URBAN EXPANSION

THE ETHIOPIA URBAN EXPANSION INITIATIVE: **INTERIM REPORT 2**

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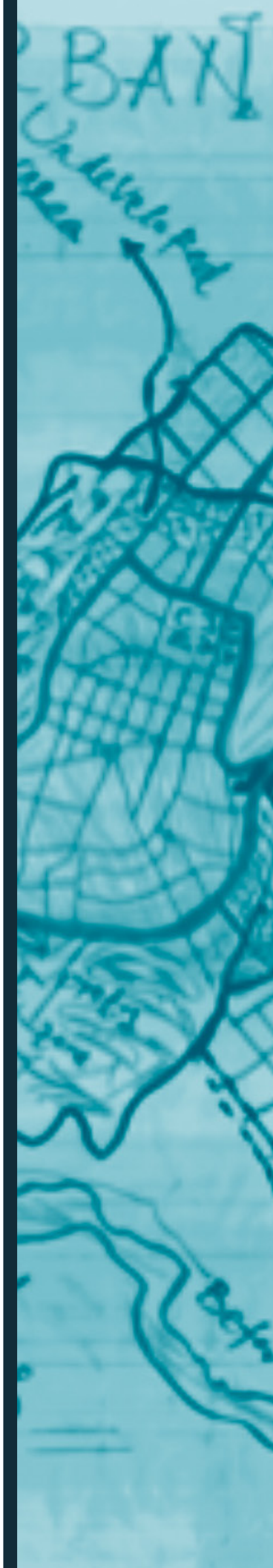

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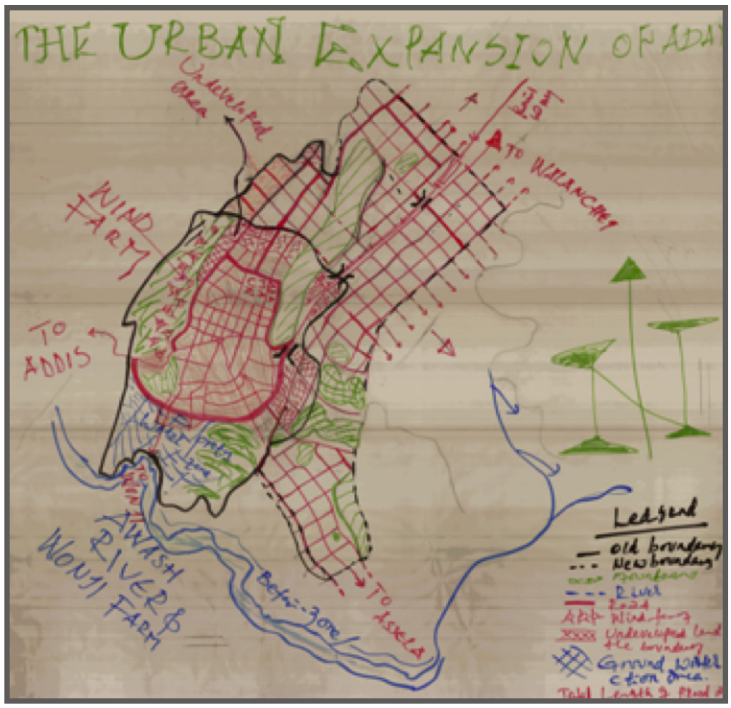
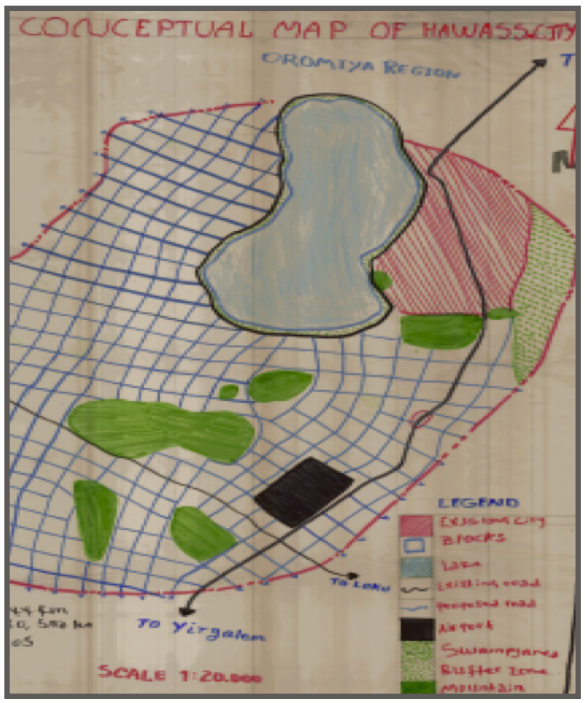
URBAN EXPANSION





A MUNICIPAL ACTION PROGRAM TO SECURE LANDS ON THE URBAN PERIPHERY FOR PUBLIC WORKS IN ADVANCE OF PROJECTED URBAN EXPANSION

New York University (NYU) launched an important new initiative in 2012 that focused on rapidly growing cities: The Urban Expansion Initiative. This initiative is aimed at assisting cities in rapidly urbanizing developing countries in preparing for their inevitable expansion. It is one of two initiatives within The Urbanization Project, an urban action center located within the Stern School of Business at the University.

