapse often choose to settle in urban areas, which offer better security and greater opportunities for livelihood and access to education and healthcare than camps (IDCM 2019).

Between 2008 and 2021, 24 million people in the Horn of Africa – almost 13 per cent of the total population in 2021 – experienced displacement. About half of these people eventually returned home, and as of 2021, countries in the Horn of Africa had 11.2 million IDPs (IDMC 2021).

There is no accurate information on the scale of displacement into urban areas, nor is there systematic information on the locations or needs of displaced people who settle in urban areas. Case studies show that urban IDPs are often in conditions similar to or worse than those of the urban poor. New IDPs may lack the social networks or resources of deliberate rural-urban migrants, while farmers and pastoralists struggle to sell their skills in the urban economy (IDMC 2019).

FIGURE 1. **Urbanisation in the Horn of Africa**

■ Urbanization

Kakuma, Kenya
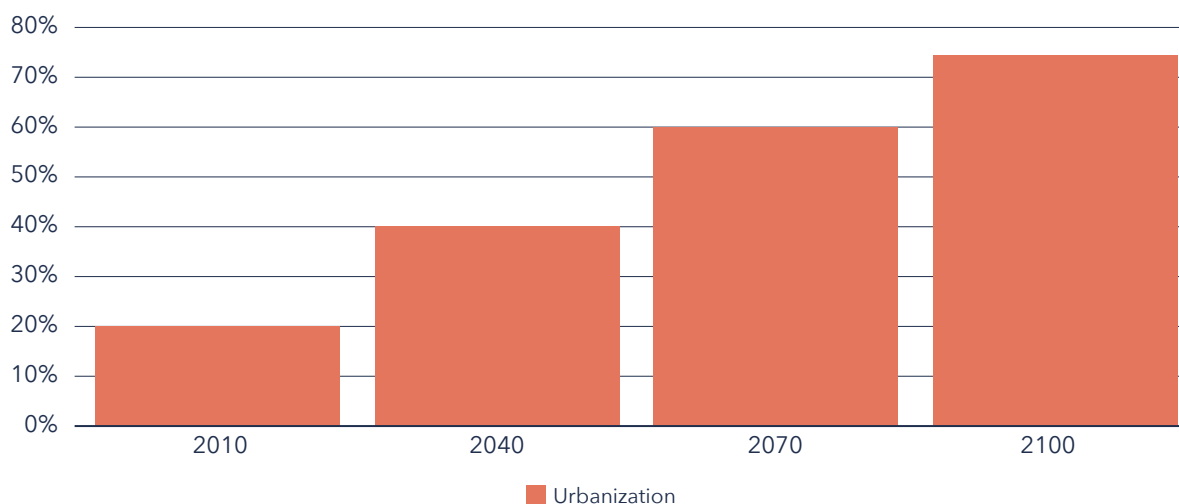
Between now and 2050, 59 million people in the Horn of Africa will migrate from rural areas to cities.[2] Many of those people will likely be fleeing displacement. Settlement in urban areas may represent their best option, even if they did not previously intend to migrate.

Knowing that many migrants are coming in the next three decades and that many of these migrants are internally displaced people, what can cities do today to prepare for their arrival?

Many short-term actions should be taken to extend basic services and support to new urban migrants. These actions are extensively detailed elsewhere. This report focuses on long-term actions municipalities can take today to prepare for future migration.

URBAN POPULATION GROWTH CAUSES CITIES TO EXPAND IN AREA

City leaders must first recognise that urban population growth inevitably results in urban expansion because new residents need land for homes and businesses. On average, when a city's population doubles, its area triples (Angel et al. 2016a). Based on this, the tripling of urban populations expected in the Horn of Africa should result in a fourfold increase in urban areas.

New residents of cities can settle in existing areas, causing them to densify, or they can settle in newly built areas, leading to urban expansion. Worldwide, 77 per cent of new urban residents from 1990–2015 settled in expansion areas on the edges of cities, and 23 per cent settled in the existing areas of cities. As a result, some cities are growing very rapidly – 64 per cent of cities have at least doubled their areas since 1990, and 28 per cent have at least quadrupled their areas (Angel et al. 2021).

FIGURE 2. **The growth of Addis Ababa from 1990 to 2015**
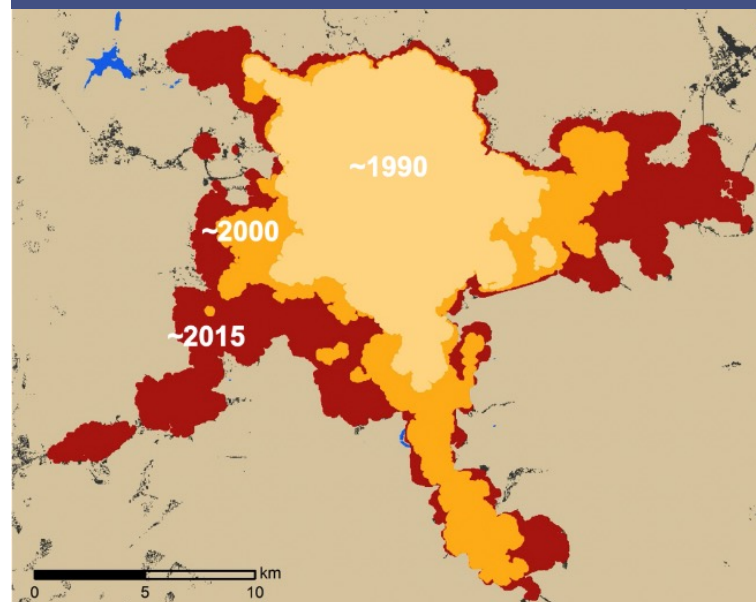
Source: NYU Marron Institute.

---

2   Calculated from United Nations 2018 using data from World Bank 2020 and the improved methodology in Lamson-Hall et al. 2022.

FIGURE 3. **Disorderly urban expansion on the edge of Addis Ababa, Ethiopia**

Much of the urbanisation taking place today in the expansion areas of cities is unplanned. Informal developers or squatters occupy rural land before the municipality can organise it for urban settlement (Angel et al. 2016b). New neighbourhoods developed in this way usually lack basic public goods, such as major roads that connect them to the rest of the city, public open spaces, piped water, or drainage (Wekesa et al. 2011).

Urban IDPs often settle in these poor peripheral neighbourhoods in overcrowded and sub- standard conditions. They commonly lack tenure security and often also lack basic infrastructure. Furthermore, unplanned urban settlement in high-risk areas exposes residents to future displacement by natural disasters. However, housing is relatively affordable, and being located on the city's edge allows migrants to pursue urban livelihood opportunities (IDMC 2019). These issues are not unique to urban IDPs and addressing them will also improve the lives of other low-income citizens.

FAST-GROWING CITIES CAN USE URBAN PLANNING TO PREPARE NEW AREAS FOR URBAN DEVELOPMENT

The definition of a "good" urban plan in the Horn of Africa is one that keeps housing and land affordable, ensures that there is enough land for businesses and economic activity, gives good access to public open spaces, makes it easy to move throughout the city, and protects important features of the natural environment. A good urban plan can improve conditions in the expansion areas of cities for IDPs, new migrants, and even new residents born locally.

The economy in a city is different from a rural economy. In rural areas, most people make their living from being close to the land. However, in cities, most people make their living through trading, manufacturing, or providing services – activities that require people to be close to each other (Glaeser 2011). The greater the number of people and businesses that are connected together in a city, the more productive the economy in that city will be (Glaeser 2013), whether the economic activity is formal or informal.

