

Urban Expansion Planning for Inclusive and Green Growth in Ethiopia

Ethiopian Civil Service University,

College of Urban Development and Engineering

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Executive Summary

The Ethiopian Civil Service University (ECSU), under the leadership of Dr. Nigus Tadesse, is proud to spearhead a transformative initiative to guide sustainable urban development through Urban Expansion Planning (UEP) in Ethiopia and the wider East African region. Urbanization, while inevitable and dynamic, presents both significant challenges and unprecedented opportunities. Through intelligent and inclusive planning, ECSU has responded with a forward-looking Urban Expansion Planning Project designed to support rapidly urbanizing secondary cities.

This initiative, made possible through the technical guidance of Prof. Shlomo Angel (New York University) and funding from UN-OPS and Cities Alliance, targets sustainable urban growth in four pilot cities: Dire Dawa, Jigjiga, Ethiopian Wujale, and Somaliland Wujale. The project's core objective is to shape urban expansion over a 30-year horizon through systematic allocation of land, arterial road networks, protection of environmentally sensitive areas, and promotion of inclusive and resilient communities.

With an emphasis on legal and institutional frameworks, ECSU has drafted a policy brief to integrate urban expansion planning into Ethiopia's national Urban Planning Proclamation. This legal foundation is essential for ensuring that urban growth remains guided, accountable, and environmentally sustainable.

To strengthen human capacity for nationwide implementation, ECSU conducted a five-day Training of Trainers program, certifying 34 professionals in collaboration with a third-party certifier. With support from AUL (African Urban Lab – Zanzibar), this effort ensures a growing pool of competent practitioners ready to implement UEP in cities across the country.

The University has incorporated urban expansion planning into its curriculum and continues to provide training, research, and consultancy services to public institutions. Drawing from its decades-long legacy in urban planning, ECSU is now scaling this experience to additional cities across Ethiopia and the continent, fulfilling its role as a center of excellence in urban development.

Ultimately, ECSU's Urban Expansion Planning Project is setting the foundation for inclusive, climate-resilient, and legally supported urban growth – empowering cities to plan for tomorrow while improving the quality of life today.

Message from the President of the Ethiopian Civil Service University

Dear people of the world, Africa, cities and towns of our country – Ethiopia, I believe that



urbanization today presents more opportunities than ever, along with strategies to address its challenges. As a defining force of our time, urbanization must not be hindered but guided through intelligent planning. Urban expansion planning is central to this approach, enabling cities to grow systematically and sustainably. I express my sincere

appreciation to Professor Shlomo Angel of New York University for his pioneering work on urban expansion planning in rapidly growing secondary cities, and to UN-OPS/City Alliance for funding this vital project in Ethiopia. The second phase of our collaboration (2023–2026) with City Alliance focuses on embedding urban expansion planning into national policy frameworks for the next 30 years. The aim is to manage urban growth inclusively and sustainably, ensuring environmental, economic, and social well-being. The project also focuses on developing local service providers to meet the increasing demand for trained urban planners. I am proud to announce that Ethiopian Civil Service University has been selected to lead this initiative in Ethiopia and East Africa, particularly in cities like Dire Dawa, Jigjiga, Ethiopian Wujale, and Somaliland Wujale. In collaboration with City Alliance and the Ministry of Urban and Infrastructure, ECSU continues to play a leading role in urban planning for over five decades through research, training, and consultancy. The project is nearing completion. Partner cities have begun implementing their plans, resulting in sustainable growth, protection of natural areas, organized arterial road development, reduced informal settlements, and better land use. Drawing on our institutional expertise, we aim to scale this experience to other cities across Ethiopia and Africa. Urban planning will remain a pillar of excellence at our university. We are committed to advancing sustainable development in cities through knowledge and practical support. The Ethiopian Civil Service University is always ready to serve. My team and I remain dedicated to offering comprehensive assistance in urban expansion and development planning. Thank you!