The Urban Expansion Initiative is based on a ten-year global study of urban expansion reported on in Shlomo Angel's Planet of Cities [Cambridge MA: Lincoln Institute of Land Policy, 2012]. But it is not aimed simply at producing yet one more study or another paper plan. It is an action program aimed at getting real and tangible results in a select number of cities with competent and farsighted municipalities, cities – supported by their central government and by their regional or provincial authorities – that can take a leadership role in making realistic preparations on the ground ahead of their expected expansion and serve as role models for other rapidly growing cities the world over. The Urban Expansion Initiative is now collaborating with municipal, provincial and central government officials in selected cities in two countries: Ethiopia in Sub-Saharan Africa and Colombia in Latin America and the Caribbean. A third collaboration, in an Asian country, is scheduled to commence in 2014.

The Ethiopian Urban Expansion Initiative, like similar such initiatives planned for other participating countries, consists of a simple four-step municipal action program, to be implemented in advance of the occupation of the urban fringe by formal and informal construction:

1. Realistic Maps: preparing maps of the lands that will need to be converted to urban use in the coming thirty years, based on realistic population and urban area per capita projections;

2. Generous City Limits: compelling federal or regional authorities to create a single municipal jurisdiction that can execute plans in the entire area of expansion;

3. Arterial Road Grid: locating a 30-meter wide arterial road grid with a 1-kilometer spacing throughout the expansion area and transferring the rights-of way for all roads to the municipality; and

4. Selective Protection of Public Open Spaces: identifying a hierarchy of public open spaces, large and small, throughout the expansion area, and transferring the land rights for all these spaces to the municipality.

The NYU Urbanization Project has committed itself to providing free technical assistance to competent municipal teams in four rapidly growing cities in Ethiopia that are also regional capitals – Adama, Bahir Dar, Hawassa, and Mek'ele – to guide them through this four-step action program. To that effect, a technical team has been recruited in early 2013 to work with the municipal teams. H.E. Mr. Mekuria Haile Teklemariam, Minister of Urban Development and Construction, has strongly endorsed the program and has signed a Memorandum of Understanding detailing the duties and responsibilities of all participating parties: NYU, the municipalities, the regional authorities, and the Ministry. The NYU technical team visited Addis Ababa in early July 2013 – following an earlier visits to the selected cities in late May- early June 2013 – to participate in a workshop attended by Ministry officials, mayors and their appointed municipal teams, and representatives of regional governments. The workshop focused on drafting expansion plans and on charting the course of preparing plans[1] and budgets for approval by the Minister and by regional governments in January of 2014. Following approval, they will be submitted for budgeting in fiscal year 2014-15.

The municipal teams are now working on improving their designs of the arterial road grid and the open space hierarchy. The technical team continues to visit the cities to provide guidance. It is also engaged in preparing more rigorous city population projections to 2040, as well as in preparing prototype subdivision plans for the macroblocks within the arterial grid. The municipal teams will begin to survey the rights-of-way of the arterial grid after the Fall harvest season with the goal of assessing the amount of compensation that will need to be paid to farmers now

1 *See cover page for draft expansion plans of the four participating municipalities. Top left: Adama; top right: Bahir Dar; bottom left: Hawassa; bottom right: Mek'ele.*

Table 1: Preliminary Population Projections for the Four Participating Ethiopian Cities (to be revised later), 2010-2040

CITY	IN 2010	IN 2020	IN 2020 AS MULTIPLE OF 2010	IN 2030	IN 2030 AS MULTIPLE OF 2010	IN 2040	IN 2040 AS MULTIPLE OF 2010
Mek'ele	254,000	436,000	1.7	745,000	2.9	1,235,000	4.9
Adama	253,000	398,000	1.6	626,000	2.5	954,000	3.8
Hawassa	190,000	358,000	1.9	671,000	3.5	1,222,000	6.4
Bahir Dar	178,000	278,000	1.6	434,000	2.4	656,000	3.7

cultivating land within the projected rights-of-way. That compensation will form an integral part of a multi-year infrastructure investment program in the participating cities. In parallel, technical teams in four regional governments are gearing up, supported by the NYU technical team, to expand the urban expansion initiative to other Ethiopian cities. This effort is accompanied by municipal capacity building at the Ethiopian Civil Service University, involving educating future urban planners in the science and practice of urban expansion.

Background and Rationale

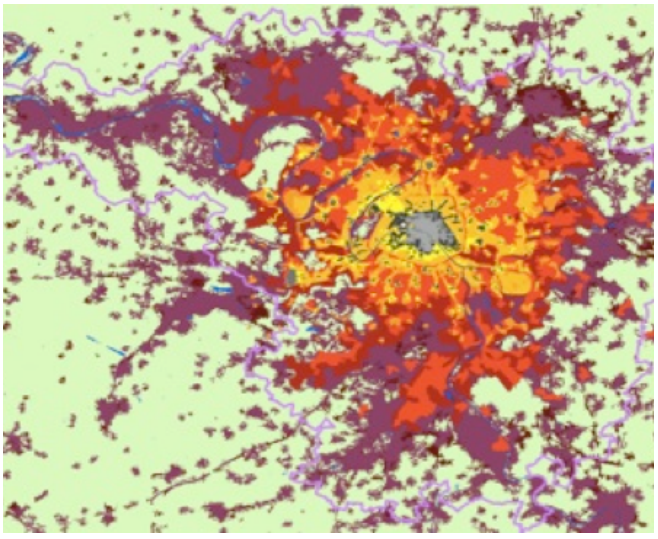
According to recent U.N. estimates, the urban population of Ethiopia is now expected to triple between 2010 and 2040, growing at an average rate of 3.5% per year. Ethiopia is now one of the most rapidly urbanizing countries in the world. Among the 80 countries that had more than 10 million people in 2010, it had the 15th highest rate of projected urban population growth between 2010 and 2040.