Urban planning is a core municipal function focused on organising public and private land in towns, cities, and metropolitan areas. Proper planning in the expansion area of a city – where most new growth occurs – is a critical part of creating livelihood options and decent housing for migrants, including IDPs (Salon and Gulyani 2010; Diaz et al. 2013). When land in the expansion area is organised for urban settlement before it is occupied, we can say that the land was planned for urban settlement.

Adama, Ethiopia

FIGURE 4. **Service delivery benefits from a network of road corridors, as in this example from Kampala, Uganda**

When a city is rapidly expanding in population and area, as many are in the Horn of Africa, urban planning is the primary available tool to organise the areas of new growth. Urban plans specify where public lands such as roads should go.

The organisation of land in the expansion area helps connect the private lands where people will live or establish businesses. Those connections make the urban economy more productive and inclusive (Glaeser 2011). Plans tie the city together.

Urban planning can also bring revenue to the city. When land is in a rural area, it has very little value. As soon as a road connects it to a city, the value of the land increases dramatically.

Connecting different areas of the city will increase land value by making formerly unusable land usable and accessible. In many cities, the increase in land value that comes from urbanisation is captured through taxation and is used to pay for more infrastructure and better services (Lamson-Hall et al. 2022).

Land that is used for connections can also deliver services such as water, electricity, and sewage to individual plots of land. The cost of installing infrastructure in planned areas is at least three times lower than in unplanned areas, mainly due to the cost and difficulty of creating direct routes for infrastructure between different areas after buildings have been built on the land (Abiko et al. 2007).

Urban planning can also be used to create parks and public spaces in the expansion area or to guide the direction of growth away from hazardous or environmentally sensitive areas by providing infrastructure and connections in safer places.

The net effect of all this is to make cities more inclusive, more productive, and more sustainable.

URBAN PLANNING MAKES CITIES MORE INCLUSIVE, PRODUCTIVE, AND SUSTAINABLE.

BOX 2

WHAT DOES A GOOD URBAN PLAN DO?

A good urban plan:

Guides infrastructure investment by calculating how much land the city will need for future growth and identifying where growth will occur. New investments can be planned around the future urban development pattern.

Eases movement around the city by creating a network of arterial roads that provides access to the entire expansion area of the city. The network makes avoiding traffic jams on any particular road much easier.

Keeps land and housing accessible, especially for families who build their houses gradually over time. When a low-income family builds a house, the most significant single expense is often the land cost. Urban plans help cities balance the supply of available land for development with the demand for land from residents and businesses, keeping land and house prices stable.

Protects the natural environment by identifying environmentally sensitive areas and guiding growth away from those areas.

Simplifies the provision of basic services by creating corridors of public land (road rights of way) that can carry drinking water pipes, drainage channels, electric and telecom wires, and sewer pipes.

URBAN PLANS IN EXPANSION AREAS SHOULD BE SIMPLE

In expansion areas, urban plans can and should be extremely simple. The most important connections in the expansion area of a city are the major roads – known as arterial roads – that can carry trunk infrastructure and public transportation (Angel 2008).

Plans for expansion areas should also protect some large areas from development. Some of these can become parks or public open spaces. Others must be preserved as watersheds, flood plains, or wetlands to reduce disaster risk in the city (Lamson-Hall and Angel 2022).

Some urban plans in the expansion area are short term, and some are very long term. Short-term plans usually concern themselves with a small area that will be settled very soon and have a great deal of detail. Long-term plans usually concern themselves with a larger area that will not all be settled for some time. These have far fewer details.

Cities need both types of plans. Simple plans will help prepare for long-term growth from future migration and natural increase in the urban population. More detailed plans can be prepared for smaller areas closer to the time of construction. For instance, they can be used to design neighbourhoods shortly before construction starts.

Some plans specifically address the existing area of the city and try to improve conditions there. These plans usually focus on land uses, small public spaces, and changes in the way street space is used. They may introduce some new public facilities as well. In general, plans that address the existing area are more limited in what they can accomplish because much of the existing area is already built up. The plans are also more complex, and the cost of implementing them is much higher.

FIGURE 5. **An example of the activities that can take place in a 30m-wide arterial road**

FIGURE 6. **An example of a two-year plan for a neighbourhood in the expansion area of Hawassa, Ethiopia**
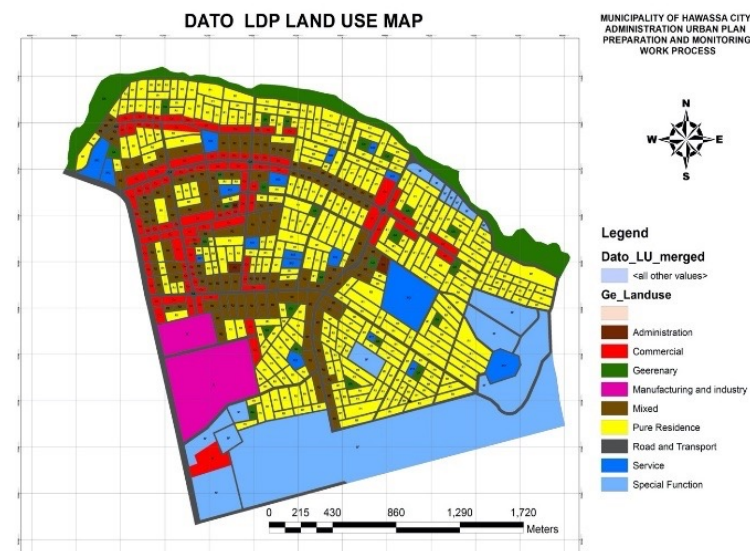
Source: NYU Marron Institute.

URBAN PLANNING IS ABOUT IMPLEMENTATION

An urban plan has to make a visible impact on the ground to improve conditions for new migrants. A plan that stays on paper and is never implemented is probably too complex or not useful for other reasons. Good urban plans can and should be implemented.

Implementation is much simpler when urban planning is proactive, happening before development occurs. When people have already settled on a piece of land and built buildings and homes, it is very costly and challenging to rearrange things to make room for parks and major roads.

In practice, it is usually impossible. If land can be planned in advance, it is much more likely that the new areas of cities will have good connections, strong public services, and be located in areas that are less prone to disasters.

Successful urban plans are visible for hundreds of years. Consider the 1859 plan of Barcelona, Spain. This plan, drawn by Ildefons Cerda, expanded the planned area of Barcelona ninefold.

We know this plan was a success because, over 150 years later, we can see the impact of the Cerda plan on Barcelona (Figure 8).
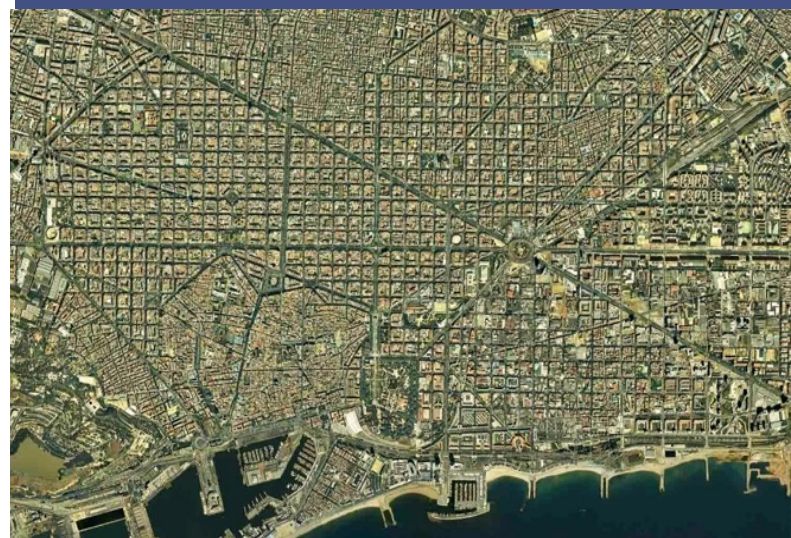
SUCCESSFUL URBAN PLANS ARE VISIBLE FOR HUNDREDS OF YEARS.