Honorable Dr. Nigus Tadesse President of the Ethiopian Civil Service University

1. Introduction

The Ethiopian Civil Service University is extremely grateful for the innovative idea of urban expansion planning, credited to Professor Shalom Angel, USA, University of New York and his team, particularly Patrick Lamson, for spearheading its realization in rapidly urbanizing secondary cities in Africa, including Ethiopia. The University of New York, USA, played a key role in this initiative by recognizing the importance of managing urbanization, urban growth, and urban expansion. The Ethiopian Civil Service University is also thankful to UN-OPS/City Alliance for funding the project for the urban expansion plan in rapidly urbanizing secondary cities in Ethiopia, in collaboration with the Ethiopian Civil Service University.

Therefore, the Ethiopian Civil Service University is extremely grateful for their contributions to sustainable urbanization. Highlighting the benefits of this concept, the Ethiopian Civil Service University has incorporated urban expansion planning into the urban development-related curriculums as a common course. This will help promote sustainable urbanization by providing training and consultancy services to the public service sector, ensuring orderly development.

As a leading institution in urban excellence, the Ethiopian Civil Service University is actively involved in the Urban Expansion Planning project in four secondary cities in Ethiopia and Somaliland. This project is being carried out through a contract agreement between the Ethiopian Civil Service University and City Alliance/UN-OPS. Urban Expansion Planning is a cost-effective and simple way for cities to alter the course of their rapid growth in an inclusive and environmentally sustainable manner. Cities project their future growth over the next 30 years, designate land for development, establish arterial road grids, and outline networks of environmentally sensitive areas that need protection in cities.

This project focuses on *regulatory changes* to embed Urban Expansion Planning in national policies, as well as creating local service providers to respond to a steady demand from cities for the services of trained practitioners. Therefore, the university has implemented activities such as assisting the preparation of urban expansion plans for four secondary cities namely *Dire-Dawa, Jigjiga, Ethiopian Wujale, and Somali Land Wujale*, providing policy brief to persuade policy makers to draft legal framework for urban expansion planning and conducting training of trainers to contribute the availability of trained practitioners.

1.1. Objectives of Urban Expansion Planning

The main objectives of an urban expansion plan are to manage and shape future urban growth in a way that is inclusive and sustainable, ensuring the long-term well-being of residents and the environment. This involves a holistic approach that considers economic, social, and environmental aspects, aiming to improve quality of life and reduce negative impacts of rapid growth in partner Cities. Here's a more detailed breakdown:

1) Managing Urban Growth:

- Estimating Future Growth: urban expansion plans often involve projecting future population and housing needs.
- *Identifying Land for Growth:* this includes designating areas for new residential, commercial, and industrial developments.
- *Creating Arterial Roads:* establishing a network of major roads (one kilometer by one kilometer) to facilitate transportation and access within the new expansion area
- *Protecting Sensitive Areas:* identifying and protecting environmentally sensitive areas like forests, wetlands, and floodplains.

2) Improving Quality of Life:

- Affordable Housing: ensuring that new residential areas include affordable housing options for various income levels
- Accessible Amenities: planning for access to essential services like schools, hospitals, and public transportation.
- *Green Spaces: in*corporating parks, greenbelts, and other green spaces to improve air quality, enhance aesthetics, and provide recreational opportunities.
- Climate Smart Design: designing for climate resilience, including incorporating measures to mitigate flood risks and manage water resources.

3) Promoting Sustainable Development:

- *Infrastructure Planning: d*eveloping a comprehensive infrastructure plan that includes utilities, transportation, and waste management systems.
- Environmental Protection: protecting natural resources, reducing pollution, and promoting sustainable land use practices
- *Economic Growth:* creating opportunities for job creation, entrepreneurship, and business development

- 4) Other Important Considerations:
 - *Urban Revitalization and corridor development*: planning for the revitalization of existing urban areas to improve their quality and attractiveness and of course appealing corridor development
 - *Improved Governance:* ensuring that planning and development processes are transparent, accountable, and inclusive.
 - *Monitoring and Evaluation: establishing* mechanisms to monitor the implementation of the urban expansion plan and evaluate its effectiveness.