Preliminary city-level population projections[2] suggest that some of its larger cities—excluding Addis Ababa, its capital—can now be expected to much more than triple their 2010 population by 2040: Hawassa will grow to more than 6-fold its 2010 population by 2040, Mek'ele to almost 5-fold its 2010 population, and Adama and Bahir Dar to almost 4-fold their 2010 populations (see table 1).

The built-up areas of these cities can be expected to expand at an even faster rate than their population. Planet of Cities [2012] shows that – when urban population growth is accompanied by economic development and by the increasing availability of inexpensive transport – the annual consumption of urban land per person grows as well. A study of a global sample of 120 cities found that their built-up area grew twice as fast, on average, as their population in the 1990s. Urban area per person[3] grew, on average, at 2% per year during this period. It grew at an average annual rate of 1.5% in a smaller representative sample of 30 cities between 1800 and 2000. The population of Paris, France, to take a concrete example, grew 20-fold between 1800 and 2000 while its built-up area grew 200-fold. Urban land per person in Paris (see figure 1) grew at an average annual rate of 1.1% during this period.

We calculated initial estimates of the expected expansion of these cities given five realistic assumptions about the annual growth of urban area per person. These projections are by no means unrealistic. As noted earlier, urban area per person in a global sample of 120 cities

Figure 1: The population of Paris, France, increased 20-fold between 1800 and 2000, while its area grew 200-fold.



2 *Now being revised by Professor Mark Montgomery of the Population Council with city-level demographic data from the Ethiopian Central Statistical agency.*

3 *Very low projection: 2% decrease in urban area per person per year; Low projection: 1% decrease in urban area per person per year; Middle projection: No change in urban area per person per year; High projection: 1% increase in urban area per person per year; and Very high projection: 2% increase in urban area per person per year.*

increased at the very high projection rate of 2% per year between 1990 and 2000. Given these initial projections (to be revised later), we can begin to estimate how much land these four Ethiopian cities will require for their expansion during the next 30 years—more specifically, between 2010 and 2040. The middle, high, and very high projections are shown in table 2 below.

As the table shows, according to the middle projection, by

Table 2: Projected Increases in the Built-up Areas of the Four Participating Ethiopian cities (to be revised later), 2010-2040.

CITY	ESTIMATED CITY AREA IN 2010 (HECTARES)	NO INCREASE IN CITY AREA PER PERSON PER YEAR		1% INCREASE IN CITY AREA PER PERSON PER YEAR		2% INCREASE IN CITY AREA PER PERSON PER YEAR	
		CITY AREA IN 2040	AS MULTIPLE OF CITY AREA IN 2010	CITY AREA IN 2040	AS MULTIPLE OF CITY AREA IN 2010	CITY AREA IN 2040	AS MULTIPLE OF CITY AREA IN 2010
Mek'ele	4,509	21,924	4.9	29,594	6.6	39,948	8.9
Adama	3,531	13,315	3.8	17,973	5.1	24,261	6.9
Hawassa	3,465	22,285	6.4	30,082	8.7	40,607	11.7
Bahir Dar	3,767	13,881	3.7	18,737	5.0	25,293	6.7

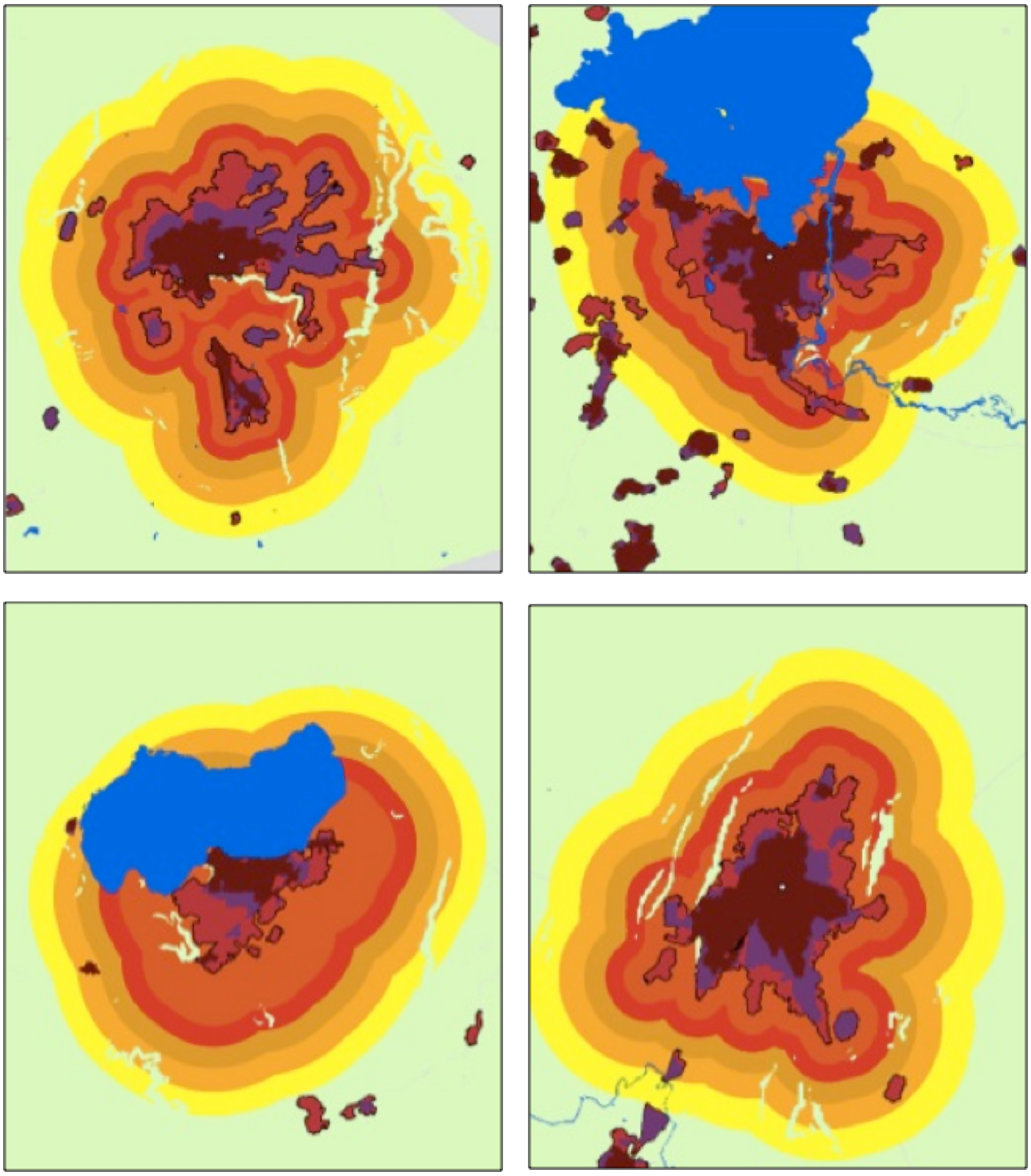
2040 the areas of cities will grow by the same multiple as their population: Hawassa by more than 6-fold, Mek'ele by almost 5-fold, and Adama and Bahir Dar by almost 4-fold their 2010 built-up areas. According to the high projection—a 1% annual increase in urban area per person—all four cities are projected to increase their built-up areas more than 5-fold, and Hawassa may increase its area more than 8-fold. According to the very high projection—a 2% annual increase in urban area per person—2 of the 4 cities may increase their areas more than 7-fold, and Hawassa may increase its area more than 11-fold. These projections are preliminary, of course. Still, even given a large margin of error, the numbers speak for themselves. And as the historical expansion trajectories of other rapidly growing cities show, they are not unrealistic or unreasonable. We have now projected the expansion areas of these four cities on the ground, assuming they will expand at the same rate in all directions (see figure 2 on next page).

