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SOUTH SUDAN MULTI-DONOR TRANSITION TRUST FUND

SOUTH SUDAN URBANIZATION REVIEW

Cities as Anchors of Recovery and Resilience

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Cover Photo:
View of a neighborhood in Thongpiny, Juba

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Forewords

It is with great pleasure and a strong sense of responsibility that I present the South Sudan Urbanization Review. This important report comes at a critical moment in the development of our nation, as South Sudan continues to experience rapid urban growth in a context marked by fragility, displacement, climate vulnerability, weak infrastructure, and institutional constraints.

The Review provides a timely, evidence-based assessment of the country's urban development challenges and opportunities, and offers a practical pathway for strengthening our cities and towns as engines of recovery, resilience, and inclusive growth.

Over the past 18 months, the World Bank South Sudan Office, in close collaboration with the Ministry of Lands, Housing and Urban Development and other national counterparts, has undertaken extensive analytical work and consultations to produce this review. The process has been highly consultative, technically rigorous, and grounded in the realities of South Sudan. I wish to commend the dedication of the World Bank team, whose professional expertise and sustained engagement have contributed greatly to the quality and relevance of this report.

The importance of this Review lies in its clear recognition that urbanization in South Sudan is not a distant prospect, but a present and accelerating reality. Our cities are absorbing population growth driven by conflict, displacement, climate shocks, and demographic pressures. At the same time, they are operating under severe constraints, including inadequate infrastructure, limited services, weak land administration, fragmented governance, and insufficient municipal finance. These challenges require urgent and coordinated action if our urban areas are to serve their intended role as centers of stability, opportunity, and service delivery.

This report is particularly valuable because it goes beyond diagnosis to propose a sequenced and realistic framework for action. It identifies immediate priorities for stabilization, medium-term measures for consolidation, and longer-term reforms for transformation. In doing so, it provides the government and development partners with a practical basis for aligning investments, policies, and institutional reforms around a shared vision for urban development in South Sudan.

I am equally pleased to note that the Review reflects strong collaboration between the Government of South Sudan and the World Bank, particularly through the Inter-Governmental Technical Committee on Urban Development. This collaborative approach has ensured that the findings and recommendations are not only technically sound, but also relevant to the policy priorities of the government.

On behalf of the Government, I warmly endorse this report and commend it to policymakers, development partners, local authorities, and all stakeholders committed to the future of South Sudan.

The recommendations contained herein deserve serious consideration and concerted implementation. They provide a credible foundation for strengthening institutions, improving service delivery, addressing land and planning challenges, enhancing resilience to climate risks, and creating the conditions for cities to contribute more effectively to peace, prosperity, and national unity.

I therefore encourage all relevant institutions and partners to use this Review as a guiding instrument for policy formulation, investment planning, and coordinated action. By implementing the recommendations in this report, our cities become anchors of recovery and resilience.

Hon. Michael Chiangjiek Geay
Minister, Ministry of Lands, Housing and Urban Development
Juba, Republic of South Sudan

South Sudan's cities and towns are at the center of the country's future. Across the nation, urban areas are growing rapidly as people seek safety, livelihoods, markets, and access to basic services. This transformation presents significant challenges, but also an important opportunity: if managed well, urbanization can become a powerful driver of recovery, resilience, and inclusive development.

The *South Sudan Urbanization Review: Cities as Anchors of Recovery and Resilience* comes at a critical moment. It provides the first comprehensive assessment of urbanization trends, conditions, and opportunities in South Sudan and offers practical recommendations for strengthening the role of cities in the country's wider development agenda. The Review highlights the urgent need to improve urban planning, strengthen institutions, expand basic infrastructure and services, and better manage land and natural resources in a context of fragility, climate vulnerability, and rapid demographic change.

The pressures on South Sudan's urban areas are already visible. Cities are absorbing large numbers of displaced people while facing increasing risks from flooding, food insecurity, and climate shocks. At the same time, many local authorities continue to operate with limited institutional capacity, inadequate financing, and severe infrastructure deficits. Without timely action, these pressures risk deepening inequalities and undermining social and economic resilience.

Yet the Review also demonstrates that South Sudan's cities can become important platforms for stability and economic opportunity. Better managed urbanization can improve access to services, strengthen local economies, support job creation, and enhance resilience to future shocks. Achieving this will require sustained commitment, stronger coordination, and more effective use of available public resources. In a context of significant fiscal constraints, it is particularly important that scarce resources are directed toward investments that deliver tangible benefits for citizens, strengthen local institutions, and lay the foundations for long-term urban development.

The World Bank Group welcomes the strong leadership demonstrated by the Government of South Sudan throughout the preparation of this Review. We particularly commend the collaboration fostered through the Intergovernmental Technical Committee on Urban Development, which brought together national and local institutions around a shared urban agenda. This partnership reflects a growing recognition that urban development is not only a sectoral issue, but a central component of South Sudan's broader recovery and state-building efforts.

I would also like to express my sincere appreciation to the technical teams from the Ministry of Lands, Housing and Urban Development, partner ministries, state and local authorities, academia, civil society, and development partners who contributed their expertise and perspectives during the preparation of this report. Special thanks to the World Bank task team for their dedication, technical rigor, and sustained engagement over the course of this important work.

It is our hope that this Review will serve as a practical platform for dialogue, policy reform, and coordinated investment, including above all utilization of South Sudan's own considerable public revenues, under the leadership of the government. The World Bank Group remains committed to supporting these efforts to strengthen cities and towns as places of opportunity, resilience, and hope for future generations.

Charles Undeland
Country Manager for South Sudan
World Bank Group

Acknowledgments

The *South Sudan Urbanization Review* was jointly developed by the World Bank Group and the Government of the Republic of South Sudan under the leadership of the Ministry of Lands, Housing and Urban Development. The report was prepared by a World Bank team led by Lukas Loeschner (Senior Urban Specialist, IAEU3), Droma Bank Dominic Kat (Urban Specialist, IAEU3), Aanchal Anand (Senior Urban Economist, IAWU1), and Soraya Goga (Lead Urban Specialist, IAEU3), with the support of Wubanchi Tesso (Urban Specialist, IAEU3), Tjark Gall (Urban Resilience Specialist, IAEU3), Eric Sukumaran (Consultant), Aditya Sarkar (Consultant), Sammy Ndayizamvye (Consultant), Jada Modi (Consultant), Edward Renzi (Consultant), Anirudh Rajashekar (Consultant), and Tim Berke (Consultant).

The report features a series of thematic deep dives authored by members of the team: Urban Conflict and Fragility by Soraya Goga and Aditya Sarkar; Urban Climate and Disaster Resilience by Lukas Loeschner and Eric Sukumaran; Leveraging Cities for Jobs and Economic Recovery by Aanchal Anand, Anirudh Rajashekar, and Sammy Ndayizamvye; and Urban Governance and Institutional Capacities by Droma Bank Dominic Kat and Eric Sukumaran.

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The report also benefited from a range of technical analytics and background diagnostics. The team thanks the following partners for their valuable contributions (in alphabetical order): the Global Facility for Disaster Reduction and Recovery (GFDRR) (City Resilience and Nature-Based Solutions), JBA, Pegasys, REACH/IMPACT Initiatives, and Triple Line (with HKV and Consilient).

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Finally, this work was made possible through the generous support of development partners and donors, including the Global Facility for Disaster Reduction and Recovery and the South Sudan Multi-Donor Transition Trust Fund (MDTTF), whose contributions have been instrumental in advancing the urban development agenda in South Sudan.

Data Limitations Disclosure: Measuring Urbanization in South Sudan

This report draws on the best available data to analyze urbanization trends in South Sudan. However, important limitations should be considered when interpreting the findings, particularly regarding the measurement of urban population growth and the identification of urban areas.

1. **Uncertainty in defining 'urban' areas.** There is no consistently applied or up-to-date national definition of what constitutes an 'urban' area in South Sudan. Administrative classifications may not reflect actual settlement patterns, and boundaries of towns and cities are often unclear or subject to change. As a result, comparisons over time and across locations should be interpreted with caution.

2. **Limited and outdated population data.** The most recent comprehensive population census was conducted in 2008, before independence. Subsequent population estimates rely on projections, partial surveys, or model-based approaches, which introduce uncertainty in both total population figures and their spatial distribution.

3. **Constraints in measuring urban population growth.** Estimates of urban population growth are sensitive to assumptions about migration, displacement, and natural population increase. In a context affected by conflict and mobility, these dynamics are difficult to capture accurately, and available data may not fully reflect short-term or localized changes.

4. **Data gaps and inconsistencies across sources.** Different data sources—including administrative records, satellite imagery, and household surveys—may use varying methodologies and definitions. This can result in inconsistencies in reported figures for urban population size, growth rates, and service coverage.

5. **Rapidly changing settlement patterns.** Urban expansion in South Sudan is often informal and dynamic, with new settlements emerging quickly. Available datasets may lag these changes, leading to underestimation or misclassification of urban areas.

Implications for interpretation. Given these constraints, the analysis presented in this report should be understood as indicative rather than precise. Where possible, multiple data sources have been triangulated to improve robustness. Nevertheless, findings should be interpreted with caution, particularly when making comparisons over time or drawing policy conclusions based on absolute figures.

Executive Summary

Key Messages

- **Urbanization is accelerating in a fragile context.** South Sudan is one of the world's fastest-urbanizing countries despite remaining predominantly rural. Only about one-fifth of the population currently lives in urban areas. Urban growth is driven by conflict, displacement, climate shocks, and natural population increase rather than planned economic transformation.

- **Cities are under severe pressure from climate risks.** Recurrent flooding, rising temperatures, and drought increasingly shape urban form, livelihoods, and service delivery. Nearly half the population has been exposed to repeated floods in recent years, with risks intensifying as climate change accelerates.

- **Urban fragility is deepening but uneven.** Cities concentrate opportunity and services relative to rural areas, yet also concentrate conflict risks, informality, land disputes, and exposure to disasters—especially in informal and peri-urban settlements. Major urban centers such as Juba, Wau, Malakal, and Bentiu-Rubkona have absorbed large inflows of displaced people and migrants.

- **Infrastructure and institutions have not kept pace with the rate of growth.** Chronic underinvestment, weak governance, and fragmented mandates have resulted in major deficits in urban services, disaster preparedness, connectivity, and municipal finance. Networked urban services remain rare outside parts of Juba.

- **Strategic investment in cities is critical for recovery and resilience.** Targeted, government-led investments and policy reforms can enable cities to serve as platforms for humanitarian-to-development transition and conflict risk reduction, enabling livelihoods, restoring service delivery, strengthening social cohesion, and enhancing climate resilience, subject to demonstrated government leadership, sequencing, and institutional readiness.

Urbanization in a Fragile and Post-Conflict Context

South Sudan, the world's youngest country, has experienced decades of conflict, economic disruption, and displacement that continue to shape its urban system. While only about one-fifth of the population currently lives in urban areas, cities are growing rapidly. Since the signing of the Revitalized Agreement on the Resolution of the Conflict in South Sudan (2018), the number of urban dwellers is estimated to have increased by more than 590,000. This expansion in urban population has been driven by a combination of natural population growth, forced displacement (climate- and conflict-induced), refugee/returnee movements, and economic migration.

