

Social Green-Blue Infrastructure

Case Studies to Support the Addis Ababa Urban Age Task Force

A Technical Report commissioned by the Addis Ababa Urban Age Task Force



URBAN AGE

Addis Ababa Urban Age Task Force

The Addis Ababa Urban Age Task Force is a partnership between the Addis Ababa City Plan and Development Commission (AACPDC), LSE Cities at the London School of Economics and Political Science, the Alfred Herrhausen Gesellschaft, and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. Its purpose is to support the City of Addis Ababa in advancing its strategic development agenda. The Task Force's work builds upon the Addis Ababa City Structure Plan 2017–2027, exploring opportunities for compact and well-connected urban growth that can be delivered through integrated city governance. In addition to advisory activities and capacity building, it will identify strategic pilot projects to address complex urban challenges around housing, urban accessibility, green and blue infrastructure, and urban governance.

urbanagetaskforce.net/addisababa

Report Authors

Name Name
Name Name
Name Name

Supervisor

Name Name

Working Group

Name Name
Name Name
Name Name

Research Team

Name Name
Name Name
Name Name

LSE Cities
London School of Economics
and Political Science
Houghton Street
London
WC2A 2AE
United Kingdom

lse.cities@lse.ac.uk
lse.ac.uk/cities



@LSECities



LSE Cities



LSE Cities

This Report is intended as a basis for discussion. While every effort has been made to ensure the accuracy of the material in this report, the authors and/or LSE Cities will not be liable for any loss or damage incurred through the use of this report.

Published by LSE Cities, London School of Economics and Political Science, 2022.

Cover photo © Charlie Rosser

This publication has been
supported by



Contents

Introduction	4
1. New urban governance	5
1.1 The New Urban Governance focus of the Urban Age Task	5
1.2 Sheger Express buses	5
2. New urban governance	6
3. What is an International Building Exhibition (IBA)? What can it achieve?	6
3.1 IBA - an innovation generator for sustainable urbanisation	6
3.2 The Historical Context along examples	6
4. IBA Berlin: Inner City as Living Space (1979 - 1984/87)	6
4.1 IBA Emscher Park: The Future of an Industrial Region (1989-1999) IBA Hamburg: Leap across the Elbe (2006-2013)	6
4.2 IBA Thüringen: URBANRURAL (2012-2023)	6
Appendix 1. Task force pilot programmes	8
References	9

Introduction

The same time, digital technology is changing the way city governments operate and how they interact with citizens. Cities are increasingly using big data and real-time information to inform decision making.

The New Urban Governance focus of the Urban Age Task Forces is designed to support concrete change across different tiers of governments.

Conclusion: For any task force governance focus, issues of data and information will have to play a central role.

The overall programme is composed of four distinct strands of engagement (see Figure 3):

1. framing, which includes the pre-assessment;
2. the task force core;
3. task force support;
4. background research

Q5: ‘What type of additional local research on Addis Ababa would be particularly helpful for advancing compact and connected urban growth?’

Why?

The aim of the task force was to provide a valuable resource and accessible document to inform decision making in Yangon beyond technocratic processes.

Table 1: Urban governance issues

Core Issues	Wider Issues
<ul style="list-style-type: none"> – Data and information – Strategic planning – Scenario planning – Integrated governance and coordination – Policy interdependence – Budgets and finance – Skills and capacity – Transitions – Communication – Leadership 	<ul style="list-style-type: none"> – Corruption – Politicisation – Legal structures – Decision making – Addressing uncertainty – Participation – Trust – Formalisation – Land governance – Change management – Staffing – Implementation

*On behalf of the Addis Ababa Plan Commission, this included assessments by Dr Firehiwot Jebessa, Addis Ababa University (sociologist); Dr Belay File, Ethiopian Civil Service University (urban planner); Dr Moges Tadesse, Plan Commission (economist); Mr Dereje Yohannes, Addis Ababa University; Mr Dumesa Olkeba, Plan Commission (development economist); Mr Ephreme Bekele, Plan Commission (urban planner and architect); and Dr Philipp Rode, LSE Cities, on behalf of the Urban Age Programme.