Therefore, urban expansion planning aims, in essence, to create a well-designed, sustainable, and equitable urban environment that can support future growth and improve the lives of its residents while minimizing negative impacts on the environment.

1.2. Key elements of an Urban Expansion Planning

A successful Urban Expansion Plan in all partner cities requires a holistic approach, integrating various elements to ensure sustainable and inclusive development. Key aspects include population projections, infrastructure planning, land use zoning, economic development strategies, environmental protection measures, and community engagement and also mainly includes;

- 1) *Delineating Expanding City Boundaries:* identifying and protecting land for future growth, ensuring adequate space for residential, commercial, and industrial development.
- 2) Arterial Road Network: designing and protecting a network of roads (1 kilometer by 1 kilometer) that facilitate access to different parts of the city and peripheral areas.
- 3) *Protecting Sensitive Areas: i*dentifying and safeguarding environmentally sensitive areas, such as green spaces, wetlands, and natural habitats.
- 4) *Inclusive Planning:* considering the specific needs of different groups, including women and youth, to ensure equitable access to services, transportation, and public spaces.
- 5) Sustainable Development: promoting efficient and sustainable mobility, reducing greenhouse gas emissions, and ensuring access to water, sanitation, and other essential services.

2. Pilot Urban Expansion Planning Projects on Four Secondary Cities

An Urban Expansion Plan outlines how a city can accommodate growth in a sustainable, inclusive, and environmentally sound way. It focuses on creating space for development, protecting sensitive areas, and ensuring access to basic services for all residents, according to Cities Alliance. This plan aims to prevent the chaotic expansion of informal settlements and improve the quality of life for all residents. Ethiopian Civil Service University is successfully fulfilling the obligations outlined in our contract with Cities Alliance, adhering to the timeline established in the Urban Expansion Plan of partner cities which include *Dire-Dawa*, *Jigjiga*, *Ethiopian Wojale*, *and Somali Land Wajale* for inclusive and green growth and development in Ethiopia. Our university experts have provided the necessary guidance in preparing the urban expansion plan for the four partner cities of the project, enabling them to independently prepare an urban expansion plan.

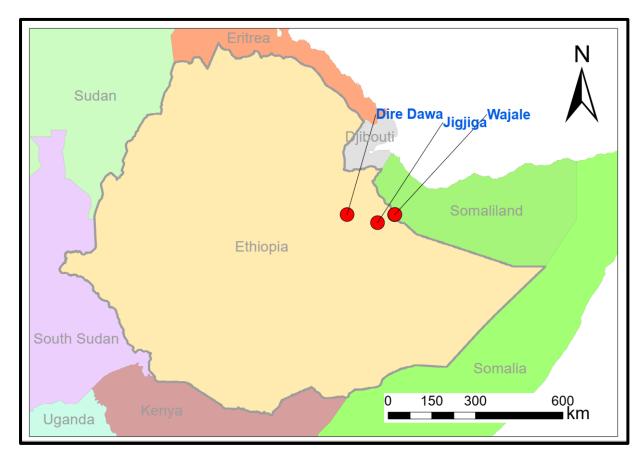


Figure 1: Location of Urban expansion plan project cities.

Source: Compiled by the Project Team, 2025

The university has achieved significant outcomes in accomplishing the objectives set by the project. The project will be scaling up to other cities within our nation and East Africa, promoting sustainable development in urban expansion plans and facilitating organized urban

growth. This guarantees the sustainable growth of our cities, systematic urban advancement, and sustainable environmental conservation, expanding road network including arterial roads (1km by 1km) wide network of arterial roads, decrease in the construction of informal housing, and optimization of limited land resources.

The project aims to ensure that our university continues to grow and develop cities in an orderly manner while maintaining current achievements in Dire Dawa, Jigjiga, and Wajale (Ethiopia), as well as in Somaliland. The university is enhancing its role in capacity building through research, mentoring, and training in urban planning and development excellence. Therefore, the Ministry of Urban Development and Infrastructure, the cities of Dire Dawa, Jigjiga, and Ethiopian Wajale, the Somaliland Wajale and the Ethiopian Civil Service University are working together to consolidate this interest.