Urbanization in South Sudan differs fundamentally from the growth trajectories observed in more stable regions. Rather than being driven by industrialization or productivity gains, it is shaped by forced displacement,

rural insecurity, climate stress, and demographic pressure. Cities serve simultaneously as places of refuge and sites of vulnerability. Juba remains by far the largest urban center, followed by Wau, Malakal, and Bentiu-Rubkona. Major urban centers have absorbed large numbers of internally displaced persons (IDPs), returnees, and migrants, often without the infrastructure or institutional capacity to do so. This dual role means that cities require stabilization and basic functionality before they can credibly absorb larger-scale development investment.

Conflict has repeatedly reshaped urban form. During periods of violence, urban cores have been hollowed out, while camps and informal settlements expanded on city peripheries. As security improves, partial returns occur, but often into cities with damaged infrastructure, unresolved land disputes, and weakened governance. This cycle has entrenched spatial inequality, social fragmentation, and informality. These impacts are not gender-neutral; women and girls often bear the heaviest burden of service deficits and are disproportionately exposed to protection risks in crowded urban environments.

Climate Change and Urban Disaster Risk

South Sudan is among the most climate-vulnerable countries globally, and its cities sit at the frontline of this risk. Climate change is intensifying flooding, heat stress, and drought, with severe implications for urban residents, infrastructure, and local economies.

Flooding is the dominant urban hazard. Between 2019 and 2022, prolonged floods affected most states, displacing hundreds of thousands of people and inundating homes, roads, markets, and public facilities. Many cities are located in low-lying floodplains or near major rivers, and rapid, unplanned expansion has pushed settlements into the most hazard-prone areas. As impervious surfaces increase and drainage remains rudimentary, pluvial flood risks are rising sharply.

Heat stress is an emerging and under-recognized urban risk. Rising temperatures and increasing numbers of extreme heat days are already affecting productivity, health, and education, with recent school closures underscoring the severity of the challenge. Heat risk is medium to high across all major cities, disproportionately affecting informal settlements with limited vegetation, poor ventilation, and inadequate access to water and electricity.

Drought affects cities indirectly through disrupted rural–urban linkages. Agricultural losses reduce food availability and incomes, drive rural–urban migration, and raise food prices in urban markets. These cascading effects amplify food insecurity and urban poverty.

Despite these growing risks, urban disaster risk management (DRM) and emergency preparedness remain extremely limited. Flood protection infrastructure is scarce and poorly maintained; early warning systems (EWSs) are weak; and response assets, such as boats, pumps, and fire services, are largely absent outside the capital. Emergency preparedness and response (EP&R) systems remain heavily donor dependent, fragmented, and under-resourced.

Infrastructure, Services, and Connectivity Deficits

South Sudan's cities began from a low infrastructure base and have fallen further behind as populations have grown rapidly. Today, urban infrastructure and service gaps are among the most severe globally.

Access to water, sanitation, electricity, roads, solid waste management (SWM), health, and education remains limited and highly uneven. While urban residents generally fare better than rural populations, most cities provide only partial coverage, often concentrated in historic cores or administrative areas. Informal settlements and urban fringes—where growth is fastest—face the largest deficits. Service access indicators remain consistently lower outside Juba and major administrative centers. While population mobility is in part cyclical (as people move in and out of cities), many urban areas face protracted pressures from forced displacement, straining the institutional capacities for the sustainable provision of infrastructure and services.

Service delivery systems are fragmented and heavily reliant on humanitarian actors, nongovernmental organizations (NGOs), churches, and private providers. Networked services are rare outside parts of Juba, and even there, coverage and reliability are limited. Water trucking, off-grid solar, generators, and community-managed facilities fill critical gaps but are costly, inconsistent, and difficult to regulate. These gaps significantly constrain the absorptive capacity of cities and limit the feasibility of large-scale or fast-tracked investments.

Poor connectivity further constrains urban development. Intercity road networks are sparse, often unpaved, and highly vulnerable to flooding and insecurity. Seasonal impassability and informal roadblocks raise transport costs and undermine trade. Weak rural–urban linkages limit agricultural value chains, increase food prices, and reduce opportunities for agro-processing and job creation.

Digital connectivity is also limited. Internet access is expensive and unreliable, power shortages disrupt services, and many secondary cities remain poorly connected. These constraints limit economic diversification, access to information, and the efficiency of public administration and humanitarian operations.

Informality, Livelihoods, and Urban Fragility

Informality dominates South Sudan's urban economy. Most businesses operate without registration, access to finance, or formal premises. Informal trade, transport, construction, and services provide critical livelihoods but remain low-productivity and highly vulnerable to shocks.

Several structural barriers prevent cities from translating population growth into productive employment. These include unreliable electricity, limited serviced land, weak transport networks, regulatory uncertainty, and severe constraints on access to finance. Political instability and insecurity further deter private investment.

Urban residents often pursue hybrid livelihoods, combining informal urban activities with subsistence agriculture or seasonal rural work. Displaced populations, returnees, women, and youth face particularly acute constraints, with the youth making up a majority of the national population, increasing the urgency of employment creation. Youth unemployment and underemployment, combined with limited education and training opportunities, contribute to gang activity, crime, and recruitment into armed groups—reinforcing cycles of urban fragility.

Land governance is a critical pressure point. Overlapping statutory and customary systems, unclear legal frameworks, and elite capture have resulted in widespread land disputes, tenure insecurity, and exclusion—especially for women, youth, and

displaced populations. Land conflict undermines social cohesion, deters investment, and complicates urban planning and service delivery.

Governance and Institutional Constraints

Urban governance in South Sudan is characterized by weak institutions, fragmented mandates, and limited fiscal capacity. Key legislation governing land, planning, and local government is outdated or inconsistently enforced. There is no fully operational national urban policy to guide city growth, and municipal planning instruments are often outdated, donor driven, or disconnected from implementation.

Local governments lack adequate staffing, technical capacity, and predictable financing. Municipal revenues are low, collection systems are weak, and transfers from the national government are unreliable. Subnational governments remain heavily dependent on central transfers and donor-funded systems. As a result, cities struggle to maintain infrastructure, expand services, or respond effectively to shocks.

Urban governance is further complicated by South Sudan's fragile political settlement. Cities are arenas of competition among state actors, customary authorities, and informal power brokers. While customary systems play an essential role—particularly in land administration—the lack of clarity and coordination fuels disputes and undermines accountability.

Despite these challenges, ongoing reforms, such as efforts to update land legislation, develop a national urban strategy, and strengthen DRM, offer important entry points for change.

The Way Forward: Cities as Anchors of Recovery and Resilience

To address the challenges of rapid urbanization under conditions of fragility, this review proposes a sequenced, pragmatic, and performance-based pathway for the Government of South Sudan to transform its cities from sites of vulnerability into anchors of stability and growth while integrating displaced populations into the urban fabric. The strategy uses a 'learn-and-scale' approach, beginning with a concentration of limited, catalytic public resources in priority cities selected through a data-informed diagnostic. Implementation should be driven by a government-led hybrid model, partnering with United Nations (UN) agencies and NGOs where needed and feasible to ensure delivery while building the capacity of local authorities.

The pathway is structured in three distinct phases:

- *Phase 1 (Immediate Priorities, 0–24 months):* The immediate focus is on stabilizing and building credibility through rapid, visible actions. This includes delivering packages of essential services (such as drainage, water, and lighting) in high-risk neighborhoods, establishing a national urban data system to guide all future government-led investments, initiating participatory processes to address land disputes, and installing minimum viable management systems within municipalities.
- *Phase 2 (Consolidation, 3–5 years):* Building on early successes, this phase will consolidate gains by restoring citywide systems, such as entire water distribution

segments and secondary drainage networks. It will also upgrade high-priority economic corridors, where justified by performance and institutional capacity, and pilot systematic property registration to create a viable pathway toward municipal revenue generation, with any potential co-investment explicitly linked to demonstrated performance, leadership, and commitment by the Government of South Sudan, inclusive of financing.

- *Phase 3 (Transformation, 6–10 years):* For cities with proven capacity, this phase allows consideration of potential transformative, large-scale investments. This includes implementing citywide integrated upgrading programs; developing intercity transport corridors to build a national economic network; and ultimately consolidating the legal and policy frameworks for urban management, finance, and land tenure at the national level.

This disciplined, sequenced approach ensures that interventions are realistic, build institutional capacity progressively, and create a credible foundation for long-term, sustainable urban development in South Sudan.

I - Introduction

Background and Country Context

The Republic of South Sudan emerged as the world's youngest country in 2011 after decades of armed conflict. Its creation followed a civil war between the north and south of Sudan, culminating in the signing of the Comprehensive Peace Agreement (CPA) in 2005, which set the stage for independence. Soon after its independence, the country was plunged into internal conflict initially in 2013 with another subsequent deadly fighting in 2016 due to political power struggles, leading to a brutal civil war that displaced millions and caused widespread suffering. While a peace agreement was signed in 2018, the civil war reversed much of the development gains achieved in the years before independence, resulted in an accumulated loss in the aggregate gross domestic product (GDP) equivalent to US$81 billion, and put significant pressure on South Sudan's cities.

South Sudan remains one of the least developed countries (LDCs) in the world. Southern Sudan, as the region was called before independence, has been marred by conflict since 1955, just a year before Sudan attained its independence from British colonial rule. The region experienced systematic marginalization and underdevelopment under both British and Sudanese rule, inhibiting it from developing its physical and human capital. According to the United Nations (UN), over 75 percent of the population lives in poverty, and more than half faces food insecurity. Access to basic services is extremely limited, with low literacy rates, minimal health care infrastructure, and some of the worst maternal and child mortality rates globally. Development efforts are further hindered by weak governance, displacement, and climate-related challenges such as flooding and drought.

Poverty in South Sudan is widespread, chronic, and increasing. About 80 percent of South Sudan's population lives below the national poverty line, driven by conflict, economic instability, and climate shocks (WBG 2024b). Chronic and widespread poverty contributes to South Sudan's ranking of 185 out of 189 countries in the Human Development Index (HDI) 2020, with a life expectancy of only 58 years compared to the global average of 72 (UNDP 2020a). Poverty is multidimensional and is driven by many factors. Foremost is violent conflict, which has persisted since the signing of the Revitalized Agreement for Resolution of Conflict in South Sudan (R-ARCSS) in 2018. Other factors include the macroeconomic crisis; declining incomes; inflation; and the impacts of climate change, natural hazards, and displacement. As a result, much of the population has sunk into a state of destitution with extremely low rates of food security, immobility due to insecurity, and very poor access to basic services. Internally Displaced People (IDPs) are particularly impoverished with an estimated 91 percent below the poverty line compared to 80 percent of rural and 59 percent of urban residents (WBG 2024b).

South Sudan faces one of the most protracted and complex displacement crises in the world, with millions affected by conflict, insecurity, and climate shocks. As of September 2025, the country hosts over 2 million IDPs, many of whom were uprooted by civil war, intercommunal violence, and flooding. Additionally, more than 2.3 million South Sudanese refugees remain in neighboring countries, notably Uganda (940,000),

Sudan (670,000), Ethiopia (420,000), and Kenya (180,000). The ongoing crisis in Sudan, which erupted in April 2023, has significantly affected South Sudan's displacement dynamics. Hundreds of thousands of returnees—South Sudanese nationals who had been living in Sudan—have fled back into South Sudan,[1] often arriving in vulnerable conditions with limited access to shelter, food, or services. An increasing percentage of these returnees built their lives on urban livelihoods and, as far as possible, settle in or close to cities. The inflow has strained already overstretched humanitarian resources, particularly in border areas like Renk and Malakal.