How people move in Addis Ababa

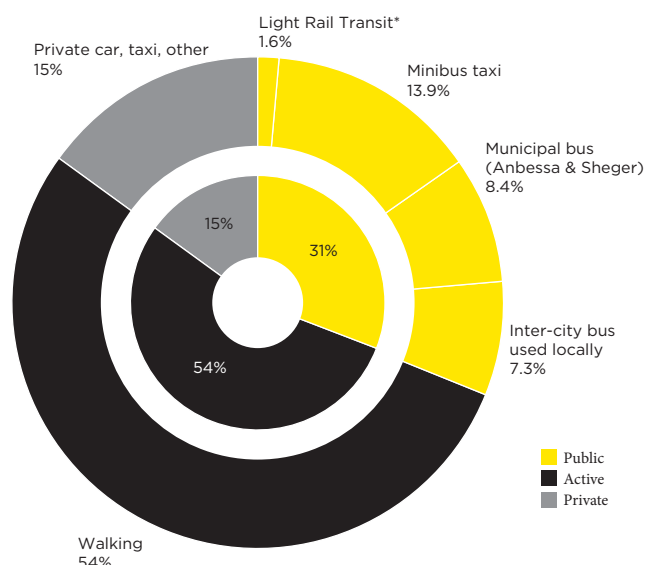


Figure 1: Urban Age engagement with Addis Ababa since 2017

These were then evaluated both by the Plan Commission and the Urban Age Executive Group in order to determine the main governance focus of an Addis Ababa Task Force.

Based on a scoring exercise of the urban governance core and wider issues* outlined in Table 2 (see Appendix 2, three priority issues were identified: data and information; integrated governance and coordination; and land governance.

This is a priority concern in Addis Ababa due to:

‘Prepare 4,301 ha of land to accommodate the 645,120 units in the inner part of Addis Ababa (brown land) with housing density of 150 units per ha; and another 4,586 ha of land on expansion areas to accommodate 554,880 units by applying a density standard of 121 units per ha.’

The key phases of the task force core will include:

Urban Age Task Force brief/Memorandum of Understanding (April–May 2019)

- final brief negotiation and development
- brief writing based on pre-assessment
- or programmes could this focus be aligned with?

1. New urban governance

The same time, digital technology is changing the way city governments operate and how they interact with citizens. Cities are increasingly using big data and real-time information to inform decision making.

1.1 The New Urban Governance focus of the Urban Age Task

The New Urban Governance focus of the Urban Age Task Forces is designed to support concrete change across different tiers of governments.

Conclusion: For any task force governance focus, issues of data and information will have to play a central role.

The overall programme is composed of four distinct strands of engagement (see Figure 3):

5. framing, which includes the pre-assessment;
6. the task force core;
7. task force support;
8. background research

1.1.1 Local research needs

Q5: ‘What type of additional local research on Addis Ababa would be particularly helpful for advancing compact and connected urban growth?’

1.1.1.1 Local research needs

Why?

The aim of the task force was to provide a valuable resource and accessible document to inform decision making in Yangon beyond technocratic processes.

Table 2: Urban governance issues

Core Issues	Wider Issues
<ul style="list-style-type: none"> – Data and information – Strategic planning – Scenario planning – Integrated governance and coordination – Policy interdependence – Budgets and finance – Skills and capacity – Transitions – Communication – Leadership 	<ul style="list-style-type: none"> – Corruption – Politicisation – Legal structures – Decision making – Addressing uncertainty – Participation – Trust – Formalisation – Land governance – Change management – Staffing – Implementation

*On behalf of the Addis Ababa Plan Commission, this included assessments by Dr Firehiwot Jebessa, Addis Ababa University (sociologist); Dr Belay File, Ethiopian Civil Service University (urban planner); Dr Moges Tadesse, Plan Commission (economist); Mr Dereje Yohannes, Addis Ababa University; Mr Dumesa Olkeba, Plan Commission (development economist); Mr Ephreme Bekele, Plan Commission (urban planner and architect); and Dr Philipp Rode, LSE Cities, on behalf of the Urban Age Programme.