These cities now face a simple yet ominous choice: They can seek to block this projected expansion with containment strategies—such as greenbelts, smart growth policies, urban growth boundaries, or restrictive land use and zoning regulations—or they can make adequate room for this expansion so that it occurs in an orderly, efficient, equitable, and sustainable way. The Urban Expansion Initiative seeks to work with municipalities in Ethiopia that prefer the second option and are willing to expend both human and financial resources to attain it. It has now engaged municipal officials in four selected cities in Ethiopia—all of them rapidly growing ones. These officials have agreed to commit some of the resources allocated to them by the Ethiopian Government – as well as their own human and financial resources – to this all-important effort.

In the not too recent past, many cities—Tokyo and Saõ Paolo included—have experimented with containment strategies of one kind or another, failed, and gave them up. They grew too fast to contain themselves effectively. In fact, a representative global sample of 30 cities—including Paris, France, shown in figure 1—increased their built-up areas, on average, by a factor of 16 between 1930 and 2000. They could not have been contained and all efforts to contain them would have failed. In the few places where containment or partial containment by authoritarian governments has been at least partially successful—such as in Seoul, Korea in the 1970s or in the cities of China in the 1990s and 2000s—it has resulted in choking the urban land supply and putting housing out of reach of most people. In short, failed containment may result in a disorderly, inefficient, inequitable, and unsustainable urban expansion, while successful containment may result in unaffordable housing.

The alternative to the containment paradigm is the Making Room Paradigm. This paradigm accepts that urban expansion is inevitable; that if accompanied by economic development it is likely to occur at increased levels of urban area per capita; that it needs to be embraced if residential land supply is to remain plentiful and affordable; and that the land required for public works—including, at the very minimum, the land for an arterial infrastructure grid and the land for a selective hierarchy

Figure 2: Urban Expansion Projections for 2040 in the Four Participating Ethiopian Cities.
Top left: Adama; top right: Bahir Dar; bottom left: Hawassa; bottom right: Mek'ele. Edge of yellow border corresponds to the Very High urban area projection (2% annual increase in urban area per person); light orange to the High projection (1% increase); and darker orange to the Middle projection (no change).



of public open spaces—needs to be identified and acquired by municipalities in advance of the occupation of the city periphery by urban development.

It should be noted here that preparing adequate lands for urban expansion is not in conflict with efforts to make the city more compact: increase densities in the urban core, along the main transportation corridors and around main transit hubs, ease building height and floor area ratio restrictions, as well as regulations that prevent the gradual addition of rooms or dwelling units on residential plots. These valuable efforts to densify cities— except in cases where there is serious overcrowding and where densities must be reduced rather than increased – can go hand in hand with preparing adequate lands for their expansion. As noted earlier, in all but the most authoritarian regimes, radical efforts to block expansion through regulatory restrictions are likely to fail.

There are very few good examples of cities that have prepared adequate lands for their projected expansion. One of the best historical examples is Ildefons Cerdá's Ensanche plan of 1859 for Barcelona, Spain (see figure 3), a plan that envisioned no less than a 9-fold expansion of the built-up area of the city. Given the projected rates of expansion of the rapidly growing cities in Ethiopia, the 9-fold expansion envisioned by Cerdá is not entirely unrealistic.