South Sudan is highly vulnerable to climate change, with extreme weather events—especially seasonal flooding—posing serious threats to livelihoods, infrastructure, and food security. In recent years, widespread and prolonged floods have displaced hundreds of thousands, destroyed homes, submerged urban settlements and farmland, and cut off communities from essential services. These floods, driven by intense rainfall and the overflow of the White Nile and its tributaries, are becoming more frequent and severe due to climate change. At the same time, parts of the country also experience drought and irregular rainfall, which further undermines agriculture and exacerbates food insecurity and drives urbanization. The country's limited infrastructure, weak institutions, and ongoing conflict significantly reduce its capacity to adapt and respond to these growing climate risks.

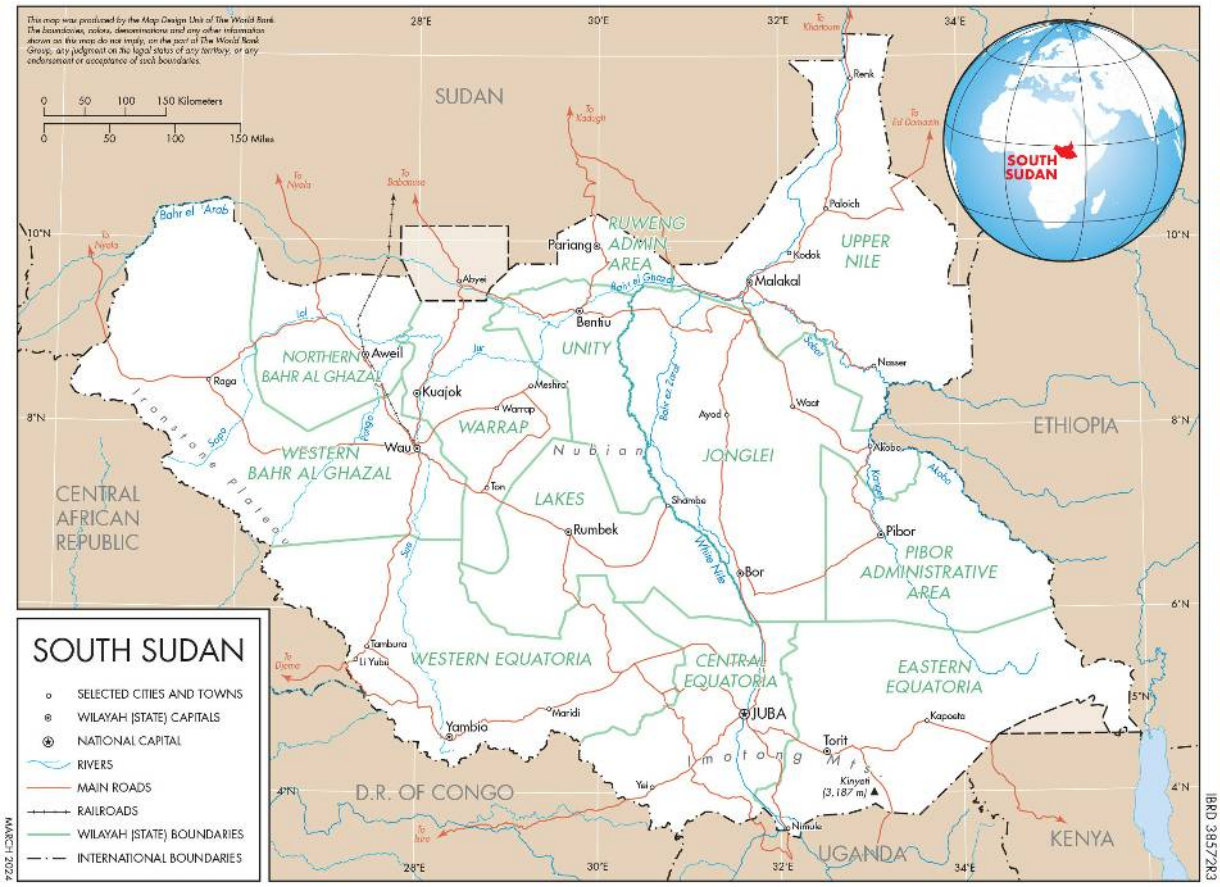
South Sudan's economy is heavily dependent on oil, which accounts for about 90 percent of government revenue and the vast majority of export earnings. Despite its significant oil reserves, the country remains one of the poorest in the world, with a GDP of around US$7 billion and a per capita income among the lowest globally. Economic growth is highly vulnerable to oil price fluctuations, production disruptions, and political instability. The economy has been further strained by conflict, weak infrastructure, limited diversification, and high inflation. Agriculture, which employs most of the population, is underdeveloped.

South Sudan's connectivity with neighboring countries is limited but strategically important, given its landlocked status and dependence on cross-border trade and transport (Figure 1). The country relies heavily on road links to Uganda and Kenya for the import of goods, humanitarian aid, and access to international markets via the ports of Mombasa and Dar es Salaam. The Juba–Nimule Road, connecting the capital to Uganda, is the country's most developed international highway and serves as a critical trade corridor. While border infrastructure with Ethiopia, the Democratic Republic of Congo, and the Central African Republic is minimal or underdeveloped, connectivity with Sudan to the north remains vital for South Sudan's oil exports, as the pipelines and refineries that serve its oil fields run through Sudan to Port Sudan on the Red Sea.

Settlement patterns in South Sudan are shaped by the country's economic geography. South Sudan's terrain is largely flat, with vast floodplains and grasslands dominating the landscape, particularly in the central and northern regions. The White Nile River, which flows northward through the country, is a critical geographic and economic feature, supporting agriculture and providing a vital water source. South Sudan also contains the Sudd, one of the world's largest wetlands, which plays

[1] Since April 2023, South Sudan has received more than 1,345,000 displaced individuals from Sudan, of which 67 percent (904,000) are South Sudanese nationals. Many of these 'returnees' have never lived in South Sudan (UNHCR 2026).

Figure 1. Map of South Sudan



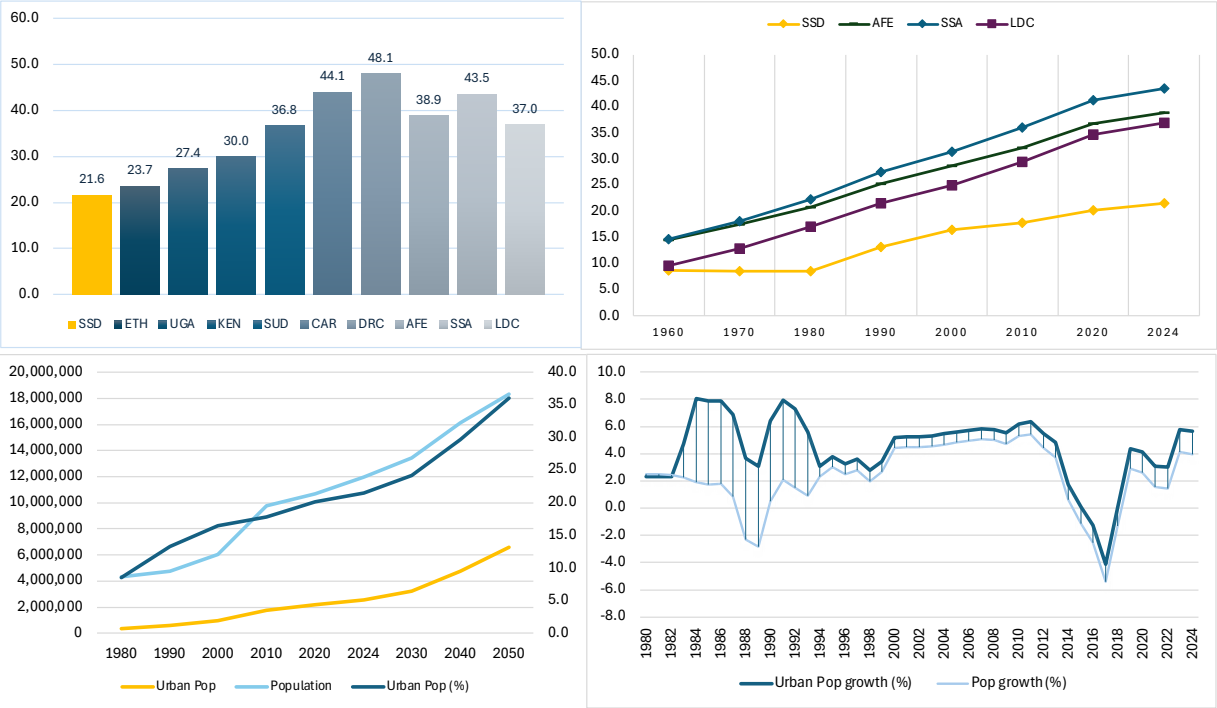
Source: WBG 2024d.

a key ecological role but also presents significant challenges for infrastructure and road development. Most major urban centers such as the capital city Juba, Malakal, Wau, or Bor are located along the Nile and other navigable rivers, while other notable towns such as Rumbek, Aweil, Torit, and Nimule emerged as cross-border trading or regional trading hubs.

Urbanization in South Sudan is one of the lowest in the world but accelerating rapidly (Figure 2). South Sudan is a predominately rural country with only around 22 percent of the population (~2.5 million people) living in towns or cities. South Sudan is significantly less urbanized than Sudan (36.8 percent) and other neighboring countries, about half the average in Sub-Saharan Africa (43.5 percent) and well below the average of LDCs (37.0 percent). By far, the largest number of urban dwellers live in the capital region of Juba, which has an estimated population of 710,000, followed by Wau (232,000), Yei (188,000), Bor (192,700), and Kuajok (163,000).

South Sudan is urbanizing steadily, albeit not linearly. Urbanization remained low (~8.5 percent) until the early 1980s, then more than doubled to approximately 17.2 percent by 2005 (signing of the CPA). After independence in 2011, the urbanization level further increased from 18.0 percent to 21.6 percent. Since signing the R-ARCSS (2018), the number of urban dwellers increased by an estimated 590,000 people (+30 percent), while in the same period, the total population increased by 18 percent or 1.8 million people. Over the past decades, annual urban growth has consistently outpaced total population growth, however, varying considerably—from +8 percent (at the onset of the Second Sudanese Civil War, 1983–2005) to −4 percent (at the height of the Civil War, 2013–2018)—reflecting the complex role of cities and towns during times of conflict.

Figure 2. Urban population indicators



Top Left: Urban population (% of total population, 2024); **Top Right**: Urban population (% of total population, 1960–2024); **Bottom Right:** Annual urban population growth and total population growth (%, 1980–2024); **Bottom Left:** Urban population and total population (1960–2050)

Note: SSD (South Sudan), ETH (Ethiopia), UGA (Uganda), KEN (Kenya), SUD (Sudan), CAR (Central African Republic), DRC (Democratic Republic of Congo), AFE (Eastern and Southern Africa), SSA (Sub-Saharan Africa), LDC (Least Developed Countries).

Source: World Development Indicators (WDI), 2025.