How people move in Addis Ababa

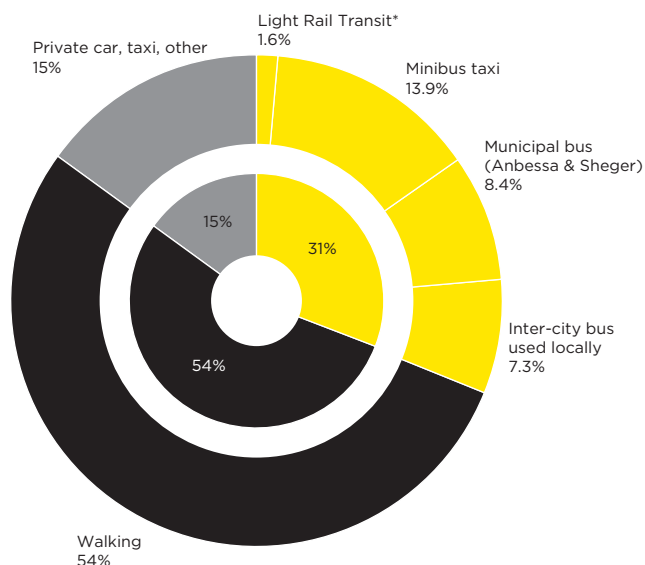


Figure 2: Urban Age engagement with Addis Ababa since 2017

These were then evaluated both by the Plan Commission and the Urban Age Executive Group in order to determine the main governance focus of an Addis Ababa Task Force.

Based on a scoring exercise of the urban governance core and wider issues* outlined in Table 2 (see Appendix 2, three priority issues were identified: data and information; integrated governance and coordination; and land governance.

This is a priority concern in Addis Ababa due to:

‘Prepare 4,301 ha of land to accommodate the 645,120 units in the inner part of Addis Ababa (brown land) with housing density of 150 units per ha; and another 4,586 ha of land on expansion areas to accommodate 554,880 units by applying a density standard of 121 units per ha.’

1.2 Sheger Express buses

The key phases of the task force core will include:

Urban Age Task Force brief/Memorandum of Understanding (April-May 2019)

- final brief negotiation and development
- brief writing based on pre-assessment
- or programmes could this focus be aligned with?

1.2.1 Sheger Express buses

2. New urban governance

The same time, digital technology is changing the way city governments operate and how they interact with citizens. Cities are increasingly using big data and real-time information to inform decision making.

4.2 IBA Thüringen: URBANRURAL (2012-2023)

3. What is an International Building Exhibition (IBA)? What can it achieve?

3.1 IBA - an innovation generator for sustainable urbanisation

3.2 The Historical Context along examples

3.2.1 Test line

3.2.1.1 Test line

Nectatem possim net re venim que prepe offic testo
evellati denime cum numquunt quunt moditius
ma invellaccus a sundic tem sit illut maxim rerit,
te cupianti dolorestem re volore sus erciendiosam
imollupta commimporem fugiatibus quia consequi
oditasp erruptaeriam nonsectur ame pliquo eturiam
offictibus et pre ra descienem quae.

Nectatem possim net re venim que prepe offic testo
evellati denime cum numquunt quunt moditius
ma invellaccus a sundic tem sit illut maxim rerit,
te cupianti dolorestem re volore sus erciendiosam
imollupta commimporem fugiatibus quia consequi
oditasp erruptaeriam nonsectur ame pliquo eturiam
offictibus et pre ra descienem quae.