The 1811 plan of New York City, prepared by a commission of leading citizens, expanded the planned area of New York sevenfold.

FIGURE 7. **The 1859 expansion plan for Barcelona**

FIGURE 8. **A Google Earth image of Barcelona in 2022 closely resembling the 1859 plan**

More than 200 years later, we see that the roads are – but not completely – intact. The most significant change is in the middle, where city leaders in the 1850s decided to create a much larger park to the north of the one laid out in the plan (Figure 10). Changes like this can and should happen as the needs of the residents of the city change over time.

These simple plans were drawn as paper plans laying out major public roads and open spaces. Politicians then ensured the plans were implemented on the ground by securing the land for the roads and public spaces. Today, hundreds of years later, these plans are still benefiting citizens and can be seen from space, clear evidence of the hard work of past generations.

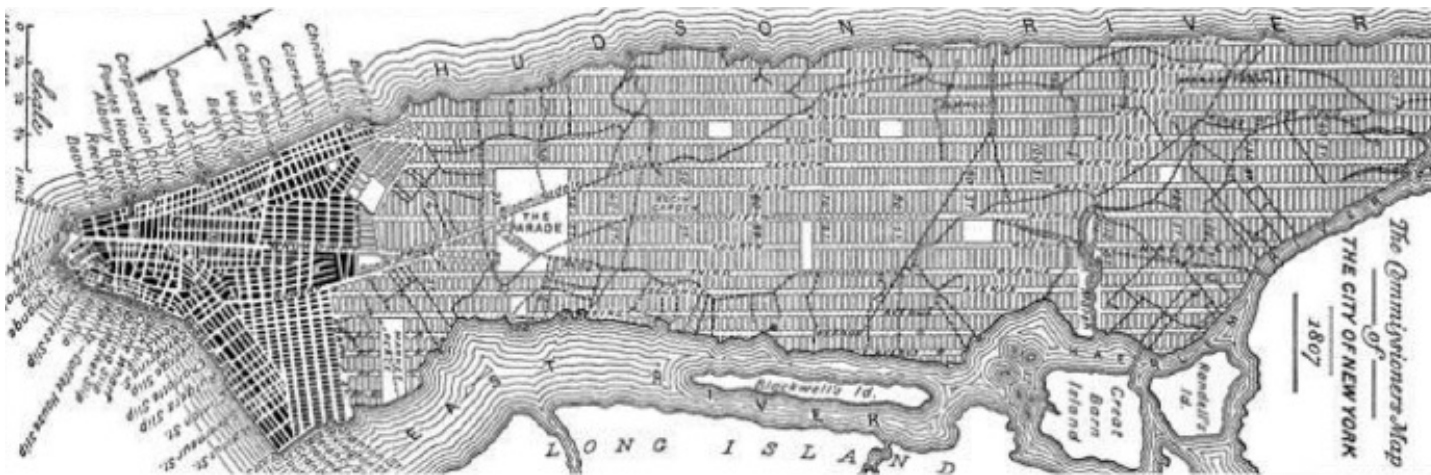FIGURE 9. **The 1811 Commissioner's Plan for New York City**

FIGURE 10. **A Google Earth image of New York City in 2022, closely resembling the 1811 plan.**

BOX 3

Good city designs will fail to make a visible impact if they make unrealistic assumptions about implementation. The great architect Sir Christopher Wren designed a new plan for the City of London after a fire destroyed that city in 1666.

The plan would have fixed the congested medieval street grid and made living in the city much easier and safer. However, Sir Christopher Wren made an unrealistic assumption that the King would be able to implement the plan. In fact, not even the King had the authority or the money to buy the land for the roads and squares shown in the plan, a move which would have enraged all the powerful landowners in London (Abercrombie 1923).

As a result, the plan stayed on paper, and the City of London continued with its congested medieval street pattern. Ideas about implementation must be based on reality and not assume an all-powerful government or a bottomless treasury.

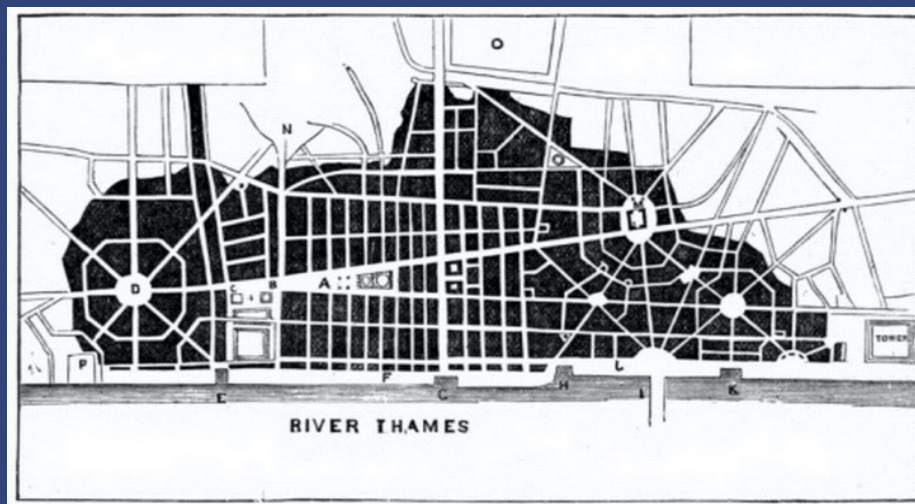FIGURE 11. **A schematic of Sir Christopher Wren's 1666 plan for London**

FIGURE 12. **A Google Earth image of the City of London in 2022, bearing no resemblance to the plan of Wren**

Implementation is political, not technical

Physical planners, engineers, or architects usually prepare urban plans. Sometimes these technical professionals work directly for city governments, and other times they are consultants hired by the city or some other entity.

Urban plans are often paid for using a mix of development aid, funds from the central government, and local funds. The greater the local funding component, the more local control the city can exert over the process.

Planners work with surveyors and other experts to prepare data inputs such as map layers and census information to help them make decisions about the plan. Plans are usually prepared after consulting with community members and city leaders and gathering data.

Once a plan is prepared, the next phase is to try and implement it. Urban plans can be implemented in two ways. The first way is to approve the plan as a legal document and put regulations in place that require people to comply.

For example, the city of Noida near New Delhi, India, recently demolished two new residential skyscrapers built on land that was planned to be reserved as green space.

With no official permission to construct the buildings, the city began giving fines and violations to the developer. Eventually, the city took the developer to court. The developer proceeded with construction, perhaps hoping to finish the buildings before the court decided the case and assuming the city – already suffering from a major housing shortage – would not demolish so many apartments. In fact, the court decided against the developer and ordered the buildings destroyed (Dogra 2022). Nevertheless, this type of enforcement is very rare.