Most recently, South Sudan has emerged as one of the fastest-urbanizing countries in the world. During the past five years (2019–2024), the compound annual growth rate (CAGR) was +4.3 percent, significantly higher than the average in Africa East (4.0 percent), Sub-Saharan Africa (3.8 percent), and LDCs (3.9 percent). As per the latest projections, in the next 15 years (2040), the number of urban dwellers in South Sudan is expected to increase by more than 2 million people, or nearly double, augmenting the urbanization level to about 30 percent.

Urbanization is driven by forced displacement, migration, and natural growth. Forced displacement (both conflict and climate related) constitutes one of the most pronounced and characteristic drivers of urbanization—having influenced the overall population of cities, but also settlement patterns within them (Craze 2024; Jahn 2017). The second key driver of urbanization is rural–urban migration, as people move to cities and towns in search of better economic opportunities or as rural livelihoods become unsustainable in the face of insecurity and land dispossession. Finally, high birth rates and the country's young demographic (38 percent of the population is below the age of 14) mean that the number of urban dwellers is increasing naturally.

Despite rapid urbanization, economic gains as in other regions have not materialized. As has been observed in Sub-Saharan Africa, urbanization has not been accompanied by the expected productivity gains as was seen in the case of Asia and Latin America. While

cities like Juba, Wau, and Malakal have seen fast population growth, much of this urbanization has been driven by displacement and crisis rather than planned economic development with sufficient capital investments or skills development to harness the demographic potential of an enhanced urban labor force. Overall, urban areas often lack the basic infrastructure—such as reliable transport, electricity, water, and communications—that typically supports productive clustering of businesses and services (Berke and Larsen 2025). Moreover, insecurity and political instability deter private investment and prevent the emergence of strong markets or value chains. The absence of functioning land markets, poor urban planning, and weak governance further undermine the conditions needed for agglomeration economies to take hold. Instead of creating better jobs and fostering innovation and efficiency, South Sudan's urban growth has mostly led to overcrowded, under-serviced, informal settlements, with limited economic gains.

Urban areas offer better services than rural areas and are therefore attractive, yet they still face significant household- and business-level service deficits. In urban centers like Juba, at least some residents have access to piped water, sanitation facilities, schools, and health services, though quality and coverage remain poor. In contrast, most rural areas lack even the most basic infrastructure. Rural communities rely on unsafe water sources, lack proper sanitation, and have minimal access to health care or education. Health facilities are often understaffed and under-resourced, and school attendance is hindered by poverty, conflict, and long travel distances.

Service delivery systems in urban areas are weak, fragmented, and heavily reliant on international aid and nongovernmental organizations (NGOs). Government capacity to provide basic services such as water, sanitation, health, and education is extremely limited due to low public revenues, institutional fragility, and recurring conflict. In cities like Juba, service provision is often ad hoc and concentrated in certain areas, with large segments of the urban population—particularly in informal settlements—lacking reliable access to essential services. Infrastructure is poorly maintained, planning is minimal, and service delivery is frequently disrupted by insecurity or funding shortfalls. As a result, many urban residents depend on private providers or humanitarian actors, leading to uneven access, high costs, and poor service quality.

Purpose and Structure of the Report

This report unpacks South Sudan's complex urbanization to identify priority policy reforms and investments that foster green, resilient, and inclusive urban development. The report is structured in seven main sections, comprising four thematic deep dives (Figure 3):

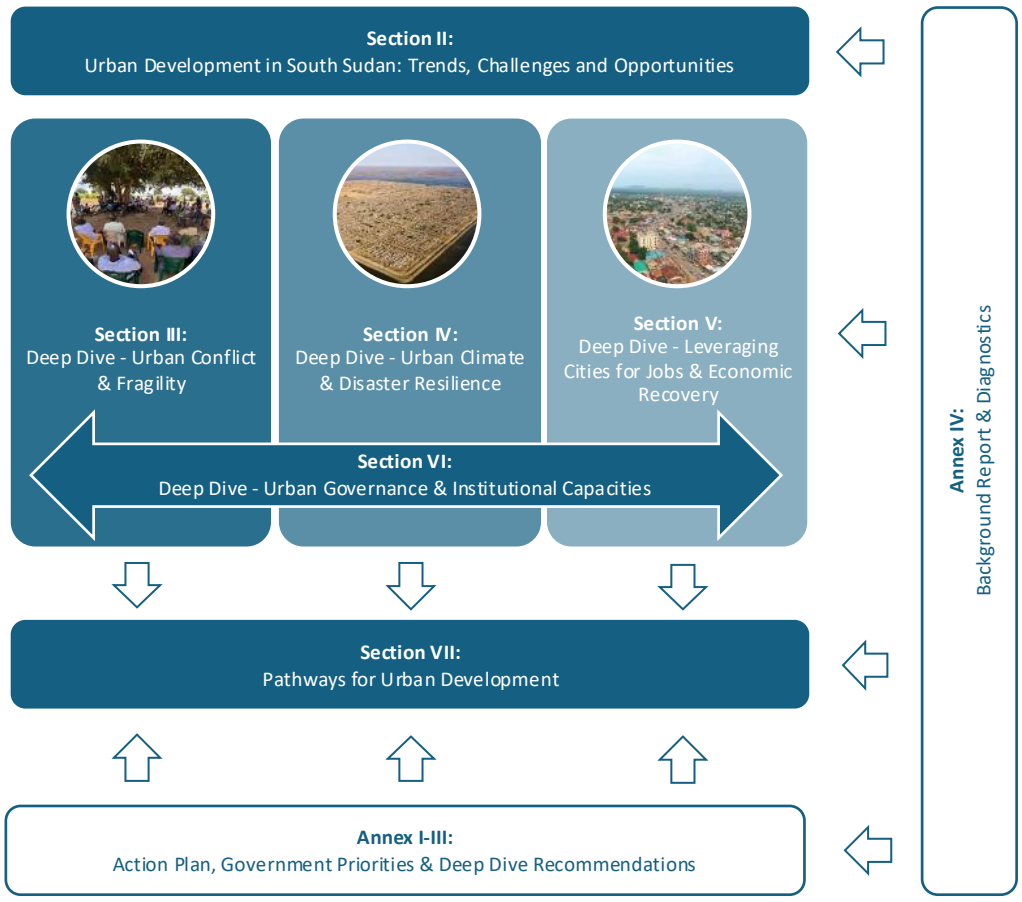
- Section II - **Urban Development in South Sudan** lays out the country context that shapes urbanization patterns and characterizes the challenges and opportunities of urban development in South Sudan.
- Section III - **Deep Dive: Urban Conflict and Fragility** explores key drivers of urban conflict and fragility in South Sudan and identifies sources of resilience against related urban challenges.
- Section IV - **Deep Dive: Urban Climate and Disaster Resilience** documents the changing patterns of urban disaster risk in South Sudan and identifies options to

better prepare for, respond to, and manage related risks.

- Section V - **Deep Dive: Leveraging Cities for Jobs and Economic Recovery** explores the constraints and opportunities that South Sudan's urban areas face in generating more and better jobs and driving economic growth as part of wider recovery efforts.
- Section VI - **Deep Dive: Urban Governance and Institutional Capacities** reviews the institutional arrangements, fiscal systems, land governance, and service delivery modalities as a cross-cutting priority for urban development in South Sudan.
- Section VII - **Pathways for Urban Development** highlights key recommendations and priority interventions to address urbanization challenges in South Sudan.

The report draws on extensive consultations with the Government of South Sudan. These consultations were organized through an Intergovernmental Technical Committee (IGTC) on urban development. Co-chaired by the Ministry of Lands, Housing and Urban Development (MLHUD) and the Ministry of Finance and Planning (MFP), the IGTC comprises representatives from government agencies at the federal, state, county, and city levels and serves as a government-led coordination platform for urban development across sectors and tiers of government in South Sudan. The IGTC assumed a fundamental role in identifying knowledge gaps, validating findings, and formulating recommendations and priorities to address urbanization challenges going forward.

Figure 3. Structure of the report



The findings presented in the report are informed by a set of technical analyses and background studies.[2] These employed a range of methods for data collection and processing including geospatial analysis, remote sensing, field surveys, key informant interviews (KIIs), and focus group discussions (FGDs). Notwithstanding the efforts to ensure data robustness and triangulate the report findings, critical data gaps remain notably related to urban population figures or the disaggregation of data by gender, age, or vulnerable groups. These gaps reflect South Sudan's overall fragility, conflict, and violence (FCV) context, which is characterized by scarce, incomplete, or outdated data; poor availability of data at the city level; and weak governmental systems for statistics and data management, among others. This report illustrates that data are the foundation for sustainable, inclusive, and resilient urbanization and highlight the needs for strengthening future data systems to enable governments and stakeholders to make informed decisions that improve urban living conditions and manage growth effectively.

[2] See Annex IV: Background Reports and Diagnostics.

II - Urban Development in South Sudan: Trends, Challenges, and Opportunities

South Sudan's urban development is shaped by a complex interplay of rapid demographic shifts, conflict legacies, weak governance, disaster and climate risks, and infrastructure deficits. This section provides the country context that shapes urbanization patterns and characterizes the following nine main dimensions of urban growth and the challenges and opportunities they create for South Sudan's towns and cities:

1. *Recent and rapid urbanization*, showing how migration, displacement, and natural growth have made South Sudan one of the fastest-urbanizing countries in the world
2. *Post-conflict and fragile state context*, highlighting how cycles of violence, displacement, and reconstruction have left lasting marks on the urban system and continue to shape settlement patterns
3. *Emerging urban form* of South Sudan's cities and towns, which are marked by informal urban expansion and weak planning frameworks
4. *Vulnerability and resilience of cities to climate shocks*, where recurrent floods, heat stress, and other hazards interact with rapid, unplanned growth to heighten risks for urban populations
5. *Structural deficits in infrastructure and connectivity*, where towns remain poorly serviced, disconnected, and heavily reliant on informal providers
6. *Challenges in connectedness* with neighboring countries, between cities and within cities, as well as digital connectivity as foundations for urban development
7. *Prevalence of informality* relating to the structure of urban economies
8. South Sudan's *governance structures and institutions* for urban development
9. *South Sudan as a multi-scalar urban system*, highlighting the diverse characteristics of Juba, state capitals, and other secondary cities, such as heterogeneous drivers of fragility and sources of resilience.

Together, these dimensions underscore the paradox of South Sudan's cities: They are sites of opportunity, trade, and resilience, yet are simultaneously shaped by fragility, informality, and vulnerability.

Recent and Rapid Urbanization

South Sudan is at an incipient stage of urbanization, but its urban population is increasing rapidly. Compared to other countries in the region, South Sudan has urbanized with delay and initially at a slower pace. While urbanization across Sub-Saharan Africa generally kicked in the 1960s and 1970s, in South Sudan, it was not until the early 1980s that large numbers of people moved to urban areas (driven by conflict during the Second Sudan Civil War). South Sudan's rate of urbanization has been lower than average

throughout the early 2000s but it has notably accelerated in recent years, making South Sudan currently one of the fastest-urbanizing countries in the world.