The Historical Context along examples

Figure 3:

4. IBA Berlin: Inner City as Living Space (1979 - 1984/87)

4.1 IBA Emscher Park: The Future of an Industrial Region (1989-1999) IBA Hamburg: Leap across the Elbe (2006-2013)



View looking south west over Addis Ababa
from the hills above Megenagna
© Charlie Rosser

Appendix 1. Task force pilot programmes

Yangon, Myanmar

Undertaken as part of the Executive MSc in Cities in 2016/17, the task force focus was on strategic planning and infrastructure development in Yangon, Myanmar, working with the Yangon City Development Corporation (YCDC) on long-term scenario planning for this rapidly growing South East Asian metropolis. The task force worked to develop a research report that can be used by YCDC as they consider different spatial development pathways when transitioning from a city of 5.2 million to a megacity of more than 10 million inhabitants between now and 2050. It explored different scenarios of how this rapid population growth could be physically accommodated in the city, relating the Yangon context to international experiences with urban expansion driven by infrastructure development. Three spatial development scenarios (compact, polycentric and sprawl) were analysed for two economic growth trajectories (high and low GDP growth) while the same level of projected urban population growth is assumed. The aim of the task force was to provide a valuable resource and accessible document to inform decision making in Yangon beyond technocratic processes.

India Smart Cities

The India Smart Cities Mission pilot was a capacity building event held in Delhi in 2015, attended by state governments, mayors and municipal commissioners of the 98 cities included in the Smart Cities Mission. The two-day programme explored various aspects of smart city development, with a group of experts from the Urban Age network working with the city officials to facilitate discussion and potential actions in relation to issues such as how to set goals for cities, understanding area-based development and financing smart city projects, so that these could be taken forward and developed within their own cities/administrations.

Dutch Government

The National-Regional Programme for Amsterdam, Almere and Markermeer (RRAAM) was a development, environmental and transportation strategy for the North Wing of the Randstad, which will see the city of Almere double in size by 2030. LSE Cities convened a panel of experts from our Urban Age network to look at the existing plans and alternatives in order to assess the programme from a more qualitative and international perspective, working alongside the local administrative authorities as well as two central government ministries. The findings were then presented to the Ministry of Infrastructure and Environment. With the RRAAM International Review, LSE Cities informed and influenced the Dutch National Government and civic leaders in city and urban planning. The final report submitted, following the inputs from the international panel of experts, was critically instrumental in the decisions made by local and national policymakers.