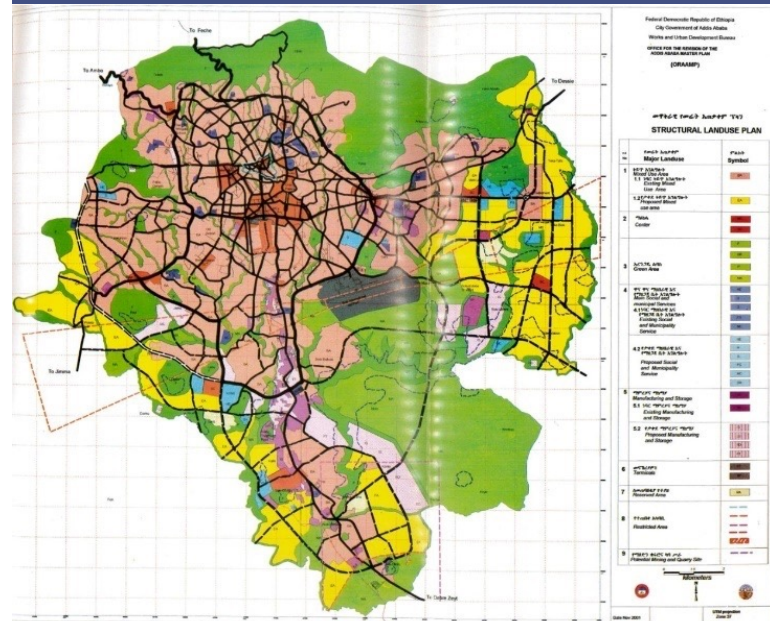FIGURE 13. **The structural land use plan proposed for Addis Ababa, Ethiopia in 2001**

FIGURE 14. **Demolition of the Supertech Towers in Noida, India in 2022**

The second way to implement an urban plan is to put it into action on the ground by building roads or by protecting road corridors, land for public spaces, and land for civic buildings. This implementation strategy guides the direction of growth by creating a network of publicly controlled land that adds value by connecting private spaces. It quickly produces visible impacts, particularly in countries that lack strong enforcement capacity.

In practice, plans must be legally approved and also visible on the ground.

Planning is a technical exercise, but implementing a plan is primarily political. Leaders must commit to supporting the implementation of plans by investing funds and staff time, participating actively in the planning process, communicating the plan to constituents, and leading activities to make the plan a reality on the ground. Suppose the leadership is unwilling to support the plan by making budget requests and committing time, energy, and political capital. Why waste money preparing plans that will never see the light of day?

MOST URBAN PLANS IN THE HORN OF AFRICA DO NOTHING

Many cities in the Horn of Africa already have urban plans. In most cases, consultant teams lead the preparation of the plans, and national planning mandates drive the process. The plans are often skillfully prepared, incorporating large amounts of data. They also often include consultations with residents and political leaders. Nevertheless, growth on the ground shows that the plans are doing little to make the expansion of their cities more accommodating to new residents or more orderly.

Satellite imagery, such as Google Earth, can show the pattern of global urban growth and tell us how successful planning is on the ground. Worldwide, from 1990 to 2015, 66 per cent of new residential areas were unplanned or informal. In Africa, the figure may be closer to 90 per cent (Angel et al. 2016.)

Only part of this can be explained by gaps in implementation. There are also serious issues with the planning frameworks used in Africa in general and in the Horn of Africa in particular.

FIGURE 15. **Example Google Earth image of disorderly urban growth in Uganda**

FIGURE 16. **Successful regulatory enforcement in Portland, USA, where the city is contained by an 'urban growth boundary.'**

Plans often try to copy successful approaches from other cities or other countries. The planning frameworks – the set of laws and regulations that require planning and enable it to take place – are often borrowed from countries in the Global North. In some cases, this borrowing is a legacy of colonialism. Many urban planning laws, especially in Anglophone countries, are based directly on colonial-era legislation (Watson 2009). In other cases, it results from efforts to improve conditions on the ground in cities (i.e., Cohen 2006), but without considering the local context.

The wrong framework leads to very complex plans resembling comprehensive plans or master plans used in cities in the Global North. Some planning ideas can indeed be borrowed from other places, but the needs of cities in the Horn of Africa are very different from those of cities in the Global North.

Arua, Uganda

BOX 4

Cities need plans that meet their needs, and countries need planning frameworks that reflect their level of development. What factors should be considered when choosing an urban planning model?

Income. The per capita income in countries in the Horn of Africa (adjusted for PPP) is $2,474, and the per capita income in the countries of the Global North (adjusted for PPP) is $58,916 – nearly 24 times higher (World Bank 2022). Lower incomes in the Horn of Africa mean that government budgets are also smaller and fewer resources are available for implementing plans. Plans in the Horn of Africa must prioritise critical activities, as it simply is not possible to do everything.

Population Growth. The average country in the Global North will increase in population at a rate of 0.08 per cent per year to 2050, for a total average increase of only 2.5 per cent in 30 years. In the Horn of Africa, the average country population will increase at an average rate of 1.9 per cent per year, for an average increase of 57 per cent by 2050 (United Nations 2018) – more than 20 times faster than in the Global North. A higher population growth rate means many more young people in larger families, and city populations grow much more rapidly. Cities in the Global North experienced rapid growth in past decades or centuries and adopted planning frameworks that met their needs at that time. They now use planning frameworks designed for much slower growth that simply may not work well in rapidly growing cities.

Regulatory Enforcement. In the Global North, municipal governments formally approve almost all development. Enforcement systems to prevent illegal development are robust and include banks, insurance companies, civil authorities, tax authorities, and law enforcement authorities. However, enforcement is rarely necessary because most people can comply with the regulations and have more incentive to do so than to attempt to build illegally.

In the Horn of Africa, almost all development happens without municipal governments' approval. Even legal construction often violates many rules. There is a widespread expectation that regulations will generally not be enforced. Although it is inconvenient and expensive to be in the informal sector, most people have a stronger incentive to ignore the regulations than to comply with them, especially low-income people who cannot afford to meet the standards laid out in building or zoning codes. Most regulations could never be fully enforced.

BOX 4 (CONT.)

Crowding. People in the Global North have access to much more residential floor space than those in Sub-Saharan Africa (figures are unavailable for the Horn of Africa). Sub-Saharan Africa averages 10 sqm per person, versus 65 sqm per person in North America and 35 sqm per person in Western Europe (Harvey et al. 2010). The urban population density in Sub-Saharan Africa averages around 80 people per hectare, versus an average of 15 people per hectare in the Land-Rich Developed Countries, or an average of 34 people per hectare in Europe and Japan (Angel et al. 2016).

National Urbanisation. A much lower share of the population in the Global North lives in rural areas. In the Horn of Africa in 2020, 74 per cent of the population lived in rural areas. In the Global North in 2020, only 21 per cent of the population lived in rural areas (United Nations 2018). As a result, cities in the Global North are not rapidly growing, and the skills and composition of the urban population are very different.

Land Titling. Planners in the Global North have constant access to accurate databases showing the boundaries of every land parcel in their planning area. These databases often also contain ownership information, tax information, and the zoning details of the parcel. They are often publicly available, making it easy for land buyers to understand the rules in a given location. Banks, insurance companies, and tax authorities all work to keep these databases updated by requiring all transactions to be registered.

In the Horn of Africa, land titling is difficult and slow, and many parcels of land remain unregistered (Legesse et al. 2018). Land registration is sporadic, and landowners are not incentivised to register their parcels. Land is often subdivided without notifying any authorities. Indeed, local authorities often lack access to central land registration databases even where they exist.

Arua, Uganda

PLANNING NEEDS FOR THE HORN OF AFRICA

Let us summarise the preceding sections. Cities in the Horn of Africa are low income. They are rapidly expanding in population and area. They have limited government capacity, including limited regulatory enforcement, and not much knowledge of who owns the land on the urban periphery. In addition, they are vulnerable to climate disasters.

Most of their new residents are migrants, and a large but unknown portion of these migrants are IDPs with particular vulnerabilities. The key concerns for both groups are housing and livelihoods.