Since the last official census in 2008, the population of South Sudan's largest cities and towns is estimated to have nearly doubled from 1.34 million to 2.47 million, corresponding to an increase in urbanization level from 16 to 22 percent.[3] Urban population estimates for South Sudan's cities and towns vary widely as official figures are not available, and even the census results are contested. Table 1 presents an approximation of the current city-level population using different (including remote sensing-based) estimates. Metropolitan Juba[4] is by far the largest agglomeration with an estimated population of about 710,000 (compared to 285,000 in 2008).[5] Other cities and towns have experienced similar population growth dynamics, with some (for example, Wau, Bor, Aweil, Nimule, Bentiu, or Torit) having doubled or even tripled their urban population during the observation period. Some urban centers—notably Malakal, historically a vital trading hub—experienced a decrease in urban population, owing to years of conflict, destruction, and displacement.

Table 1. Estimated urban population change between 2008 and 2025

Urban Area	State	Census (2008) (SSCSE 2010)	Estimate (2025)[6]	2008–2025 (%)
Juba	Central Equatoria	285,609	710,000	+149
Wau	Western Bahr el Ghazal	118,331	232,400	+96
Bor	Jonglei	61,716	192,600	+212
Yei	Central Equatoria	111,268	188,000	+69
Kuajok	Warrap	95,483	163,300	+71
Rumbek	Lakes	153,550	162,900	+6
Bentiu/ Rubkona	Unity	41,328	150,500	+264
Aweil	Northern Bahr el Ghazal	59,217	114,600	+93
Malakal	Upper Nile	126,483	110,800	−12
Yambio	Western Equatoria	105,881	102,000	−4
Renk	Upper Nile	69,079	97,000	+41
Nimule	Eastern Equatoria	38,181	94,500	+147
Pibor	Greater Pibor Administrative Area	44,168	86,600	+96
Torit	Eastern Equatoria	33,657	69,000	+105
Total (Urban)	**South Sudan**	**1,343,951**	**2,474,000**	**+95**

Source: Original analysis for this report, based on SSCE (2010) and WBG estimates.

[3] Factoring in smaller urban areas, this estimate generally corresponds to the World Resources Institute (WRI) estimates for 2008 (17.6 percent) and 2025 (21.6 percent).
[4] Referring to the continuously populated urban settlement (that is, functional urban area) of Juba City and surrounding areas.
[5] Juba is only city with a population greater than 500,000. In total, 10 cities are estimated to have populations greater than 100,000 (compared to six urban areas in 2008).
[6] The urban population figures for 2025 are unofficial estimates and should be interpreted with considerable caution. They represent the arithmetic mean of four data sources—PES (2021), UN-OCHA (2025), GRID (2024), and WBG/Triple Line (2025)—each of which employs distinct methodologies, including remote sensing, to derive city-level population figures. The significant variance across these sources reflects the inherent uncertainties in the underlying data, and the resulting averages should not be taken as definitive population counts.

Table 2. Hierarchy of cities adapted to South Sudan

Tier	Label	Population (in thousands)	Density (people/ km²)	Cities (population in thousands)
1	Metropolitan Capital *(Primary Cities)*	500+	>1,500	Juba (710)
2	Regional Anchor Cities *(Secondary Cities)*	100–500	>1,500	Wau (230), Bor (195), Yei (190), Kuajok (165), Rumbek (165), Bentiu-Rubkona (150), Aweil (115), Malakal (110), Yambio (100)
3	Intermediate Cities *(Tertiary Cities)*	50–100	>1,500	Renk (95), Nimule (95), Pibor (85), Torit (70)
4	Local Urban Centers *(Towns)*	5–50	>300	County capitals, market towns, smaller nodes

Source: Hierarchy adapted from the World Urbanization Prospects 2025 (UN 2025) and the forthcoming World Bank Group flagship report on urbanization in Sub-Saharan Africa (WBG 2026b) to fit the local context of South Sudan.

Secondary and tertiary cities are emerging, driven by natural growth, migration, and forced displacement. Aside from Juba, nine urban areas are estimated to now have more than 100,000 inhabitants—qualifying them as *regional anchor cities* (Table 2) and reflecting their growing importance within the broader urban network as regional centers for administration, trade, and economic activities (Gutheil and Schlimmer 2024). Importantly, however, the observed urbanization across South Sudan is not strategically planned: New centers are emerging as a result of inherent growth dynamics and a combination of push factors (conflict, climate shocks) and pull factors (economic opportunities, trade) and are not strategically directed through policies that guide development, manage growth, and promote sustainability.

Relative to other Sub-Saharan African countries, South Sudan sits toward the extreme end of the region's spatial patterns of low-density and highly fragmented urbanization. A comparative study across Sub-Saharan Africa shows that urban systems are already characterized by a large number of small settlements and by spatial expansion that outpaces population growth; however, South Sudan exemplifies these trends more starkly. It combines very low overall population density with a dispersed settlement structure and limited development of large, integrated cities. Consistent with the report's core finding that built-up land in Sub-Saharan Africa tends to grow faster than population, South Sudan's urbanization is likely to be particularly land-intensive, reflecting weak land markets, low incomes, and constraints to vertical development. The result is an urban form where population is spreading across space rather than concentrating, with flatter density gradients and weaker internal structure than more mature urban systems in the region. While such patterns are present across Sub-Saharan Africa, South Sudan stands out as a case where urbanization is occurring without strong spatial concentration, limiting the scope for agglomeration economies that typically underpin productivity growth (Combes et al. 2023; OECD et al. 2025).

Post-Conflict and Fragile State Context

South Sudan's urbanization is intrinsically linked to its conflict-ridden history and fragile context. Annual population growth over the past decades shows strong fluctuations (Figure 4). During its periods of relative peace, South Sudan experienced rapid but steady urban population growth, as people migrated to cities in search of economic opportunities. The series of wars and conflicts, however, are associated with massive displacement into (and out of) cities. Following initial increase in urban populations in the 1970s (following the signing of the Addis Ababa Peace Agreement in 1972),[7] the first wave of sharp urban growth coincides with the Second Sudan Civil War (1983–2005), which displaced millions of people to cities seeking refuge from fighting and violence in rural areas, and many returnees opting to remain in the urban centers. Juba—then a garrison town under the Government of Sudan while the SPLM/A controlled surrounding areas in Juba County—experienced large inflow with repeated fluctuations of its populations, as people fled fighting between the warring factions. From the beginning of the war (1983) to the signing of the CPA (2005), the population of Juba town had increased from 83,000 to approximately 250,000 people, including 163,000 residents and 87,000 IDPs (Martin and Mosel 2011).

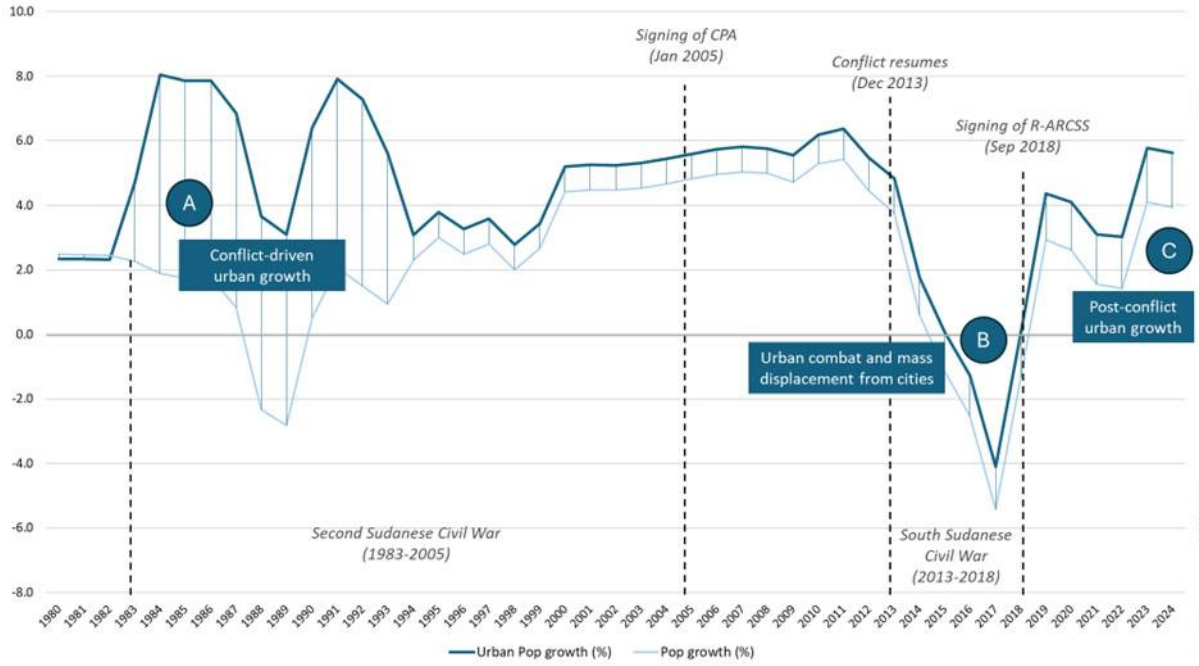
The South Sudanese Civil War (2013–2018) included significant urban combat and resulted in mass displacement from cities. Following initial violence in Juba (December 2013), key urban centers like Bor, Bentiu, and Malakal were important battlegrounds, later spreading to Wau and Yei, triggering further displacement. Malakal, Upper Nile's capital, changed hands multiple times, with urban warfare destroying infrastructure and displacing over 100,000 people, transforming it into a ghost town with looted markets and destroyed hospitals (Craze 2019). By 2017, 1.8 million people were internally displaced, many from urban areas to rural regions or UN-managed Protection of Civilians (PoC) camps in Juba or Malakal.

Years of fighting and war have left a legacy of urban conflict and fragility. While conflict and fighting during the Second Sudanese Civil War were a catalyst for urbanization, the war's urban battles left lasting scars, with cities like Juba still grappling with ethnic divisions and weakened infrastructure. Repeated violations of ceasefires in urban areas show the persistent risk of urban conflict.[8] Post-war urbanization saw ethnic tensions resurface in competition over land and resources, undermining integration. South Sudan's cities and towns thus continue to be shaped by segregation and marginalization, as displaced populations remain in camps or settle in peripheral areas, reinforcing the socioeconomic divides.[9] All major cities and towns are shaped by displacement, but the degree and spatiality of impact varies and can be categorized[10] in five typologies (Table 3).

Since the outbreak of war in Sudan in April 2023, South Sudan's urban landscape has been further reshaped by

[7] The Addis Ababa Agreement, also known as the Addis Ababa Accord, was a set of compromises within a 1972 treaty that ended the First Sudanese Civil War (1955–1972) in Sudan.
[8] For example, in 2016, under the terms of the August 2015 peace agreement (ARCSS), about 1,370 of Dr. Riek Machar's forces (Sudan People's Liberation Movement-in-Opposition [SPLA-IO]) were permitted to return to Juba for his security when he resumed his post as First Vice President in April 2016. Despite the peace deal, mistrust remained high. Both government troops (loyal to President Salva Kiir) and SPLA-IO forces in Juba were heavily armed, which led to urban warfare in July 2016.
[9] Examples include the IDP camp in Bentiu, hosting around 120,000, and Sharikat, hosting many members from the displacement in Bor from the 2013 and 2016 conflicts.
[10] Adapted from WBG (2021a).