References

- Centre for Affordable Housing Finance in Africa (2020). 2020 Yearbook: Housing Finance in Africa. Johannesburg, South Africa.
- City of Cape Town (2018). City of Cape Town Development Charges – An Implementation Guide to the Development Charges Policy for Engineering Services. 28 November 2018.
- City of Cape Town. (2014). Development Charges calculator Version 2.0. June 2014.
- City of Cape Town. (2014). Development Charges Policy for Engineering Services. 28 November 2014.
- Elias Yitbarek Alemayehu. (2020). Annex 2_The Addis Ababa Perimeter Block – Concept Design and 3D Renderings – DRAFT 07-02-20
- Elias Yitbarek Alemayehu. (2021). Livelihood and Housing Form: The Horizontal Above Vertical (H/V) Concept for Addis Ababa.
- Executive MSc in Cities (EMC) Lab, London School of Economics. (2019). Implementing Addis Ababa's Structure Plan – informing pilots for strategic interventions. Draft Report, 25 August 2019.
- World Bank (2019). Ethiopia Urban Land supply and Affordable Housing: Housing Deep Dive Report. Pgs 12-13. As reported in CAHF (2020).
- World Bank. (2019). Doing business 2019 – training for reform. Economy profile, Ethiopia.
- AAWSA (2012). Water production and distribution in Addis Ababa: Addis Ababa Water Supply and Sewerage Authority (Unpublished Report).
- AAWSA (2003). Concept Report on Basic Design Services for Addis Ababa Water and Sewerage Project Component II, Addis Ababa Water and Sewerage Authority, Addis Ababa
- AAWSA (2005). Addis Ababa Water Supply project –stage IIIA: compilation of Detail Design and Preparation of Tender Documents, Final Design Report, Addis Ababa Water and Sewerage Authority, Addis Ababa, Ethiopia (unpublished)
- AAWSA (2011). Addis Ababa Water and Sewerage Authority Business plan 2011-2020 Final Report, Addis Ababa Water and Sewerage Authority, Addis Ababa (unpublished)
- Addis Ababa City Administration (2015). Climate Resilient Green Growth Strategy and Integrated Climate Change Response Investment Plan Development for Addis Ababa, (unpublished technical report).
- Addis Ababa City Administration (2017). Revised Master Plan of Addis Ababa, Addis Ababa, Ethiopia (unpublished planning document).
- Alemayehu, T. (2001). The impact of uncontrolled waste disposal on surface water quality in Addis Ababa, Sinet: Ethiop. J. Sci., 24(1): 93-104
- In EGU General Assembly Conference Abstracts (Vol. 15, p. 3366). Available at: http://www.cluva.eu/CLUVA_publications/CLUVA-Posters/EGU2013/EGU2013_Poster_Capitano.pdf
- Cavan, G., Lindley, S., Jayeler, F., Yeshitela, K., Pauleit, S., Renner, F., Gill, S., Capitano, P., Alemu Nebebe, A., Woldegerima,
- T., Kibassa, D., & Shemdoe, R. (2014). Urban morphological determinants of temperature regulating ecosystem services in two African cities. *Ecological Indicators*, 42, 43–57. Available at: <http://www.sciencedirect.com/science/article/pii/S147016X14000338>
- Central Statistical Authority (CSA). (2012). Ethiopia Statistical Abstract 2011/12-Addis Ababa, Ethiopia. <http://www.csa.gov.et>
- Central Statistical Authority (CSA) (1995). The 1994 Population and Housing Census of Ethiopia. Addis Ababa, Ethiopia. <http://www.csa.gov.et> Central Statistical Authority (CSA).
- (2008). Ethiopia Statistical Abstract 2007. Addis Ababa, Ethiopia. <http://www.csa.gov.et>
- Conway, D., & Schipper, E.L.F. (2010). Adaptation to climate change in Africa: Challenges and Opportunities identified from Ethiopia. *Global Environmental Change*, 21(1), 227-237. <https://doi.org/10.1016/j.gloenvcha.2010.07.013>
- Conway, D., & Schipper, E.L.F. (2010). Adaptation to climate change in Africa: Challenges and Opportunities identified from Ethiopia. *Global Environmental Change*, 21(1), 227-237. Available at: <http://www.sciencedirect.com/science/article/pii/S0959378010000725>
- De Risi, R., Jalayer, F., De Paola, F., Iervolino, I., Giugni, M., Topa, M., Yonas, N., Nebebe, A., Woldegerima, T., Yeshitela, K., Kibassa, D., Shemdoe, R., Cavan, G., Lindley, S., Renner, F., & Printz, A. (2013). Delineation of flood-prone areas and the identification of residential hotspots for two African cities. In EGU General Assembly Conference Abstracts (Vol. 15) held 7-12 April, 2013, in Vienna, Austria, id EGU2013-2276. Available at: <http://adsabs.harvard.edu/abs/2013EGUGA..15.22760>
- Di Ruocco, A., Weets, G., Gasparini, P., Jørgensen, G., Lindley, S., Pauleit, S., Vahed, A., Schiano, P., Kabisch, S., Vedeld, T., Coly, A., Tonye, E., Touré, H., Kombe, W., Yeshitela, K., and the CLUVA Team (2013). The CLUVA project: Climate-change scenarios and their impact on urban areas in Africa. *Geophysical Research Abstracts*, Vol. 15, EGU2013-4381. <http://adsabs.harvard.edu/abs/2013EGUGA..15.4381D>
- Elala, D. (2011) Vulnerability assessment of surface water supply systems due to climate change and other impacts in Addis Ababa, Ethiopia, MSc Thesis, Upsala, Sweden www.w-program.nu/filer/exjobb/Daniel_Elala.pdf
- Feilberg, M. and Mark, O. (2016) Integrated Urban Water Management: Improve Efficient Water Management and Climate Change Resilience in Cities, Sustainable Water Management in Urban Environments, Volume 47
- (1-32). https://link.springer.com/chapter/10.1007/978-3-319-29337-0_1/fulltext.html
- Fetene A., & Worku, H. (2013). Planning for the conservation and sustainable use of urban forestry in Addis Ababa, Ethiopia. *Urban Forestry & Urban Greening*, 12(3), 367–379. Available at: <http://www.sciencedirect.com/science/article/pii/S1618866713000307>
- GeO (2000), Ethiopian Water Resources Management Proclamation, Proclamation No.197/2000. <https://chilot.mewp-content/uploads/2011/08/proc-no-197-2000-ethiopian-water-resources-management.pdf>
- Global Water Partnership (2010). IWRM Principles and Processes: From Advocacy to Action, Briefing Note. <http://www.gwp.org> Global Water Partnership (2013). Integrated Urban Water Management (IUWM): Toward Diversification and Sustainability, Policy brief. <http://www.eldis.org/document/A65609> Alemayehu, T. (2001). The impact of uncontrolled waste disposal on surface