Given the preceding, what are the critical urban planning needs for cities in the Horn of Africa and developing countries in general?

1. Relevant knowledge and best practices that reflect local conditions

2. Simple plans that can be created and implemented by local authorities

3. Plans that consider urban expansion, including areas of informal settlement growth

4. Plans that will improve access to livelihoods and basic services in expansion areas

5. Plans that can incorporate local knowledge and practices

6. Plans that protect some areas from development and improve disaster resilience

Not many planning instruments address all of these needs, but the remainder of this report reviews one that has produced positive results in some cities in the Horn of Africa: **Urban Expansion Planning**

Kakuma, Kenya
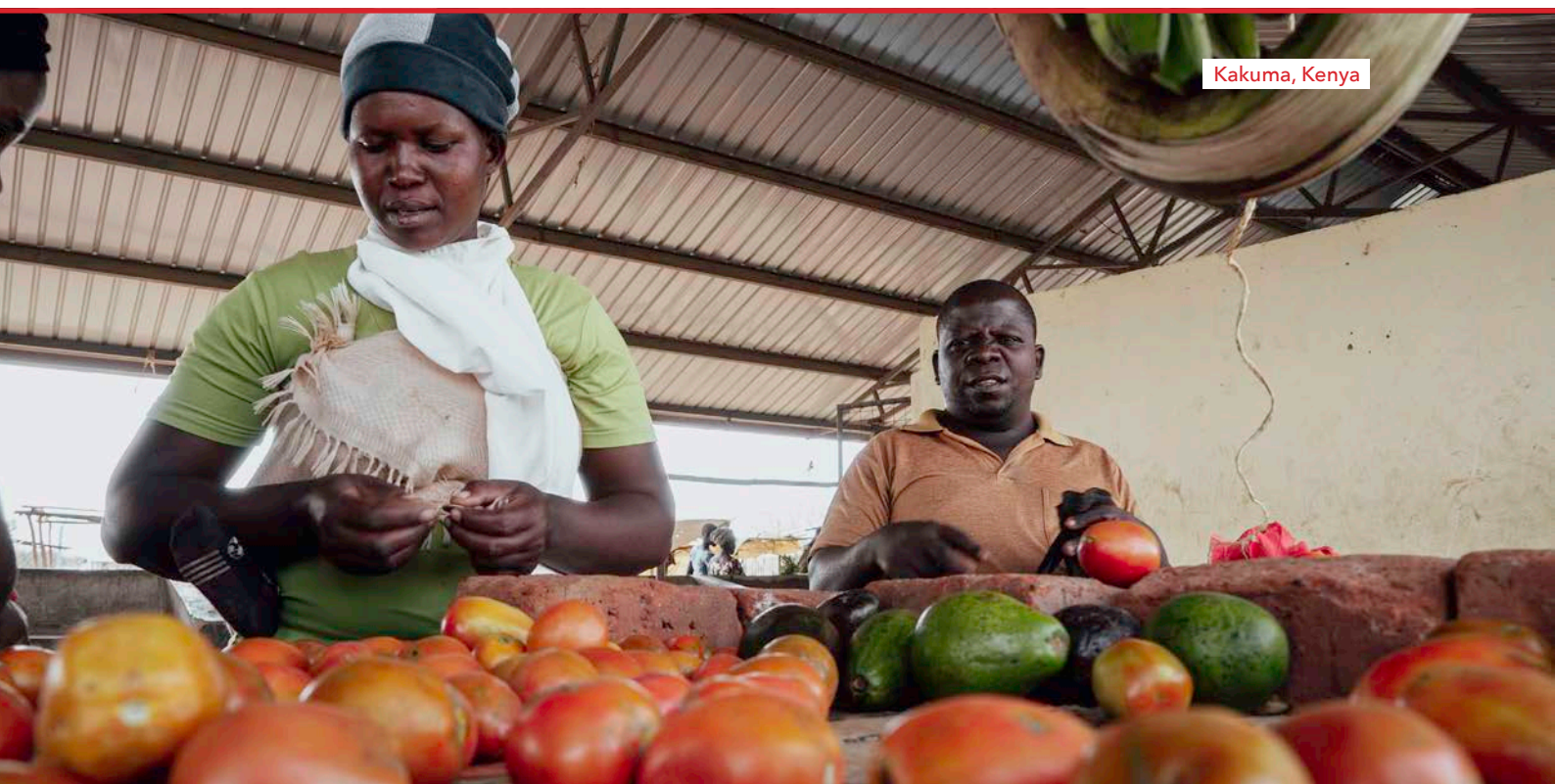
EXAMPLE: URBAN EXPANSION PLANNING

Urban Expansion Planning is a simple approach for cities to plan the next 30 years of growth in a way that matches their context and resources.

Urban expansion plans are designed and implemented by local technical officials and politicians, in direct contrast to the complex plans prepared by consultants. As a methodology, Urban Expansion Planning is designed to be uncomplicated so it can be quickly and easily explained to stakeholders, building local ownership.

Recent advances in international development theory have emphasised the critical role of improvisation and adaptation in building local capacity (Ang 2016). Urban Expansion Planning is a methodology that is meant to be modified, and each city is expected to tailor the general approach in response to local knowledge and circumstances. Indeed, no city that has implemented urban expansion planning has done it the same way as any other (Lamson-Hall and Martin 2022).

FIGURE 17. **The urban expansion team of Bahir Dar, Ethiopia at a workshop to lay out the next 30 years of growth in their city**

Urban Expansion Planning has a unique approach for plan-making and implementation. Rather than using consultants to prepare the plans, each city forms an urban expansion team made up of technical experts and political leaders. With training from development partners, these teams start by estimating how much the city is likely to grow in the next three decades (Lamson-Hall et al. 2022).

Trainers then hold workshops on how to plan this newly identified expansion area. Then, the city teams work to prepare the plans themselves and submit those plans for approval by the city council or regional or national government. While working on the plans, they receive more feedback and support from the trainers and national and regional-level officials.

In the end, all the work of making the plan – drafting, deciding where things should go, revising, surveying, estimating costs, and submitting – is done by the city urban expansion team.

This locally led approach is possible because making an urban expansion plan does not require extensive data collection or advanced technical training. Political leaders and other non-technical stakeholders can participate directly in plan creation, holding the pencil and joining discussions with the technical team.

An urban expansion plan focuses on creating rights of way (sometimes called road reserves) for a gridded network of arterial roads in the expansion areas of cities. Any urban plan for an expansion area should include land for these roads, generally around 30m wide and spaced about 1 km apart (Angel 2008).

Local planners can decide if the roads should be arranged in a gridded formation or follow the landscape's topography, as long as the network of arterial roads covers the entire expected expansion area of the city.

The network of arterial roads creates macroblocks about 1 km². These blocks and the roads that connect them provide a structure for the city's growth into the expansion area. As long as the road rights of way are preserved, any development within the macroblocks – formal, informal, commercial, industrial, or mixed – can be connected to the rest of the city.

Urban expansion plans also include important environmentally sensitive areas and large public open spaces. These spaces are essential for the city's quality of life and have a vital function in managing some climate risks.

Climate change is causing more extreme events, including heavy precipitation that can cause flooding and droughts that can impact drinking water supplies. Cities should carefully consider water management when designating environmentally sensitive areas, including flood plains, streams and rivers that provide drainage, and areas where groundwater recharges. Also, uniquely beautiful areas or those containing exceptional biodiversity can be protected to give future urban residents access to parks and green spaces (Lamson-Hall and Angel 2022).