As noted earlier, the proposed Ethiopia Urban Expansion Initiative consists of a simple four-step municipal action program that can and should be implemented now, in advance of the occupation of the urban fringe by formal and informal construction. The third and fourth steps in the program – the immediate acquisition of the rights-of-way of the arterial road grid and the selective protection of public open space – deserve further elaboration.

The arterial road grid pertains only to the network of *major arterial roads*—the urban roads that typically carry intra-urban traffic, public transport, and trunk infrastructure, especially water and sewer lines. To accommodate urban expansion, an arterial road grid on the urban fringe must have four essential properties: (1) it must cover the entire area designated for expansion and not just a segment of that area; (2) it must be a network of long, continuous roads that crisscross the expansion area and are connected to the existing road network; (3) roads should be spaced not more than one kilometer apart to ensure that public transportation is within a 10-minute walk; (4) the width of the roads should be of the order of 25-30 meters, so that they can have designated bus lanes, bike paths, a median, and several lanes to carry intra-city traffic. Initially, only rights-of-way for the grid should be acquired by municipal authorities; dirt roads can then be opened up in large portions of the grid; selected segments can then be paved over the years but only as travel demand requires them and as budgets become available.

Figure 3: Ildefons Cerdá's Ensanche Plan for Barcelona, Spain, 1859, expanded its built-up area 9-fold.

An early introduction of an arterial grid into expansion areas would help attain five important objectives: ***(1) An anti-poverty objective:*** by opening up sufficient lands for urban expansion, land prices and hence housing prices in both formal and informal markets will remain affordable; ***(2) A planning objective:*** By locating the grid now, municipalities can actively shape future growth, moving ahead of developers rather than following them. With the superblock system created by the arterial road network it becomes possible to plan for land uses and land subdivisions over time, as dictated by market forces as well as by neighborhood concerns; ***(3) A transport objective:*** The grid will function as an efficient framework for a public transport system crisscrossing the entire expansion area within a 10-minute walk of all locations; ***(4) An environmental objective:*** The arterial grid will be an essential element of an effective public transport system, one of the most important elements in any urban

strategy that aims to reduce our carbon footprint. It will also provide planners with an effective tool for directing urban development away from sensitive natural habitats that are likely to be encroached upon otherwise; and ***(5) A financial objective:*** Municipalities can acquire the land needed for the grid now, and individual road segments can be improved to higher standards later as demand for travel along them increases. If rights-of-way are acquired now, their costs will be many, many times lower than the cost of pushing an arterial road through a fully built neighborhood.

The selective protection of open spaces involves four key steps: (1) the creation of a metropolitan open space plan that contains a hierarchy of open spaces of all sizes and types—from football fields and playgrounds to wetlands, farms, and nature parks—in areas of expansion; (2) the passage of new regulations or the enforcement of existing regulations that mandate the allocation of a certain share of all lands – of the order of 40 percent - for public use; (3) the selective acquisition of lands for use as public open space on the urban periphery while land prices or compensation rates are still low, the registration of liens on lands designated for future use as open space, or the acquisition of the development rights to land through purchase or exchange of land rights; and (4) the creation of an institutional framework comprising public, private and civic organizations for the aggressive protection of these open spaces from invasion by formal and informal developers. The most important aspect of this fourth element of the making room paradigm is this: its actual extent will be limited by the private, public and civic resources—both financial and human—that can be made available for its implementation. That is why it must be selective. Instead of protecting too much land from development at no cost to the public and ending up with no open space at all, it aims to protect some land and protect it well at a minimal cost to the public so that it remains open in perpetuity.

Progress To-Date on the Work Program

The professional team to guide the Ethiopia Urban Expansion Initiative was recruited in early 2013 by the Urbanization Project, an urban action center located at the Stern School of Business at NYU. The Urbanization Project is directed by Paul Romer, a professor of economics at the Stern School of Business at NYU, and is supported by funds from NYU, from the Stern School, and from the newly created Marron Institute of Cities and the Urban Enviornment at NYU. Brandon Fuller is its Deputy Director. Dr. Shlomo Angel, head of the NYU Urban Expansion Initiative, is a Senior Research Scholar and Adjunct Professor of Urban Planning at the Urbanization Project. Dr. David de Groot, a research scholar at the Urbanization Project who has worked in Ethiopia as a World Bank expert since 1999, is the leader of the Ethiopia Urban Expansion Initiative. He is assisted by Mr. Richard Martin, the Ethiopia initiative's urban planner, who has worked in urban planning in Africa since the late 1970s; by Mr. Yohannes Fisseha, the Ethiopia initiative's municipal engineer; by Ms. Tsigereda Tafesse, Ethiopia initiative's coordinator and monitoring officer; and by Mr. Patrick Lamson-Hall, Junior Research Scholar, the Ethiopia initiative's monitoring officer and reporter.

An early version of this report, Interim Report 1, was drafted in March 2013 and circulated among municipal officials of seven Ethiopian cities, as well as among regional and central government officials, to introduce them to the initiative and to elicit their interest. In parallel, satellite images of these seven cities at three time periods – 1984, 1994, and 2009 – were analyzed and mapped by a team at the University of Connecticut, Jason Parent and Anna Chabaeva, to determine the rate of physical expansion of the built-up areas of these cities in recent years (see, for example, figure 4 on next page).

Following the exchange of documents and information, the Initiative was emphatically endorsed by the Minister of Urban Development and Construction, H.E. Mekuria Haile Teklemariam, who recommended reducing the initial number of participating cities to four, with a commitment to involve all other cities in the country in future successive stages.