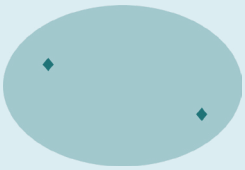
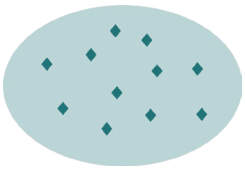
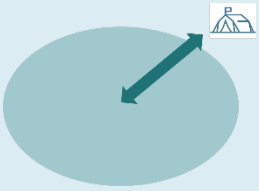
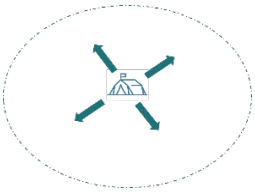
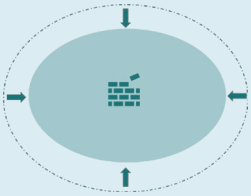
Figure 4. Annual population and urban population growth in South Sudan (%, 1980–2024)



Source: WDI, 2025.

a massive and rapid influx of displaced populations, adding a new layer of pressure to already fragile cities. Over 1.3 million individuals have crossed into South Sudan, including approximately 904,000 South Sudanese 'returnees', many of whom had never previously lived in the country (UNHCR 2026). This large-scale movement has not been confined to border entry points such as Renk but has extended to urban centers including Juba, Wau, Bentiu, and Rubkona, where returnees and refugees are settling in already strained environments. The sudden population increase has intensified competition over land, housing, and basic services, exacerbating existing ethnic tensions and socioeconomic inequalities rooted in earlier waves of conflict-induced urbanization. In towns like Bentiu and Rubkona, already shaped by displacement dynamics, new arrivals are further expanding informal settlements and deepening spatial segregation, while in Juba and Wau, pressures on infrastructure and service delivery risk reinforcing marginalization in peri-urban areas. This return movement since 2023 has thus become a key driver of contemporary urbanization in South Sudan, reinforcing patterns of fragility, uneven development, and contested urban space, while highlighting the continued interlinkages between regional conflict and domestic urban transformation.

Table 3. Typology of displacement-affected urban areas

Type	Schematic	Characteristics	Examples
Type 1: Localized displacement impact		- It hosts a localized concentration of forcibly displaced populations, without representing a significant share of the national displaced population. - Displacement is spatially clustered within specific areas of the city, with limited impact on the overall urban structure.	**Aweil**
Type 2: Widespread displacement impact		- Forcibly displaced populations constitute a large share of the city's total population, significantly shaping urban dynamics. - Displacement is widely distributed across the city, influencing multiple neighborhoods and services.	**Renk**
Type 3: Interdependence		- There are strong functional linkages between city and displacement sites, including flows of people, goods, and services. - Displacement sites and urban areas operate as interconnected systems, often within or along the urban periphery.	**Juba**
Type 4: Urbanizing Camp		- Large-scale displacement sites exhibit urban-like characteristics, including high density, service concentration, and economic activity. - Camps function as quasi-urban enclaves, with internal complexity but often limited physical integration with the surrounding city.	**Bentiu**
Type 5: Reconstruction		- Urban areas are significantly damaged by conflict, with disrupted infrastructure and services. - May experience partial or uncertain population return, shaping uneven recovery and redevelopment trajectories.	**Malakal**

Source: Adapted from WBG (2021a).

Emerging Urban Form

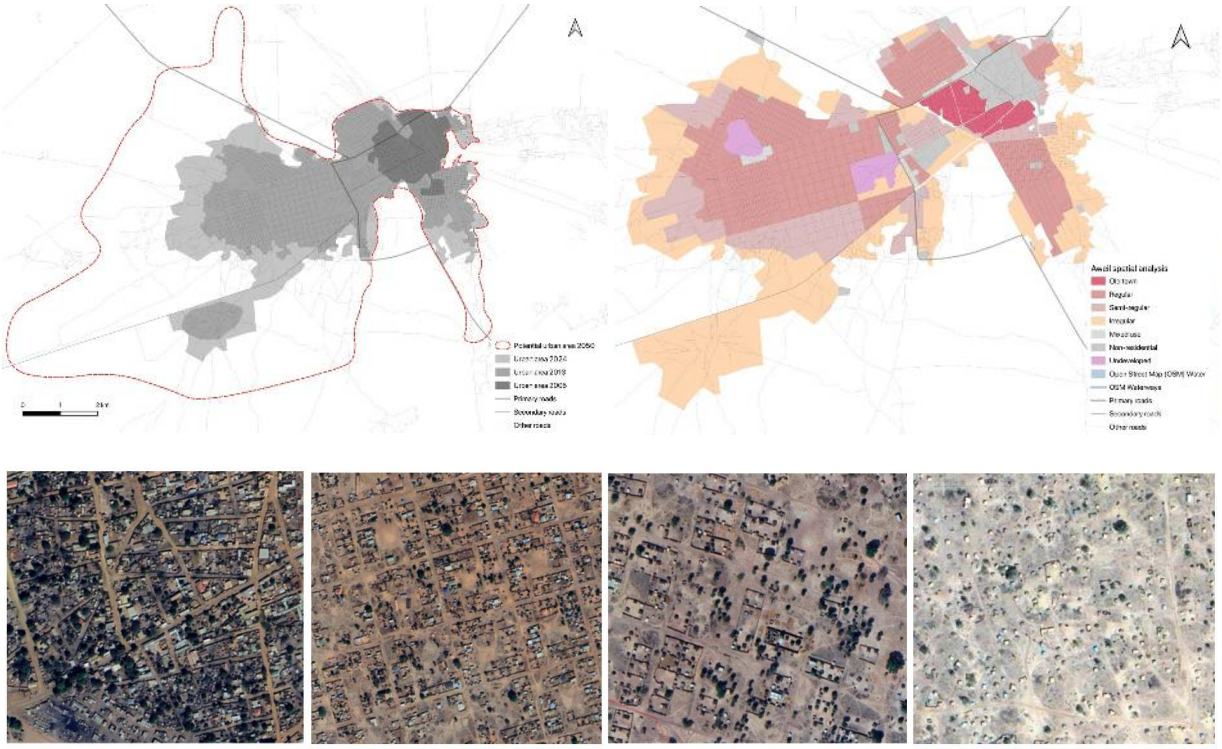
South Sudan lacks the regulatory and policy frameworks needed to guide urban development in a coherent and strategic manner. There is no national urban policy to set the vision for the growth of cities, and the draft land bill remains focused largely on rural areas and land conflict resolution rather than the challenges of urbanization. Where urban master plans or strategic plans exist, they have typically been prepared by development partners such as Japan International Cooperation Agency (JICA), UN-Habitat, or United States Agency for International Development (USAID) and are now outdated, rarely implemented, or disconnected from local realities. Moreover, the absence of zoning laws or functional urban planning instruments means there is little to no allocation of land uses, leaving urban expansion to proceed in an unregulated, ad hoc manner that reinforces informality and undermines sustainable development.

South Sudan's cities and towns are growing rapidly with informal development at the (inner-city) margins and (outer city) fringes. Most urban areas in South Sudan exhibit high growth dynamics and a significant increase in physical extent over the past years. Aweil, the capital of Northern Bahr el Ghazal State, represents an example of a rapidly growing secondary city. Since 2005,[11] Aweil's urban area expanded nearly ninefold from 3.1 km^2 to currently 27.6 km^2—a staggering annual growth rate of 12.2 percent. Until 2050, the urban footprint of Aweil is expected to double to between 42 and 72 km^2, while the population is expected to increase from currently 114,000 to between 210,000 and 336,000, depending on the future growth scenarios.

Morphological analysis reveals that Aweil has expanded outward from its old town, with newer, more irregular settlement patterns. The latest growth consists of small, unplanned huts on the periphery, some later integrated into a structured street layout. Recent development features a regular grid—large square blocks in the west and smaller rectangular ones to the north and south—now covering about 49 percent of the city. Irregular areas, mostly developed in the past decade, make up just under 40 percent and are concentrated on the outskirts. Early development in planned zones includes small huts (under 20 m^2) in loosely organized 20 m × 20 m compounds, which become more structured over time with larger dwellings (20–200 m^2). The outskirts of Aweil are expanding organically, a process that has been ongoing for many years. However, over time, a regular street layout is superimposed on this type of development, regularizing the irregular areas in physical terms. The images show how an originally organically developed area is regularized by a regular street layout. (see Figure 5).

[11] The earliest year with high-resolution satellite imagery available.

Figure 5. Urban expansion of Aweil (Northern Bahr el Ghazal)

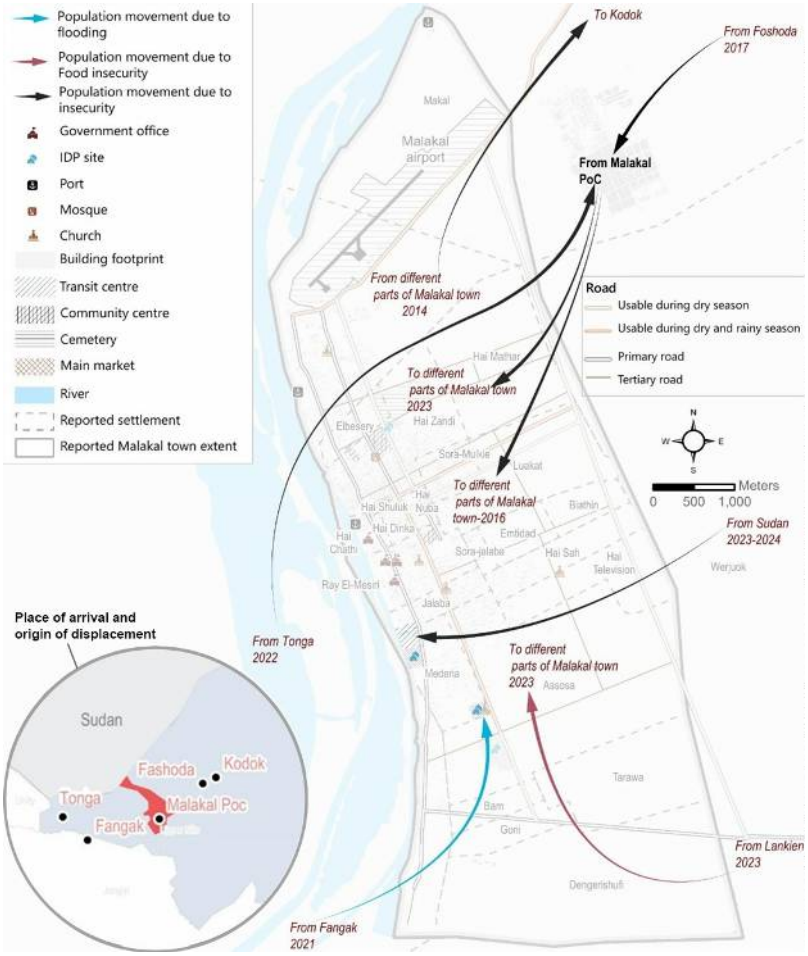


Top Left: Aweil. Change in urban areas from 2005 to 2024 and projected settlement extent in 2050. **Top Right:** Aweil. Morphological zones, 2024. **Bottom Left:** Old Town—Historical center, characterized by a geometrical, semi-regular but non-orthogonal street layout, featuring plots of various shapes and sizes with a mix of uses. **Bottom Center Left:** *Regular Development*—The newly developed urban area is largely characterized by a regular street layout. Most of the area features regular, demarcated plots—either square or rectangular—with either a large house accompanied by several small outbuildings or multiple small buildings within the same plot. **Bottom Center Right:** *Semi-regular Development*—Organically developed areas tend to become regularized in terms of their street layouts and demarcated regular plots/compounds over time. This type represents a transitional phase, characterized by a mix of haphazardly built small buildings and plots that are beginning to be demarcated. Some roads are identifiable, connecting to the existing road network. **Bottom Right.** *Irregular Development*—This type is characterized by an absence of a road network, with small buildings sited haphazardly and most plots not demarcated. While predominantly located on the periphery, there are also some low-density pockets in more central areas.