FIGURE 18. **The urban expansion plan of Shire, Ethiopia, showing macroblocks and environmentally sensitive areas.**
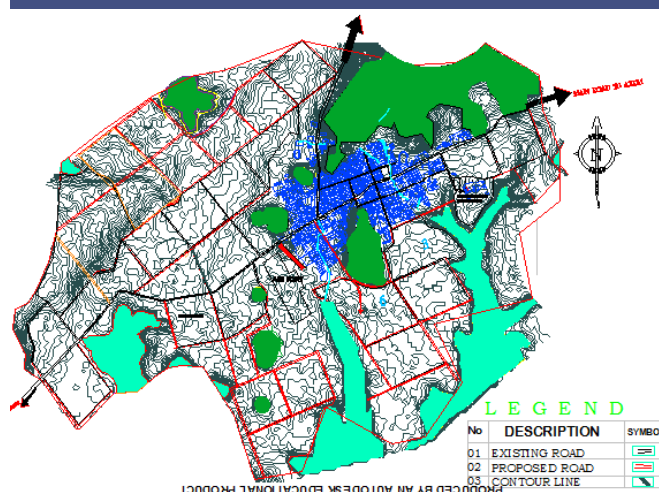

BOX 5

WHAT ABOUT EVERYTHING ELSE?

An urban expansion plan has only two elements: the arterial road rights of way, and the environmentally sensitive areas and large public open spaces. These are the entire plan.

But what about everything else? Many urban plans include zoning and land use regulations, detailed designs of parks and neighbourhood streets, the subdivision of land into parcels, street and intersection designs, drainage plans, estimates of demand for water, power, schools, and health clinics, and more.

An urban expansion plan is a 30-year plan. In the future, these more detailed planning elements can be introduced. Today, the urban expansion plan provides a basic framework that can be implemented at scale.

These two interventions can hugely benefit vulnerable residents on the urban periphery, particularly migrants and IDPs. Arterial roads increase travel speed across the city, giving better access to livelihood opportunities and services. Moreover, disaster risk reduction through the preservation of land makes neighbourhoods safer and more livable.

FIGURE 19. **Examples of different arterial road layouts (from Angel 2008)**

Kakuma, Kenya
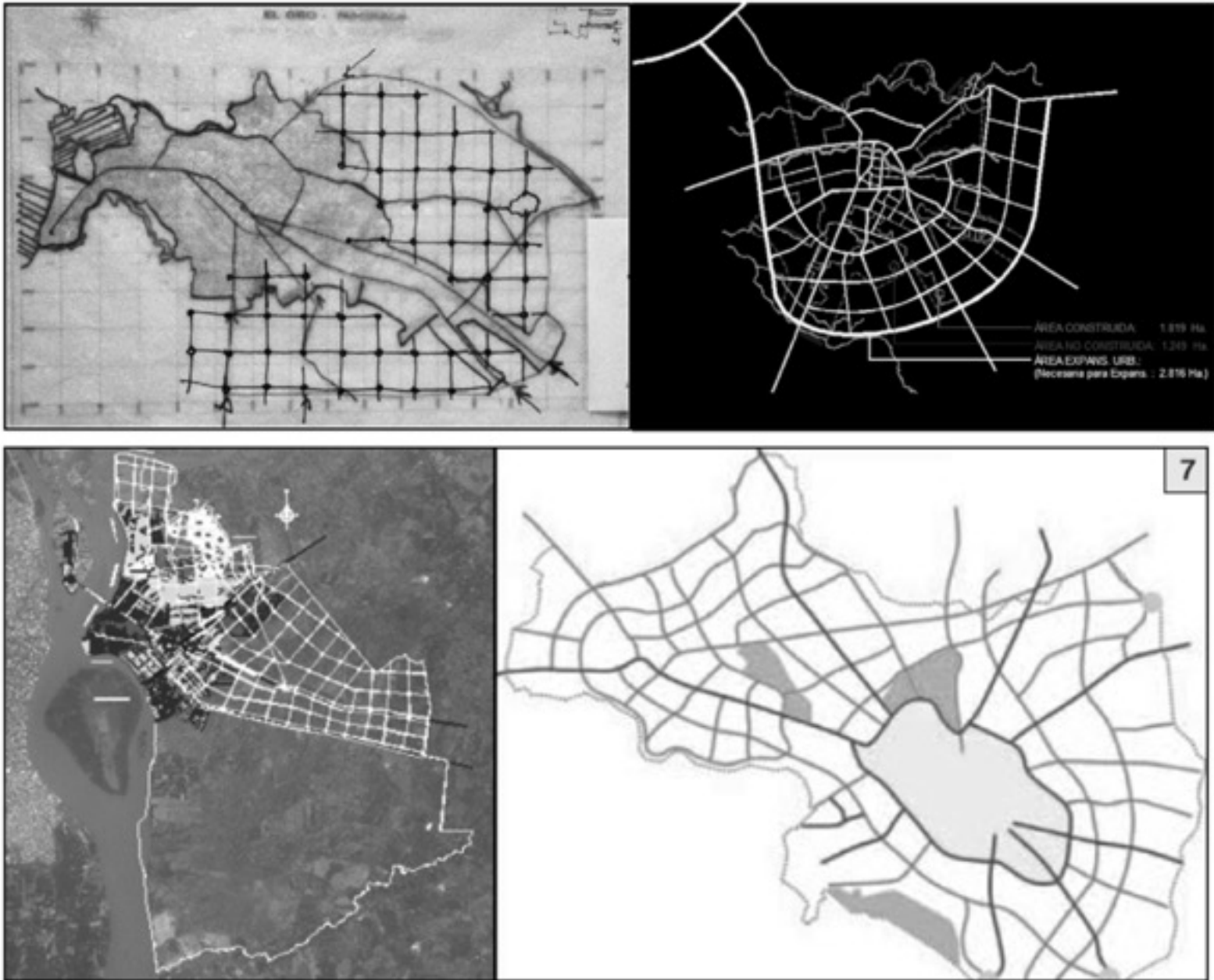
BOX 6

DOES URBAN EXPANSION PLANNING CAUSE SPRAWL?

Urban expansion planning admits the reality that cities are growing and that governments have limited power to control this growth. Does this mean that cities in the Horn of Africa are surrendering to "urban sprawl?"

Urban sprawl is very low-density development that results from inefficient use of land. In some countries in the Global North, laws separate commercial, industrial, and residential uses and require people to build single-family homes on large, mostly empty pieces of land. This growth pattern leaves residents dependent on private cars to meet their basic needs, increasing greenhouse gas emissions (GHGs). Sprawl exists in the U.S., Canada, Australia, and Western Europe.

Cities in the Horn of Africa are expanding into rural areas at densities four times higher than those in the Land-Rich Developed Countries and Europe (Angel et al. 2021). They are expanding because of population and economic growth, not because of inefficient land use patterns.

Urban Expansion Planning can help make cities more compact by helping cities grow evenly in all directions so more people can settle close to the urban centre. The arterial network also makes it easy to provide public transportation or infrastructure for walking and cycling, giving residents options that compete with private cars in speed, comfort, safety, and convenience.