The Ethiopian Urban Expansion Initiative team undertook its first mission to the ministry and to participating cities from the 20th of May to the 6th of June, 2013. Dr. de Groot, Mr. Martin, Mr. Fisseha and Ms. Tafesse travelled to Adama, Hawassa, Bahir Dar, and Mek'ele to assist municipalities in the formation of dedicated urban expansion teams. These teams were tasked with preparing preliminary urban expansion plans based on the preliminary population and urban area projections developed by the NYU technical team, as well as estimates of the growth of the urban areas of their city. The teams worked with their mayors and city managers, along with officials from the provincial urban development bureaus, to begin to draft their expansion plans.

The municipal urban expansion teams, along with mayors, city managers, and officials of the regional urban

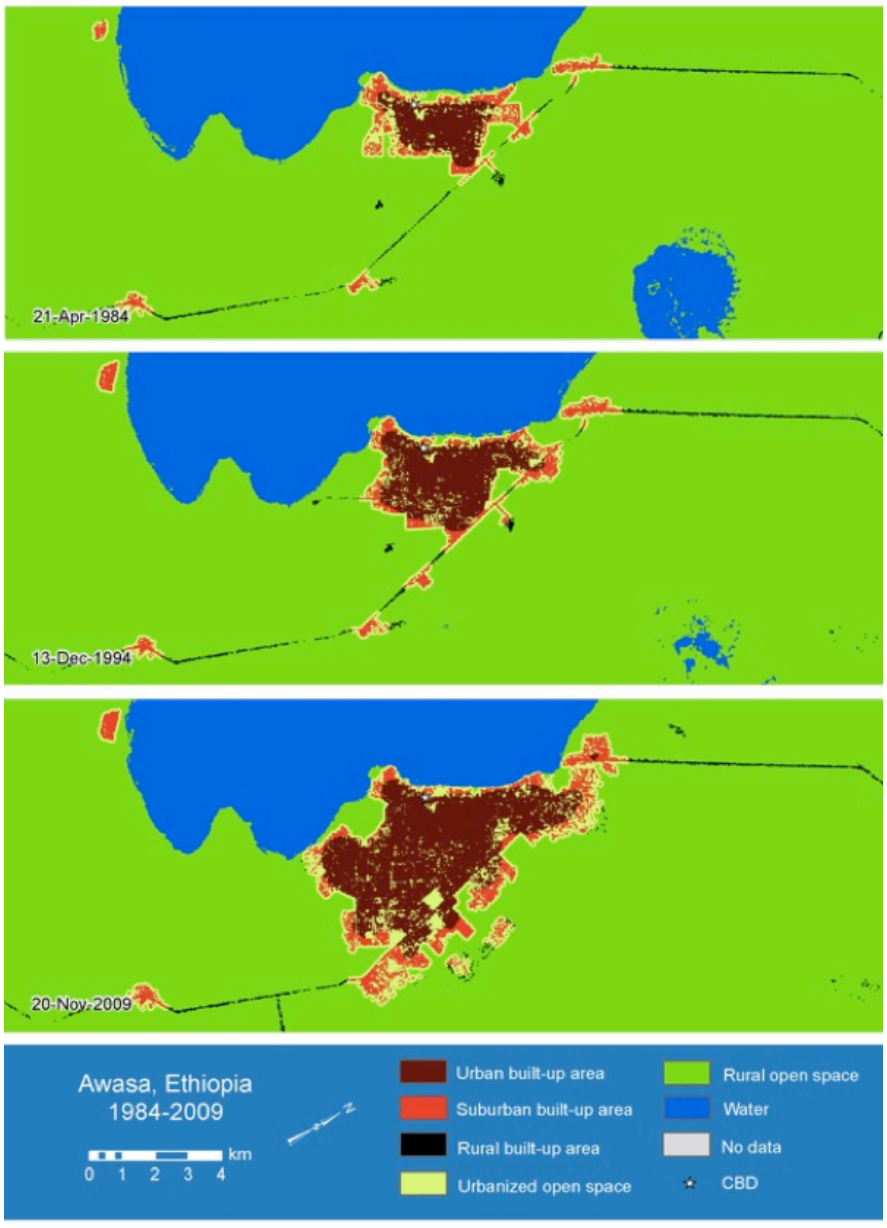
development bureaus and the Ministry, met the NYU team at the Ghion Hotel in Addis Ababa for a three-day workshop, from the 15th to the 17th of July 2013, to present their plans, analyze and define alternative scenarios for the future urban expansion of each city – grid layouts, timing of compensation, infrastructure standards – and to discuss and agree on implementation strategies and next steps.

The workshop, attended by some 60 participants, was officially opened by the Minister. In his address, the Minister stressed the importance of the Initiative in defining and laying the foundation for Ethiopia's urban future. The central government, he emphasized, has committed itself to the support and encouragement of urbanization. Making preparation for the expected urban population growth and its concomitant urban expansion is a key component of the government's urbanization strategy. The support of the central government, as well as his securing of the support of the regional bureaus, has given the Initiative the legitimacy it needed and empowered the municipal teams to pursue it diligently and wholeheartedly. The Minister also facilitated the access of the NYU technical team to all the necessary census data and maps available at the Central Statistical Agency, and requested that the team prepare more rigorous population projections for all of the country's cities.

Dr. Angel presented the conceptual background for making preparations for the coming urban expansion in Ethiopia, based on the scientific data that he and his colleagues collected on the dimensions and attributes of global urban expansion. These data and their analysis were summarized in his recent book, Planet of Cities (Cambridge MA: Lincoln Institute of Land Policy, 2012), copies of which were distributed to all participants in advance of the workshop.