2.1. Dire Dawa City Urban Expansion Plan

The Dire Dawa Administration is the municipal government of Dire Dawa city and its surrounding an autonomous city in Eastern Ethiopia. It is typically administered by a mayor, with the lowest administrative unit being the Woreda. The Woreda administrator is the highest representative of the executive power, supported by an elected council. The administration was established under the current federal structure with Proclamation No. 416/2004 in 2004.

The Urban Expansion Plan (UEP) for Dire Dawa City, covering the period from 2025 to 2055, is a comprehensive and forward-looking initiative designed to guide the city's physical, economic, and social transformation. With the current population of Dire Dawa estimated at 905,068 (2025) and projected to rise to 2,256,002 by 2055, this plan aims to address the pressures of urbanization while promoting sustainable development.



Plate 1: Photographs from Discussions and Consultations Conducted during the Preparation of the Dire Dawa city Urban Expansion Plan

Dire Dawa is undergoing significant demographic and spatial changes. As of 2025, the urban built up area of the city is 9,015 hectares and the 10th year structure plan of the city covers 16,756 hectares. Whereas, the total area of the region is about 155,860 hectares.

These figures underscore the need for an expanded and well-managed urban area to accommodate future growth. Without a proactive strategy, the city risks uncoordinated sprawl, inadequate infrastructure, and environmental degradation.

The Urban Expansion Plan sets aside 55,000 hectares of land for planned urban growth – more than six times the current built-up area. This area is strategically structured to support:

- Residential and mixed-use development
- Industrial and economic zones
- Social infrastructure (education, health, recreation)
- Green and ecological buffers
- Roads and transport networks

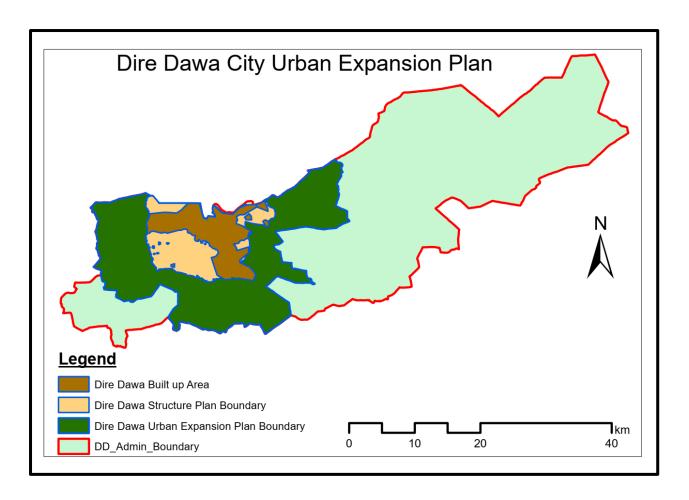


Figure 2: Draft Map of Dire Dawa Urban Expansion Plan.

2.2. Jigjiga City Urban Expansion Plan

Jigjiga is the capital city of the Somali Regional State in Ethiopia, located 600 km away from Addis Ababa, the capital of the country. It became the capital of the Somali Region in 1995. The city has an elevation of 1,634 meters above sea level. The city is rapidly urbanizing secondary city that can be highly benefited from an urban expansion plan project.

The Urban Expansion Plan (UEP) for Jigjiga City, covering the period from 2024 to 2054, is a transformative and strategic urban development initiative aimed at managing the city's rapid growth and ensuring sustainable development over the coming three decades. With a current population of 549,586 (2024) and a projected population of 2,368,780 by 2054, the plan seeks to create a well-organized urban framework capable of accommodating future demand for land, housing, infrastructure, and services.



Plate 2: Photographs from Discussions and Consultations Conducted during the Preparation of the Jigjiga city Urban Expansion Plan

Jigjiga is experiencing significant demographic and spatial changes, calling for a forward-thinking planning approach. As of 2024, the built up area of the city covers 10,868 hectares while the structure plan of the city covers 45,114 hectares of land.