Source: WBG/Triple Line 2025.

Other cities and towns are redeveloping their urban form following massive destruction. Malakal, the capital of Upper Nile State and historically a thriving trade hub located roughly equidistant from Juba and Khartoum, was devastated by the South Sudanese Civil War (2013–2016) and experienced large-scale displacement. Since the last population census (2008), the population is estimated to have decreased from 126,483 to currently approximately 110,000 (including 25,000 IDPs living in IDP camps across Malakal Town). While the fighting in Malakal has resulted in massive displacement out of the city, Malakal has experienced significant population movement (into and out of the city) during the last 10 years and has also been a place of refuge for people fleeing conflict and flooding in surrounding areas (Figure 6). Satellite imagery however reveals that Malakal has suffered large-scale destruction and is only gradually being rebuilt: The city's built-up area reduced from 5.4 km^2 before the conflict (2016) to 3.2 km^2 in 2021 and has since increased again to 3.8 km^2 (2023), reflecting the ongoing reconstruction efforts.

Figure 6. Population movement in and out of Malakal Town (Upper Nile State)

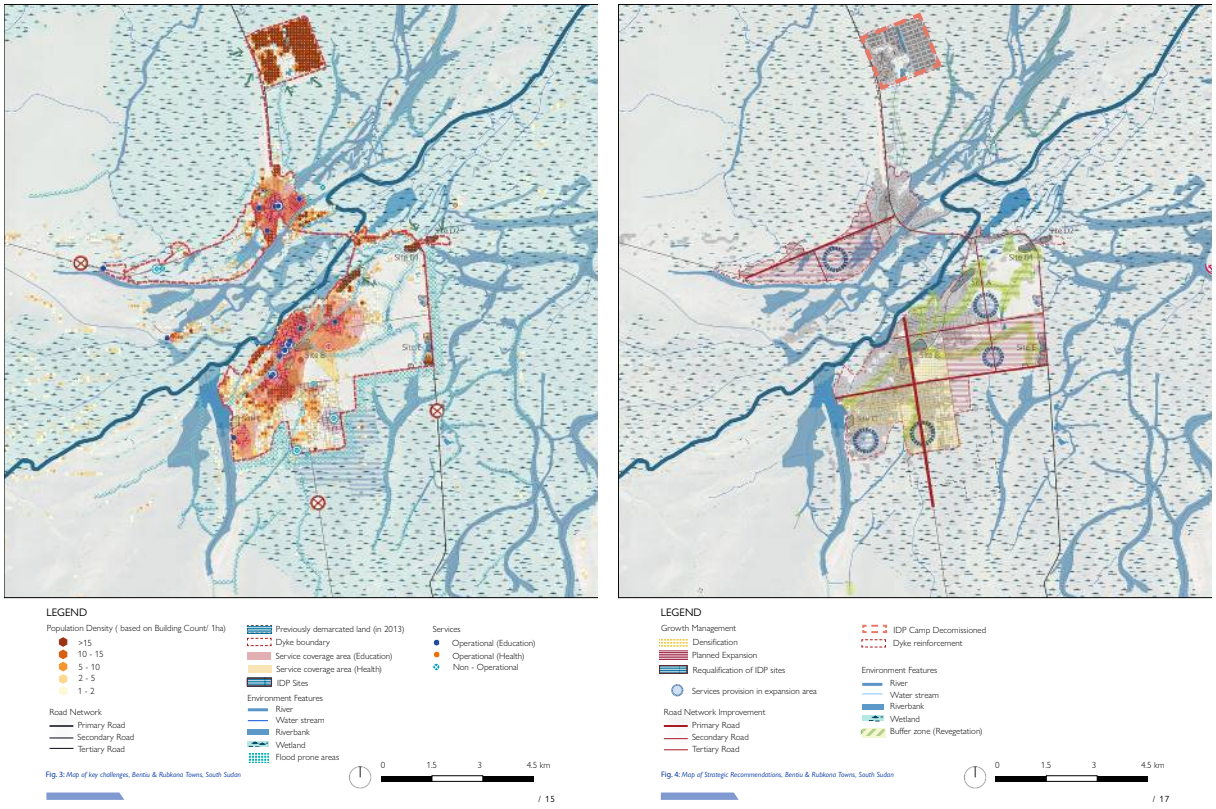


Source: REACH/IMPACT 2024a.

Some urban areas affected by both conflict and recurrent flooding are being rebuilt through an integrated settlement approach (Figure 7). In Bentiu-Rubkona, Unity State, combined efforts are under way by the Government of South Sudan and development partners for long-terms solutions to end protracted displacement. Bentiu was one of the hot spots of fighting during the South Sudan Civil War and experienced widespread destruction and displacement. The Bentiu PoC site was initially created in the aftermath of displacement and protection needs resulting from the 2013 outbreak of conflict. It is one of the largest IDP camps in South Sudan, hosting more than 100,000 individuals. Recurrent flooding since 2019 has inundated large parts of the former settlement area and resulted in additional displacement of about 50,000 people to higher grounds in nearby satellite sites. Ongoing construction and reinforcement of dikes are helping regain former settlement areas, providing the basis for restoring access to basic infrastructure and services and for the permanent return of displaced communities.[12]

[12] Under the government-led and World Bank-financed Enhancing Community Resilience and Local Governance Project Phase II (ECRP-II), 45.6 km of dikes and drainages have been built/reconstructed, securing more than 42 km2 of land in Bentiu and Rubkona against recurrent flooding. An International Organization for Migration (IOM)-led Intention Survey (March 2025) from Bentiu IDP camp shows that 37 percent want to return to their place of origin, while insecurity and lack of basic services are cited as key barriers to return. A household survey in the reclaimed areas of Pakur (see Priority Area 1), shows that 609 households have already returned to the reclaimed lands; 40 percent returned from the IDP camp, 34 percent returned from informal displacement sites.

Figure 7. Redevelopment of settlements in Bentiu-Rubkona (Unity State)



Top Left: Overview map of key dwellings in Rubkona and Bentiu towns. **Top Right:** Map of strategic interventions including extension, densification, and infill. **Bottom**: Change in urban extent from 2005 to 2023. Note the reduced settlement extent (2013 versus 2023) following the devastating sequence of floods (2019–2022) and dike system that was built to protect the urban area (and the IDP camp) against recurrent flooding.

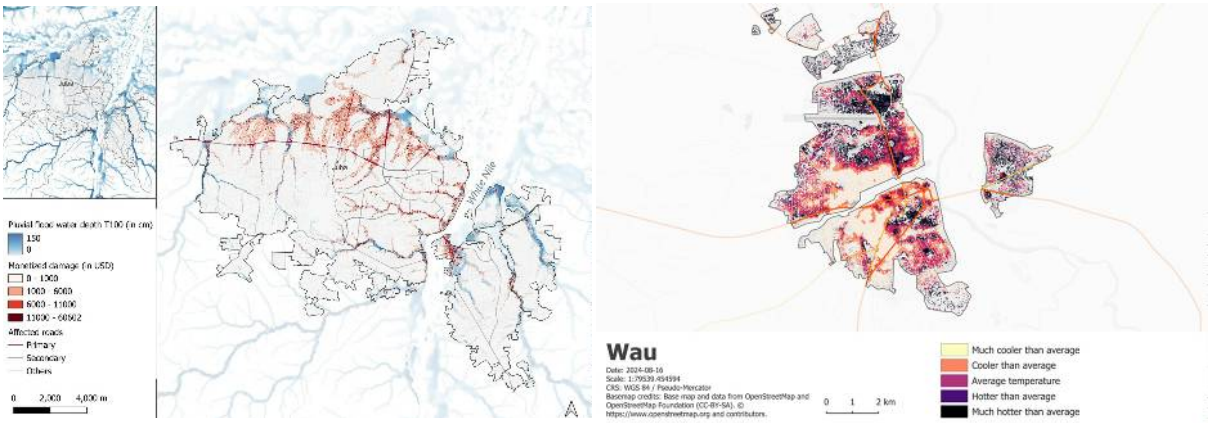
Source: IOM 2024c.

Vulnerability to Climate Shocks

South Sudan's urban areas face compounding risks, with climate shocks such as flooding and extreme heat intersecting with persistent conflict to create multilayered vulnerabilities. A country-wide analysis of urban disaster risks shows that all large urban centers (Juba, Wau, Aweil, Yei, Bor) have a high exposure and vulnerability to climate-related hazards; however, their risk profiles vary depending on the type of hazard (Figure 8). Aweil, for instance, is at high risk of drought, heat stress, and fluvial and pluvial flooding. Analysis

shows that flooding particularly affects low-income areas, water points, and residential roads. Wau, on the other hand, is highly exposed to drought and heat stress. The lowest temperatures are found near the rivers and in the central area, which are characterized by relatively high tree coverage, while the highest temperatures are in the densely built-up areas. The number of days per year with a heat index exceeding 35°C is expected to increase by an average of 19 days. Many residents in Wau already experience severe heat stress, and with the anticipated increases in temperature and frequency, heat-related impacts are expected to escalate. Finally, Juba is exposed to fluvial flooding, extreme heat, and drought; especially, the low-lying areas in the north of the city (located close to wetlands) are highly prone to pluvial flooding.

Figure 8. Urban disaster risk profiles



Ranking	Urban Area	Hazard Type				Average Ranking
		Drought	Heat	Fluvial	Pluvial	
1	Aweil	5	3	3	2	3.25
2	Juba	1	1	13	1	4.00
3	Yei	3	6	4	4	4.25
4	Wau	2	2	9	6	4.75
5	Bor	9	5	8	3	6.25

Top Left: Pluvial flood risk in Juba, expressed in monetized damage. **Top Right:** Urban heat map of Wau. **Bottom**: Five urban areas in South Sudan with the highest aggregate disaster risk related to drought, heat, fluvial and pluvial flooding.

Source: WBG/Triple Line 2025.

South Sudan's urban disaster risk landscape is changing, driven by climate change and inadequate urban growth. Climate-induced changes in rainfall are increasing the likelihood of extreme rainfall and flood events, while rising temperatures and higher frequency of days with extreme heat are exacerbating urban heat stress. However, disaster risks are even more significantly determined by rapid and inadequately planned urbanization related to the encroachment of settlements in hazard areas. As unplanned development expands, pervious surfaces decrease, and ad hoc drainage or diversion measures are put in place, rapid and severe flooding becomes more likely in low-lying areas (WBG 2026a).