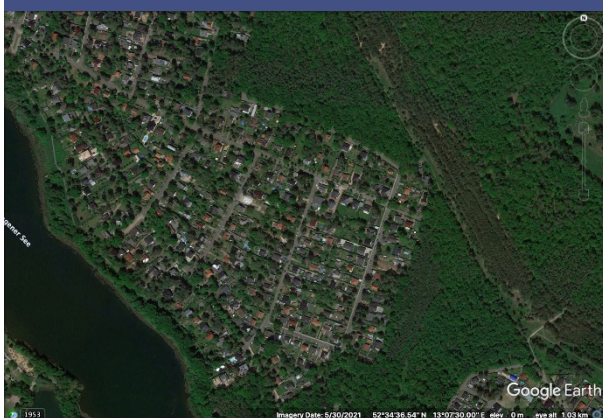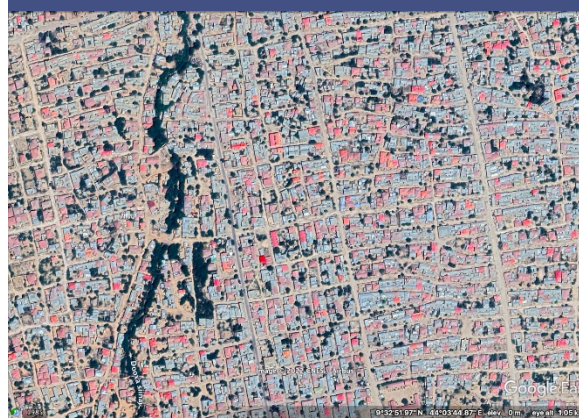FIGURE 20. **Low density suburban development outside Berlin, Germany in 2022**

FIGURE 21. **Urban expansion on the edge of Hargeisa, Somaliland**

After creating the plan, the city urban expansion team works to implement it in coordination with regional authorities and surrounding settlements. With an urban expansion plan, implementation specifically means protecting the planned road rights of way, environmentally sensitive areas, and large public open spaces from squatting or other development. The purpose of doing this now, before development occurs, is to ensure that the land for the roads will be available when development reaches an area, making it much easier to organise the city in an orderly manner.

The actual roads and other infrastructure should be built later when an area starts to develop. However, the city government can use some rights of way immediately in some cases to construct small roads to connect farmers to markets in the cities. This action can increase local food supplies in the urban area and improve rural livelihoods.

Implementation starts by surveying the land for the arterial grid while politicians work to communicate with landowners about the need to make room for the new arterial roads. Because roads increase land value, large landowners are often willing to donate land for the arterial roads without cash compensation. Smaller landowners may need cash compensation or even land swaps. One benefit of having a local team prepare the plan is that they can easily modify it in response to the surveys and feedback from citizens along the roads to reduce or eliminate any conflicts, and they have strong incentives to do so.

When the city approves the finalised urban expansion plan, the urban expansion team estimates the cash cost of compensation and works to include it in the municipal budget. It typically takes about five years to acquire all the land for the roads and environmentally sensitive areas. Open spaces often take longer.

However, once all the stakeholders agree upon the route, the city can immediately start marking the future roads. One way to do this

FIGURE 22. **Surveying the urban expansion plan of Hawassa, Ethiopia**

is by placing stone markets, but another way, where it is possible, is to plant trees along the edges of the future roads.

Trees will clearly show where the roads will go, and as they grow over time, they will create shade that will reduce the urban heat island effect. In the meantime, farmers and pastoralists can continue to use the land where the roads will go, as long as they do not construct any permanent structures in the road rights of way.

The plan implementation can be paid for with a mix of local revenue, central government transfers, and donor funds. Actual road construction can take place over the next three decades, starting with basic roads and progressing to fully functional arterial roads with public transportation, vehicle travel lanes, bike lanes, sidewalks, and shade trees.

Road construction funds often come from international development partners such as the World Bank. Such funds are often mainly used in the urban centre, where public land is clearly identified and there are no tenure and titling issues. By having the road rights of way already in place, term-limited funds for urban infrastructure can support orderly growth on the urban periphery, where most IDPs and migrants are likely to settle.

FIGURE 23. **Trees planted along the future arterial road of a city in Colombia (top) and renderings of how those trees will grow over time**

URBAN EXPANSION PLANNING IN THE HORN OF AFRICA

Since 2014, Cities Alliance has been supporting Urban Expansion Planning in rapidly growing secondary cities in the Horn of Africa, where it has produced tangible results on the ground. It has been applied on the ground in four cities in Ethiopia, and 14 additional cities have been partially trained to make the plans. It is now being applied in four cities in Uganda, three additional cities in Ethiopia, and two cities in Somalia.

In Ethiopia, four cities have created over 500 km of arterial roads from an initial investment of $700,000 in capacity-building support (Lamson-Hall et al. 2019).

Local leaders have used the newly accessible lands to develop local industrial parks that have created at least 26,000 jobs and to create extensive new residential areas housing for at least 140,000 new residents (ibid).

FIGURE 24. **Four implementing cities (red triangles) and 14 trained cities (yellow circles)**

FIGURE 25. **Arterial roads in the urban expansion area of Mekele, Ethiopia in 2018**

FIGURE 26. **Housing and businesses in the expansion area of Bahir Dar, Ethiopia in 2017**

FIGURE 27. **A new arterial road in a regularised informal settlement in Hawassa, Ethiopia**

The plans have also helped to regularise informal settlements by providing land titles and basic services, as well as to protect environmentally sensitive areas (ibid).

A recent study of household-level impacts of urban expansion planning compared household outcomes in new urban areas that were planned and unplanned. Households in areas where the city had implemented urban expansion plans were twice as likely to have running water, twice as likely to have formal tenure or title to their home and had incomes 58 per cent higher. Especially for new urban residents, the benefits of an urban expansion plan are clear and substantial (Lamson-Hall et al. 2022).

Implementation was also much faster and more complete than standard plans. Cities that started designing their urban expansion plans in 2013 were already actively marking new rights of way on the urban periphery by mid-2014. Commitment from local politicians helped ensure that resources were available for this effort (NYU Marron Institute of Urban Management 2014).

Furthermore, unlike many programmes from abroad, cities trained in Urban Expansion Planning continue implementing the approach many years after the trainers leave. Adama, Ethiopia, for example, has continued to implement its urban expansion plan for almost ten years and is on track to complete 50 per cent of the planned roads by the end of its current structure plan (Lamson-Hall et al. 2022

CONCLUSION

If implemented, an urban expansion plan can create a structure for the city that makes it easier for new residents to find housing, practice their livelihoods, and access basic services – even if they initially arrive with few skills, connections, or resources. The benefits of the plan go beyond helping migrants and IDPs. The structure also makes room for existing residents to build new homes and grow businesses, helps protect vital environmental areas, creates new public open spaces, prepares the city for future investments in infrastructure and public transportation, and reduces traffic congestion.

Urban planning is not the only thing city leaders must do to accommodate their new urban residents, but it is an excellent example of a tool already in the hands of local officials. With methodologies like Urban Expansion Planning, urban planning can help cities in the Horn of Africa manage rapid urban expansion and the high proportion of migrants and IDPs who settle in expansion areas.

FOR MORE INFORMATION

Cities Alliance has produced a publication to help city leaders, national governments, and donors learn more about urban expansion planning. It focuses on how urban expansion planning is helping cities be more inclusive toward new urban migrants and other new residents. The publication is called Managing Migration and Urban Expansion in Secondary Cities.

A companion white paper called Climate Resilient Urban Expansion Planning in Developing Countries focuses on how urban expansion planning can help cities address climate change, including reducing GHG emissions, protecting high-risk areas, making cities more compact, and helping plan for future climate risks and disasters.

AN URBAN EXPANSION PLAN CAN CREATE A STRUCTURE FOR THE CITY THAT MAKES IT EASIER FOR NEW RESIDENTS TO FIND HOUSING, PRACTICE THEIR LIVELIHOODS, AND ACCESS BASIC SERVICES.

Soweto, South Africa

References

Abel, G. J., M. Brottrager, J. C. Cuaresma, and R. Muttarak. (2019). "Climate, Conflict and Forced Migration." Global Environmental Change, 54, pp. 239–249.