To respond to future demands, the Urban Expansion Plan allocates 74,000 hectares of land for systematic and planned urban growth. The expansion area is strategically structured to ensure comprehensive development that includes:

- Residential, commercial, and mixed-use zones
- Industrial and employment-generating areas
- Social services including health, education, and recreational facilities
- Transport and mobility infrastructure
- Green corridors and environmental buffers

For effective planning and implementation, the expansion area is divided into macro blocks, each serving as a self-contained planning unit with integrated infrastructure and services.

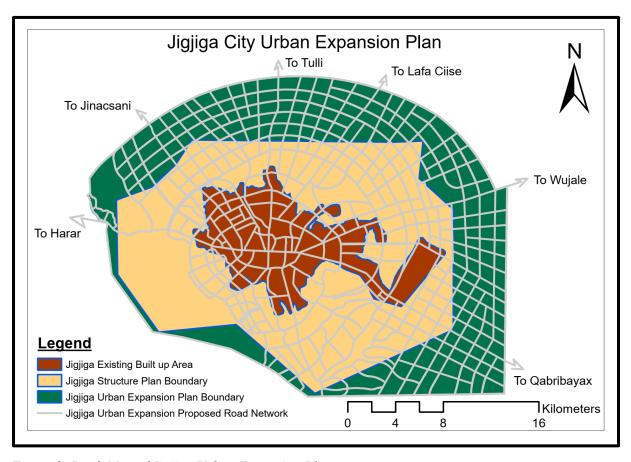


Figure 3: Draft Map of Jigjiga Urban Expansion Plan.

Source: Compiled by the Project Team, 2025

2.3. Ethiopian Wujale City Urban Expansion Plan

Ethiopian Tog Wuchale (also known as Wujale) is a city located in Eastern Ethiopia on the border of Ethiopia and Somaliland. Ethiopian Wujale is the main border crossing for goods coming in and out of Ethiopia, primarily from the port city of Berbera, Somaliland's main port. It is one of the busiest border towns in Ethiopia. It is one of the rapidly urbanizing secondary urban centers in the Somali Regional state, rapidly urbanizing and benefiting from an urban expansion plan project.





Plate 3: Photographs from Discussions and Consultations Conducted during the Preparation of the Ethiopian Wujale city Urban Expansion Plan

The Urban Expansion Plan (UEP) for -Ethiopian Wujale City, covering the period from 2024 to 2054, is a forward-looking strategic initiative aimed at guiding the city's physical growth and development in a sustainable and inclusive manner. With a current population of 82,064 (2024) expected to increase more than six fold to 554,700 by 2054, the plan seeks to proactively address urban infrastructure needs, housing demand, and economic development to transform Ethiopian Wujale into a vibrant, resilient cross-border trade hub.

Ethiopia Wujale, situated at a key border location, is witnessing increasing socio-economic activity and urban pressure. As of 2024, the built up area covers 636 hectares and the 10th year structure plan of the city covers 2,510 hectares of land. The existing urban footprint is insufficient to accommodate the anticipated demographic and economic growth. An expanded and well-structured plan is essential to manage this transformation in a sustainable and organized manner.

To meet future demands, the Urban Expansion Plan proposes to allocate 4,910 hectares of land for systematic and guided urban growth. This expansion area is carefully planned to support a wide range of urban functions, including:

- Residential neighborhoods and affordable housing
- Economic and trade zones, especially to leverage its border location
- Public facilities including education, healthcare, and administration
- Roads, transport corridors, and logistics hubs
- Public parks and green buffers

The expansion area is divided into macro blocks, each designed as a self-contained and integrated planning unit to support efficient implementation, infrastructure provision, and community development.