The coordinators of each city's urban expansion team then presented their initial findings and draft plans. They explained the current conditions in their cities, including their geography, economy, existing plans, current land uses, the availability and status of non-urban land, and the formation of new squatter settlements on their periphery. Land in Ethiopia, it must be understood, is publicly owned. Farmers use it to grow crops. Municipalities must acquire land from farmers by paying them compensation for their future crop sales. They can then convert the land to urban use, service it, and auction it to urban users. Draft expansion plans for the four participating cities showed the location and land area proposed for expansion, a preliminary arterial road grid, and reserves of large open spaces (often steep hills, rivers, lakefront, marshland, etc.) They also reported on expected compensation costs for acquiring the rights-

Figure 4: The expansion of Awasa (Hawassa), Ethiopia, 1984-2009



of-way for arterial grids, and on the needed increase in implementation capacity to survey the grid and to complete the compensation process.

A major purpose of the workshop was to engage in collaborative improvement of the expansion plans developed by the cities, and one full day of the workshop was devoted to a design studio where each team worked on a revised draft expansion plan, assisted by other workshop participants. In discussions, it was generally agreed that speed of implementation was of the essence, and that the earlier compensation payments are made, the lower they are likely to be. At the same time, it became quite clear that it was not possible to pay compensation for the entire grid in one year and there was a consensus that cities should seek to complete the compensation process in 3-5 years. Municipal teams were also aware of the need to enlarge the jurisdictions of their cities to encompass entire expansion areas. The presence of professionals from the regional bureaus at the workshop was deemed critical, as it became clear that regional administrations would need to actively cooperate in this process, the changing of urban administrative boundaries being their prerogative.

Figure 5: The Municipal Team of Bahir Dar Working on Its Draft Arterial Road and Public Open Space Plan, Addis Ababa, July 2013

It was also understood that municipalities would need to convert, prepare and auction much more land to urban use in coming years, amounting to several square kilometers – or superblocks surrounded by the arterial grid – per year. This will require the creation of land subdivision plans for these superblocks, the laying out of streets, the decision on the number of residential plots in each size category, and the decisions on lands that must be allocated to commercial, public and civic buildings and to public open spaces. This will require the recruitment and training of new staff, as well as the acquisition and proper use of surveying equipment. At an institutional level, city officials would need to be professionalized, their compensation would need to be raised, and an emphasis would need to be placed on long-term cultivation and retention of talent. It was also recognized that implementing a 30-year plan requires administrative continuity, which is often lacking in local administrations.

City officials agreed to prepare three-to-five-year compensation plans to secure the rights-of-way for the entire arterial grid. They also agreed to explore the establishment of a revolving urban expansion funds: A portion of the lease revenues from future land auctions would be placed in these revolving funds and used to finance compensation of additional rights-of-way. At the same time, city officials agreed to begin to work towards more ambitious property taxation, to generate additional revenues for funding municipal infrastructure. To advance that goal, they understand that the coverage of their property tax cadasters must expand outwards as the rights-of-way of the arterial grids are acquired.

The design studios allowed the municipal teams to work on their plans, using large-scale topographic maps, availing themselves of the knowledge and experience of the Initiative's technical team, as well as that of other workshop participants: Ministry and regional officials, municipal officials from other cities, and academics from the Ethiopian Civil Service University.

In general, the revised plans created in the design studio added more land for expansion to the original plans presented initially by the cities. Each team and its advisors spent considerable time together, matching population projections to projected land needs and ensuring that expansion plans contained the required number of macro blocks. In planning to protect sensitive open spaces, special attention was paid to creating 150-meter wide buffer zones along lakes and rivers and aligning these buffer zones with arterial roads, to protecting

the watersheds of the urban water supply, and to avoiding construction on steep slopes.

On the final day of the workshop, each team presented its revised physical plan, along with its estimated compensation budget. It was agreed that a detailed survey of the agricultural and urban land uses within the projected rights-of-way of the arterial grids will be surveyed in detail after the October harvest season. The NYU Urban Expansion Initiative agreed to provide each participating municipality with sets of 4-5 appropriate GPS instruments and digital cameras needed to conduct the compensation survey[4]. Teams also outlined financing alternatives, steps for enlarging municipal jurisdictions, projected needs for increased technical capacity, expected challenges, and proposed responses to these challenges.

Next Steps

The Memorandum of Understanding detailing the responsibilities and obligations of all participating parties was signed by Minister Mekuria and by Professor Romer, and is now circulating among regional and municipal administrations to obtain their necessary signatures as well. The Memorandum commits all participating parties to play an active role in implementing the agreed-upon four-step action program. It also commits all parties to continue to collaborate beyond June 2014. More specifically, it commits the NYU Urban Expansion Initiative to complete urban population projections for all cities in Ethiopia; to prepare prototype land subdivision plans for typical macroblocks – including perspectives and instructions showing how they may be developed – and to assist municipal planners in preparing such land subdivisions; to facilitate the preparation and delivery of a course on planning for urban expansion at the Ethiopian Civil Service University, which will include a series of videotaped lectures on Planet of Cities by Dr. Shlomo Angel; and to guide and assist the regional authorities located in the four participating cities in expanding the urban expansion initiatives to other cities in the country.