Abercrombie, P. (1923). "Wren's Plan for London after the Great Fire." *The Town Planning Review*, 10(2), pp. 71–78.

Abiko, A., L. R. de Azevedo Cardoso, R. Rinaldelli, and H. C. R Haga. (2007). "Basic Costs of Slum Upgrading in Brazil." *Global Urban Development Magazine*, 3(1), pp. 121–131.

Ang, Y. Y. (2016). "How China Escaped the Poverty Trap." In *How China Escaped the Poverty Trap*. Cornell University Press, Ithaca, NY.

Angel, S. (2008). "An Arterial Grid of Dirt Roads." *Cities*, 25(3), pp. 146–162.

Angel, S. (2012). *Planet of Cities*. Lincoln Institute of Land Policy, Cambridge, MA.

Angel, S., A. M. Blei, J. Parent, P. Lamson-Hall, N. Galarza-Sanchez, D.L. Civco, and K. Thom. (2016a). *Atlas of Urban Expansion, 2016 Edition, Volume 1: Areas and Densities*. The NYU Urbanisation Project, New York, NY.

Angel, S., P. Lamson-Hall, M. Madrid, A.M. Blei, and J. Parent. (2016b). *Atlas of Urban Expansion, 2016 Edition, Volume 2: Blocks and Roads*. The NYU Urbanisation Project, New York, NY.

Angel, S., P. Lamson-Hall, A. Blei, S. Shingade, and S. Kumar. (2021). "Densify and Expand: A Global Analysis of Recent Urban Growth." *Sustainability*, 13(7), 3835.

Cohen, B. (2006) Urbanisation in "Developing Countries: Current Trends, Future Projections, and Key Challenges for Sustainability." *Technology in Society,* 28(1–2), pp. 63–80.

Diaz Olvera, L., D. Plat, and P. Pochet. (2013). "The Puzzle of Mobility and Access to the City in Sub-Saharan Africa." *Journal of Transport Geography*, 32, pp. 56–64.

Dogra, B. (2022 29 August). "Noida Twin Tower Demolition Raises Important Questions." Countercurrents.org [Web]. Accessed September 14, 2022: https://countercurrents.org/2022/08/twin-tower-demolition-raises-important-questions/.

Glaeser, E. (2011). *Triumph of the City: How Urban Spaces Make Us Human*. Penguin Books, London.

Glaeser, E. L. (2013). *A World of Cities: The Causes and Consequences of Urbanisation in Poorer Countries*. National Bureau of Economic Research, Inc. Working Papers 19745.

Harvey, L. D., K. Korytarova, O. Lucon, and V. Roshchanka. (2014). "Construction of a Global Disaggregated Dataset of Building Energy Use and Floor Area in 2010." *Energy and Buildings*, 76, pp. 488–496.

Haug, S. (2008). "Migration Networks and Migration Decision-making." J*ournal of Ethnic and Migration Studies*, 34(4), pp. 585–605.

Hoffmann, E. M., V. Konerding, S. Nautiyal, and A. Buerkert. (2019). "Is the Push-pull Paradigm Useful to Explain Rural-Urban Migration? A Case Study in Uttarakhand, India." PLOS One, 14(4), e0214511.

IDMC (2018). "Urban Displacement." Research Areas. Webpage. Internal Displacement Monitoring Centre. Accessed September 14, 2022: https://www.internal-displacement.org/research-areas/urban-displacement.

IDCM (2019). *2019 Global Report on Internal Displacement*. Part 3: Urban Internal Displacement: Risk, Impacts and Solutions. Internal Displacement Monitoring Centre. Accessed September 14, 2022: https://www.internal-displacement.org/sites/default/files/publications/documents/2019-IDMC-GRID.pdf.

IDMC (2021). "2021 Internal Displacement." Global Internal Displacement Database. Dataset. Internal Displacement Monitoring Centre. Accessed September 14, 2022: https://www.internal-displacement.org/database/displacement-data.

Ishtiaque, A., and M. S. Ullah. (2013). "The Influence of Factors of Migration on the Migration Status of Rural-Urban Migrants in Dhaka, Bangladesh." *Human Geographies*, 7(2), p. 45.

Jedwab, R., and D. Vollrath. (2015). "Urbanisation Without Growth in Historical Perspective." *Explorations in Economic History*, 58 pp. 1–21.

Lamson-Hall, P., and S. Angel (2022). *Climate-Resilient Urban Expansion Planning: A Tool for Adaptation and Mitigation of Climate Risk in Secondary Cities*. Cities Alliance/UNOPS, Brussels.

Lamson-Hall, P., S. Angel, and T. Tafesse. (2022). *Managing Migration and Urban Expansion in Secondary Cities*. Cities Alliance/UNOPS, Brussels.

Lamson-Hall, P., and M. Martin. (2022). "The Ethiopia Urban Expansion Initiative and Knowledge Exchange." Buildings and Cities. Special Collection: Urban Expansion. (Forthcoming).

Legesse, B. A., K. Jefferson-Moore, and T. Thomas. (2018). "Impacts of Land Tenure and Property Rights on Reforestation Intervention in Ethiopia." *Land Use Policy*, 70, pp. 494–499.

Lerch, M. (2019). Regional Variations in the Rural-Urban Fertility Gradient in the Global South. *PLOS One*, 14(7), e0219624.

NYU Marron Institute of Urban Management. (2014, April 5). *Urban Expansion: On the Ground in Ethiopia*. Video, YouTube. https://www.youtube.com/watch?v=XQ7kUhTxJOM.

Okhankhuele, O. T., and O. Z. Opafunso. (2013). "Causes and Consequences of Rural-Urban Migration Nigeria: A Case Study of Ogun Waterside Local Government Area of Ogun State, Nigeria." *British Journal of Arts and Social Sciences*, 16(1), pp. 185–194.

Parby, J. I., N. Lozano Gracia, D. Mason, S. V. Lall, B. Dasgupta, and C. Young. (2015). *Stocktaking of the Housing Sector in Sub-Saharan Africa: Challenges and Opportunities*, no. AUS7243, pp. 1–123. The World Bank, Washington, DC.

Ruiz, I., and C. Vargas-Silva. (2013). "The Economics of Forced Migration." *The Journal of Development Studies*, 49(6), pp. 772–784.

Salon, D., and S. Gulyani. (2010). "Mobility, Poverty, and Gender: Travel 'Choices' of Slum Residents in Nairobi, Kenya." *Transport Reviews* 30, pp. 641–657.

Spence, M., P. C. Annez, and R. M. Buckley, eds. (2008). *Urbanisation and Growth*. World Bank Publications, The World Bank, Washington, DC.

Watson, V. (2009). "Seeing from the South: Refocusing Urban Planning on the Globe's Central Urban Issues." *Urban Studies*, 46(11), pp. 2259–2275.

Wekesa, B. W., G. S. Steyn, and F. F. Otieno. (2011). "A Review of Physical and Socio-Economic Characteristics and Intervention Approaches of Informal Settlements." *Habitat International*, 35(2), pp. 238–245.

United Nations (2018). *World Urbanisation Prospects: 2018 Revision*. United Nations Department of Economic and Social Affairs, New York.

World Bank (2020). "Fertility Rate, Total (births per woman)." World Development Indicators. World Bank. Retrieved from http://data.worldbank.org/indicator/SP.DYN.TFRT.IN.

World Bank (2022). "GDP Per Capita, PPP (current international $)." World Development Indicators. World Bank. Retrieved from https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD.

Cities Alliance
Cities Without Slums

Hosted by
UNOPS