Founding Partners

The Task Force is a partnership between the Addis Ababa City Government Plan & Development Commission (AAPDCo), LSE Cities at the London School of Economics and Political Science, the Alfred Herrhausen Gesellschaft, and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

Members

Dereje Fekadu (Co-Chair), Special Chief of Staff, Mayor's Office, Addis Ababa City Administration, Addis Ababa, Ethiopia

Philipp Rode (Co-Chair), Executive Director, LSE Cities/Urban Age, London, UK

Elias Yitbarek Alemayehu, Ethiopia Architect and Associate Professor, EiABC, Addis Ababa University, Addis Ababa

Elleni Ashebir, Cities and Urban Mobility Manager, Ross Centre for Sustainable Cities, WRI Africa, Addis Ababa, Ethiopia

Hailu Worku, Chair of Environmental Planning and Landscape Design and Deputy Scientific Director of EiABC, Addis Ababa University, Addis Ababa, Ethiopia

Henk Ovik, Special Envoy for International Water Affairs, Kingdom of the Netherlands, and Sherpa to the High Level Panel on Water, United Nations, The Hague, Netherlands

Jagan Shah, Senior Infrastructure Adviser, Department for International Development (DFID), British High Commission, New Delhi, India

Jennifer Semakula Musisi, City Leader in Residence, Bloomberg Harvard City Leadership Initiative, Harvard Kennedy School, Kampala, Uganda & Cambridge, USA

Kecia Rust, Executive Director and Founder, Centre for Affordable Housing Finance in Africa, Johannesburg, South Africa

Clarisse Linke, Country Director, Brazil, Institute for Transportation & Development Policy (ITDP), Rio de Janeiro, Brazil

Michael von der Muehlen, Former State Secretary and Participant of International Building Exhibition (IBA) "Emscher Park", Dortmund, Germany

Ricky Burdett, Director, LSE Cities/Urban Age, London, UK

Semere Jelalu Shafi, Deputy General Director, Addis Ababa City Traffic Management Agency, Addis Ababa City Government, Addis Ababa, Ethiopia

Timnit Eshetu, CEO, Construction Enterprise, Addis Ababa City Administration, Addis Ababa, Ethiopia

Zelege Teferi, Department Head, Catchment Management & Water Quality Control, Addis Ababa Water & Sewerage Authority, Addis Ababa, Ethiopia

Brett Herron, Former Member of the Mayoral Committee: Transport & Urban Development, Cape Town, South Africa

Cecilia Vaca Jones, Programme Director, Bernard Van Leer Foundation, The Hague, Netherlands & Quito, Ecuador

Marc Steinlin, Managing Partner, IngeniousPeoplesKnowledge Consultants, Cape Town, South Africa