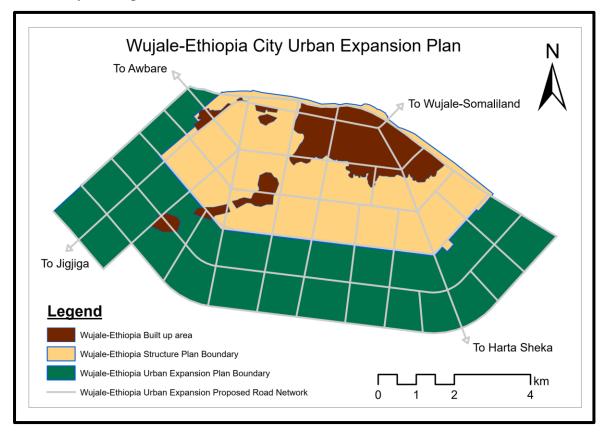


Figure 3: Draft Map of Wujale-Ethiopia Urban Expansion Plan.

Source: Compiled by the Project Team, 2025

2.3. Somaliland Wujale City Urban Expansion Plan

The Somaliland Wujale is a growing border city located in the western part of Somaliland, along the frontier with Ethiopia. It serves as a vital commercial hub, linking Somaliland to Ethiopia through cross-border trade and transportation. Due to its strategic location, the Somaliland Wujale has become one of the busiest inland ports in the region, facilitating the movement of goods between Berbera Port and inland markets in Ethiopia. The city is characterized by vibrant markets, increasing urbanization, and a culturally diverse population.

As a rapidly expanding urban center, it plays a key role in the economic integration of the Horn of Africa.



Plate 4: Photographs from Discussions and Consultations Conducted during the Preparation of the Somaliland Wujale city Urban Expansion Plan

Source: Compiled by the Project Team, 2025

The Urban Expansion Plan (UEP) for Somaliland Wujale City, spanning from 2025 to 2055, is a strategic and visionary framework designed to guide the city's urban development in a sustainable, inclusive, and forward-looking manner. With a current population of 76,417 (2025) projected to grow to 255,801 by 2055, the plan seeks to address the growing demand for land, housing, infrastructure, and services through a well-structured expansion model. Positioned as an emerging boarder hub connecting to Ethiopia. Somaliland Wujale is set to play a vital role in cross-border trade, mobility, and socio-economic development.

As of 2025, Somaliland Wujale the built up area covers 598 hectares. The city's physical growth has remained relatively modest. However, given the expected threefold increase in population, a substantial and well-managed expansion of the urban fabric is essential to meet the long-term spatial and infrastructural needs.

To respond effectively to urban growth pressures, the Urban Expansion Plan allocates 2,880 hectares for planned and phased development. This new urban territory is organized into 24

macro blocks, each representing a comprehensive planning unit that integrates residential, economic, and public service functions. The expansion plan emphasizes:

- Affordable and inclusive housing
- Economic activity zones to foster trade and employment
- Social service infrastructure such as schools, clinics, and community centers
- Transport networks and mobility corridors
- Public spaces and green areas for recreation and ecological balance

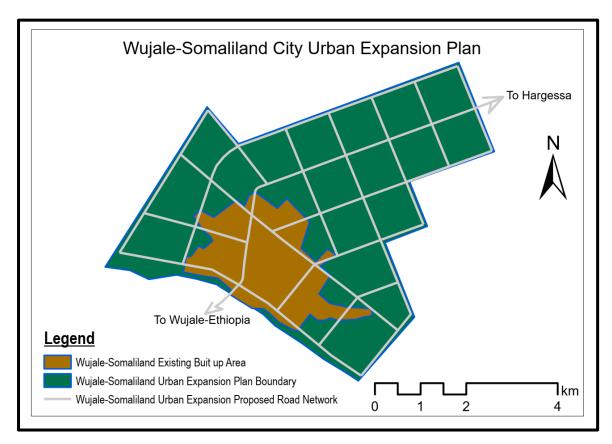


Figure 5: Draft Map of Wujale-Somaliland Urban Expansion Plan

Source: Compiled by the Project Team, 2025

3. Policy Brief to Secure a Legal Framework for Urban Expansion Planning

In our ongoing effort to promote sustainable and legally supported urban development, we have been actively engaged in the process of rationalizing the urban expansion plan. Recognizing that the success and legitimacy of urban expansion efforts depend heavily on the existence of a solid legal foundation, we took the initiative to work toward establishing the necessary legal framework.