The NYU team is planning a follow-up mission to all four participating cities in November 2013, and the workshop concluded with a conversation about the steps to be taken before that visit. In essence, the municipal teams now need advance on the following fronts:

- Develop clear municipal action plans assigning tasks and responsibilities, as well as delineating deliverable outputs at specific dates;
- Finalize their urban expansion plans, showing the arterial grid and the major public open spaces and digitizing their maps in ArcGIS;
- Geo-reference their ArcGIS maps using Google Earth, marking a set of points 200-meters-apart along arterial roads in preparation for the compensation surveys;
- Survey the arterial grid on the ground to determine compensation estimates and complete the survey before the end of 2013;
- Work with the regional authorities to secure expanded municipal jurisdictions to accommodate their plans in their entirety;
- Prepare the three-to-five year compensation schemes, working closely with the regional bureaus, and begin to delineate which parts of the arterial grid will be acquired every year;
- Start the detailed planning of several macroblocks and prepare procedures for auctioning plots within them to interested parties;
- Chart out the administrative changes necessary to institutionalize and streamline the urban expansion process;
- Prepare budgets for for municipal capacity development; and
- Begin to sketch out the legal and administrative procedures for the revolving urban expansion fund.

Urban expansion plans and their associated budgets will be presented to Minister Mekuria and his staff, as well as to the regional authorities, in Addis Ababa in January 2014, in a small workshop convened at the Ministry of Urban Development and Construction, attended by municipal and regional representatives, as well as by the NYU technical team. Once approved by the Minister, they will be added to the budget requests of the cities, to be approved by the end of June 2014 and incorporated into the municipal investment budgets for fiscal year 2014-15. The NYU technical team will continue to assist municipal teams in preparing final plans and budgets, as well as in carrying out future steps once budgets are approved.

4 *After the completion of all surveys, these devices are to be transferred to regional authorities for the conduct of additional surveys in other participating cities.*

Workshop Participants, Addis Ababa, 15th-17th July 2013

NAME	ORGANIZATION	POSITION
Mohmed Yimer	A.A Urban Development Bureau	Senior Expert
Abraham Adulla	Adama City Administration	Mayor
Dufera Fufa	Adama City Administration	Expert
Gebre Kirstos Geberu	Adama City Administration	
Tefera Kebedwe	Adama City Administration	
Shimelis Regasa	Adama Municipality	Urban Engineer
Gonfa Negera	Adama municipality	Plan and Budget
Salihe Abedela	Adama Municipality	Urban planner
Fekadu Dubisa	Adama Municipality	Structural engineer
Alemayhu Syoume	Adama Municipality	Structural engineer
Kinde Alemayehu	Amhara Industry & Urban Development Bureau	Deputy Head
Genete G/egziaber	Amhara Urban Planning Institute	General director
Simachwe Wondimagenehu	Bahir Dar City Administration	Acting mayor
Anmaw Mekonen	Bahir Dar City Administration	Expert
Geberu Tsehayneh	Bahir Dar Municipality	Process develop/fix
Addisu Begashaw	Bahir Dar Municipality	Infrastructure expert
Ayenwe Alemu	Bahir Dar Municipality	Department head
Tegared Zerihun	Bahir Dar Municipality	Dept head
Solomon Endrias	Ethiopian Cities Association	Adviser
Sisay Dejene	Ethiopian Cities Association	Director
Efrem Amdework	Ethiopian Cities Association	Senior adviser
Abebe kebede	Ethiopian Civil Service University	Lecturer
Tilahun Fekade	Ethiopian Civil Service University	Director
Frew Mengesha	Ethiopian Civil Service University	Department Head
Demeke Haile	Ethiopian Civil Service University	Director
Adem Redi	Hawassa City Administration	Senior GIS Expert
Yonas Yosef	Hawassa City Administration	Mayor
Tadse Tawota	Hawassa City Administration	Expert
Biru Wolde	Hawassa Municipality	City Manager
Shewarga shelmo	Hawassa Municipality	Land development & management coordinator
Worku Kabatu	Hawassa Municipality	Land administration expert
Tadesse Tawota	Hawassa Municipality	Land administration expert
Damte Data	Hawassa, SNNPR	Advisor
Kidu Hailezgi	Mek'ele Municipality	City manager
Berehanu Challa	Mek'ele Municipality	Expert
Amanuel W/ girma	Mek'ele Municipality	Department Head
Haile Fissha	Mek'ele Municipality	Civil Engineer
Tesfaalem Hadush	Mek'ele Municipality	Expert
Berhane Kebede	Mek'ele Municipality	Project officer
Solomon Bizuayen	Ministry of Urban Development and Construction	Senior expert
Alem Worku	Ministry of Urban Development and Construction	Senior expert
Abuye Anley	Ministry of Urban Development and Construction	Chief adviser
Zienet Ebrahim	Ministry of Urban Development and Construction	Urban manager
Israel Tesfaye	Ministry of Urban Development and Construction	Land Development and Management Bureau Head
Shlomo Angel	NYU Urban Expansion Initiative	Senior Research scholar
Richard Martin	NYU Ethiopia Urban Expansion Initiative	Urban Planner
Patrick Lamson-Hall	NYU Ethiopia Urban Expansion Initiative	Junior Research Scholar
Tsigereda Tafesse	NYU Ethiopia Urban Expansion Initiative	Coordinator
Yohannes Fisseha	NYU Ethiopia Urban Expansion Initiative	Engineer
David De Groot	NYU Ethiopia Urban Expansion Initiative	Leader
Sultan Mohamed	Oromia Bureau of Urban Development	Deputy Head
Atnafu Asfaw	SNNPR, Trade Industry and Urban Development Bureau	Land Management Head
Melese Alemu	SNNPR, Trade Industry and Urban Development Bureau	Vice President and Bureau Head
Nigisty Asmerom	Tigray Urban Development and Industry Bureau	Process owner
Moges Taffere	Tigray Bureau of Urban Development	Core process owner