Olusola Ikuforiji, Environmental Specialist, African Development Bank, Abidjan, Côte d'Ivoire

Anka Derichs, Senior Strategic Urban Development Advisor, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Eschborn, Germany

Elisabeth Mansfeld, Cities Project Area, Alfred Herrhausen Gesellschaft, Berlin, Germany

Publication Credits

Elaine Beebe, Copy Editor

Emily Cruz, Outreach Manager, LSE Cities

Lizzy Garlan, Communications Assistant, LSE Cities

Yasmin Lennon-Chong, Graphic Design

Atelier Works, Creative Agency

The Urban Task Force would like to thank the following organisations for assistance in obtaining data: [information here](#)

URBAN AGE

This report is one in the following series:

- *The Addis Ababa City Block*
- *Finding Housing Affordability*
- *Sustainable Building Materials*
- *Digital Van Service Demand*
- *Digital Van Service for Addis Ababa*
- *Green and Blue Infrastructure in Addis Ababa*
- *The Social Function of Green and Blue Infrastructure*
- *Participatory City Making*
- *Urban Governance and Strategic Planning*
- *Urban Knowledge Management*
- *International Building Exhibitions (IBA)*

Urban Age

The Urban Age Programme, jointly organised with and supported by the Alfred Herrhausen Gesellschaft is an international investigation of the spatial and social dynamics of cities. The programme consists of conferences, research initiatives, task forces and publications. Since 2005, 17 conferences have been held in rapidly urbanising regions in Africa and Asia, as well as in mature urban regions in the Americas and Europe.

urbanage.LSECities.net
[@UrbanAge](https://twitter.com/UrbanAge)

Addis Ababa Plan Commission

Addis Ababa City Plan and Development Commission is committed and fully dedicated to preparing research-based city-wide short, medium and long term strategic development plans (both socio-economic and spatial) in order to transform the city to one among the middle-income cities in the world; create a liveable city for the citizen; and make Addis Ababa the best destination for investment in Africa. The commission is accountable to promote urban economy and jobs; deliver urban renewal and housing for citizens; improve urban environment and quality of life; and support policy decisions that will register accelerated, sustainable and equitable economic growth and a climate resilient green economy.

The Alfred Herrhausen Gesellschaft

The Alfred Herrhausen Gesellschaft promotes a free and open society and its cohesion. Democracy, the social market economy and sustainability are the foundations of such a society. Our work is based on the values of Alfred Herrhausen: on freedom and responsibility, on competition and compassion. Alfred Herrhausen thought and acted with the aim of crossing and overcoming boundaries. In his memory, the Alfred Herrhausen Gesellschaft creates platforms for discussions to enrich relevant discourses during selected events, and in publications and other media.

alfred-herrhausen-gesellschaft.de
[@AHG_Berlin](https://twitter.com/AHG_Berlin)

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

As a service provider in the field of international cooperation, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) is dedicated to shaping a future worth living around the world. GIZ has over 50 years of experience in a wide variety of areas, including economic development and employment promotion, energy and the environment, and peace and security. We work with businesses, civil society actors and research institutions, fostering successful interaction between development policy and other policy fields and areas of activity. Our main commissioning party is the German Federal Ministry for Economic Cooperation and Development (BMZ).

GIZ.de
[@giz_gmbh](https://twitter.com/giz_gmbh)

LSE Cities

LSE Cities is an international centre at the London School of Economics and Political Science that carries out research, conferences, graduate and executive education and outreach activities in London and abroad. It studies how people and cities interact in a rapidly urbanising world, focusing on how the physical form and design of cities impacts on society, culture and the environment. Extending LSE's century-old commitment to the understanding of urban society, LSE Cities investigates how complex urban systems are responding to the pressures of growth, change and globalisation with new infrastructures of design and governance that both complement and threaten social and environmental equity.

LSE.ac.uk/cities
[@LSECities](https://twitter.com/LSECities)