To this end, we conducted a comprehensive review of the existing urban expansion documentation. Our objective was to ensure that the plan aligns with national planning principles, legal standards, and long-term development goals. The review process involved analyzing gaps in the current legal instruments and identifying the critical provisions needed to support orderly and effective urban expansion.

Following the review, we conducted a national workshop to validate the document. Then, by incorporating the feedbacks from the national workshop we prepared a detailed and well-structured document that outlines the justification, principles, and legal considerations for urban expansion. This document not only highlights the necessity of incorporating urban expansion plan into the legal framework but also proposes specific revisions and additions to the current laws.



Plate 5: Photographs from conducting national workshop to validate the draft policy brief of Legal framework for urban expansion plan

Source: Compiled by the Project Team, 2025

The final version of the document was submitted to the Ministry of Urban and Infrastructure (MUI) with the recommendation that it be incorporated into the ongoing revision of the Urban Planning Proclamation. By doing so, we aim to ensure that urban expansion initiatives are formally recognized, legally guided, and institutionally supported, thus fostering transparent, inclusive, and accountable urban growth in the years to come.

4. Building National Capacity for Urban Expansion Planning

To effectively scale up urban expansion planning across the nation, the availability of well-trained professionals is essential. Urban expansion is a complex and multidisciplinary process that requires skilled personnel who understand planning principles, legal frameworks, land management, and community engagement. Recognizing this need, we took the initiative to build national capacity through targeted training.

As a key step, we organized Training of Trainers (ToT) program aimed at equipping selected participants with the knowledge and tools necessary to lead urban expansion planning efforts in their respective regions. A number of professionals from various sectors participated in the intensive training. The curriculum focused on practical skills, legal and policy frameworks, and technical methodologies required for successful urban expansion planning and implementation.



Plate 6: Photographs from Conducting Training of Trainers (ToT) for professionals

Source: Compiled by the Project Team, 2025

To ensure the quality and credibility of the training, we collaborated with a third-party certification body that evaluated the participants and certified them upon successful completion. This external certification added value to the program by ensuring that the standards of instruction and competence were met objectively.

We would like to extend our sincere appreciation to AUL (African Urban Lab - Zanzibar) for their support in making this training a success. Their contribution played a critical role in enhancing the professional capabilities of the trainees and in laying a strong foundation for the nationwide rollout of urban expansion planning.

This initiative marks a significant step forward in strengthening institutional and human resource capacity to guide Ethiopia's future urban growth in a planned, sustainable, and inclusive manner.

5. Conclusion

In a visionary address, Dr. Nigus Tadesse, President of the Ethiopian Civil Service University (ECSU), underscores the urgent need for proactive, inclusive, and sustainable urban expansion planning to manage Ethiopia's rapidly growing secondary cities. He appreciates Professor Shlomo Angel of New York University and UN-OPS and Cities Alliance for their contributions to introducing and supporting urban expansion planning (UEP) in Ethiopia. Under a 2023–2026 agreement, ECSU is leading the implementation of UEP in four cities – Dire Dawa, Jigjiga, Ethiopian Wujale, and Somaliland Wujale – by designing city-scale expansion strategies that address housing, infrastructure, green spaces, environmental protection, and economic zones.

All the rapidly urbanizing secondary cities selected for the urban expansion plan are in good status and progressing well. The ECSU Urban Expansion Plan project team has created platforms for project Cities to prepare their own urban expansion plans using their own resources. Our University has established a knowledge hub for the success and achievements of the project on the main campus.

The university has successfully helped partner cities project 30 years of growth, designate future development zones, and incorporate 1km by 1km arterial road grids to support orderly expansion. ECSU has also promoted legal integration of UEP into national urban planning policies and developed local professional capacity through a certified Training of Trainers program. These efforts ensure that cities grow systematically while preventing informal settlements, maximizing land use, and safeguarding the environment. Through this project, ECSU reaffirms its leadership in urban development and its commitment to scaling UEP practices across Ethiopia and Africa, ensuring resilient and equitable urban futures.