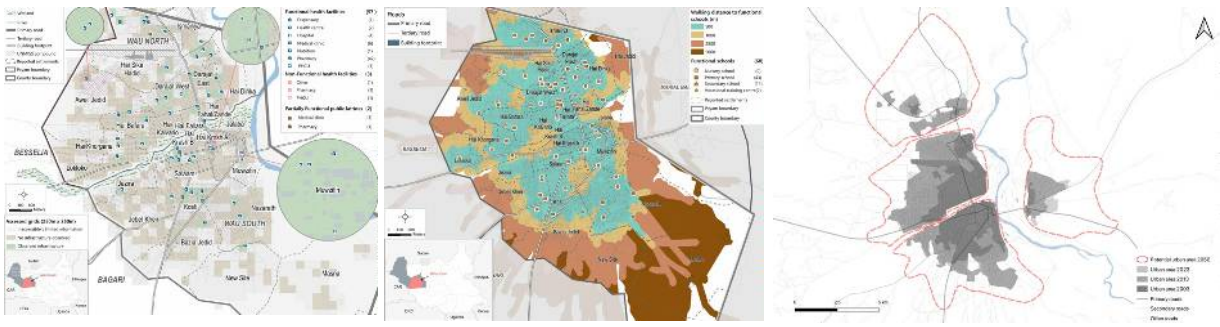
Capacities for effective disaster risk management (DRM) and emergency response are limited. Urban areas almost entirely lack functional urban disaster risk reduction (DRR) measures. Where in place (for example, around historical centers), dikes or other flood protection are outdated and poorly maintained, offering limited protection against flash or riverine flooding. Detailed hazard information or disaster risk assessments, as prerequisite for risk-informed urban development, are missing in most urban areas. Similarly, hazard-specific response capacity is severely limited as key government institutions are heavily dependent on humanitarian and development partners and lack essential equipment, including boats, pumps, and rescue tools. Especially, urban firefighting is characterized by a chronic lack of operational preparedness, with no functional fire response capacity outside Juba (WBG/JBA Consulting 2025).

Underdeveloped Urban Infrastructure and Services

South Sudan's cities and towns began from a very low infrastructure base and, amid rapid growth and recurrent fragility, have fallen further behind, resulting in major and uneven service gaps. Decades of conflict and destruction, combined with chronic underinvestment and rapid urban population growth have resulted in one of the most pronounced infrastructure deficiencies in the world. Main towns (especially Juba) have pockets of functioning services, usually located around the centers, whereas most urban residents face major gaps across all sectors: water, sanitation, electricity, solid waste management (SWM), roads, health, and education. Although access to basic services is generally higher than in rural areas, the rapidly growing urban fringes show significantly lower coverage.

Functionality assessments reveal the gaps and barriers to accessing basic urban infrastructure and services. A functionality assessment of Wau (REACH/IMPACT 2024b) indicates relatively good coverage of health facilities of which only three were not functional, although 65 percent of functional facilities have no access to water, and 40 percent have no access to electricity. Similarly, there is appropriate coverage with waterpoints, even in the peripheral areas (Figure 9). However, 40 percent of all waterpoints are dysfunctional and out of use.

Figure 9. Access to basic infrastructure and services in Wau Town (Western Bahr el Ghazal)



Left: Location of health facilities and service gaps. **Middle:** Walking distance to functional schools **Right:** Expansion of urban area, 2003–2050.

Source: REACH/IMPACT 2024b.

Urban infrastructure and services are often provided through localized and makeshift solutions. Network-based services (such as connections to piped water or citywide electricity grids) are nonexistent in smaller urban areas. Where they do exist, they have limited geographic coverage or are not functional. The example from Wau shows that services are typically provided through localized and makeshift solutions—of 260 functional water points, 114 are wells (mostly unprotected), 85 are boreholes, 25 are water kiosks or water yards; only 20 water points are connected to public taps. Similarly, access to energy is low. Though significantly higher than in other secondary cities and towns, access is mostly provided through off-grid solutions (solar panels, generators). Despite their limitations—in the absence of larger investments in trunk and grid infrastructure—such localized and off-grid solutions can be effective in reaching underserviced areas.

Nongovernmental actors play a critical role in urban service provision. Schools, health, water, sanitation, and hygiene (WASH) and other basic infrastructure facilities are often developed and operated by humanitarian agencies, churches, and NGOs. Especially in refugee and IDP camps, basic services are overwhelmingly provided by nongovernmental actors—in some instances resulting in situations whereby forcibly displaced populations have better access than host and resident populations.[13] The private sector also plays an outsize role in basic urban service delivery, largely because government and municipal systems are underdeveloped and unreliable. In many urban areas, water trucks are the dominant mode of supplying safe water. These, mostly small-scale, private operators (some informal and some registered businesses) fill trucks from boreholes, river intakes, or privately operated treatment plants, then sell water by the jerrycan or drum.[14]

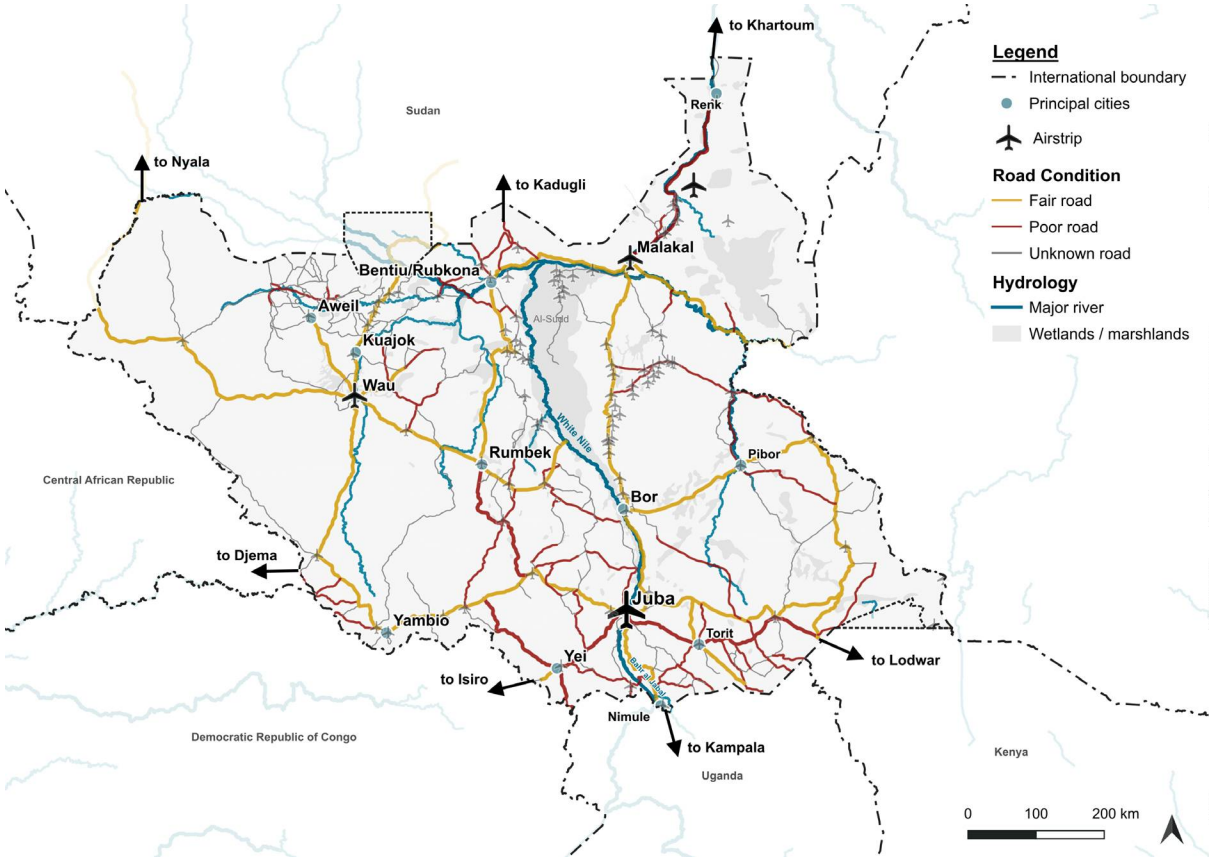
Poor Connectedness

South Sudan is strategically located at the heart of east-central Africa; however, its regional connectivity is hampered by poor transport infrastructure, limited trade facilitation, and insecurity along key corridors (Figure 10). The country is landlocked and heavily reliant on imports of fuel, manufactured goods, and foodstuffs, yet cross-border road links to Uganda, Kenya, Sudan, and Ethiopia are in poor condition and seasonally impassable. Limited border infrastructure, high transaction costs, and cumbersome customs procedures further constrain trade flows. This dependency on fragile and expensive regional supply chains exposes urban markets to price volatility and supply disruptions, particularly during conflict or flooding that cuts off key trade routes (WBG 2025a).

[13] Neighborhoods hosting large populations of displaced persons also have the potential to link hosting persons in poverty with local authorities and humanitarian aid actors. This is because when IDPs are in gathered settings, they have an increased likelihood of being identified and targeted as beneficiaries by humanitarian actors. This has the potential to lead to a combination of two outcomes. First, depending on the intervention, it could cause resentment if impoverished hosts are not benefiting (for example, not receiving food distributions) and competing for resources. Examples of such competitions might include longer lines at health clinics or water pumps. However, cooperation might also be achieved. For example, host and displaced persons mutually benefit from increased service (for example, increased access to water and sanitation services, increased employment, training, education, and market activity—job training, food distribution, and so on) (Alix-Garcia et al. 2018; Bilgili et al. 2019).

[14] Many urban dwellers are highly dependent on water trucks, which are often the only source when piped systems break down or do not exist. This presents a range of challenges: Prices fluctuate with fuel costs and road conditions; quality control is inconsistent; there is often no regulation on water safety beyond humanitarian-managed points; and service is biased toward neighborhoods that can pay, leaving poorer areas dependent on unsafe sources.

Figure 10. National and regional transport networks in South Sudan



Source: World Bank / AICD South Sudan Roads, 2009; HydroRIVERS / HydroSHEDS; OurAirports aviation points; author digitization of indicative corridors and cross-border links.

Note: Road condition and air access are indicative only and may not reflect current passability, operational status, seasonal constraints, or security conditions.

Road networks linking South Sudan's major towns are sparse, mostly unpaved, and vulnerable to seasonal flooding and conflict-related damage. Long travel times and unpredictable road conditions discourage investment and limit the movement of goods and people between cities. Moreover, informal roadblocks and local levies add to the cost of transport, creating multiple layers of fees that drive up prices for consumers and reduce competitiveness for producers. The lack of reliable intercity connectivity prevents towns from functioning as a coherent urban system, limiting opportunities for specialization, trade, and shared services between them.

Agricultural supply chains between rural producers and urban consumers are underdeveloped, with poor feeder roads, limited storage, and a lack of organized wholesale markets. Many peri-urban and rural farmers struggle to transport produce to towns before it spoils, leading to high post-harvest losses and dependence on imported food in urban areas despite abundant agricultural potential in the countryside. Weak rural–urban linkages also reduce opportunities for rural income growth and urban food security, while limiting the development of agro-processing and other value-added industries that could create jobs in both rural and urban areas (UN-OCHA 2024; UNOPS 2024).

Within towns and cities, limited road networks, poor maintenance, and the absence of formal public transport

systems severely constrain mobility. Many neighborhoods—especially informal settlements on the urban fringe—are connected to city centers only by narrow dirt tracks that become impassable in the rainy season. The lack of affordable, reliable transport forces residents to walk long distances to access jobs, schools, and markets, reinforcing spatial inequality and limiting economic participation. For women, children, and people with disabilities, mobility barriers also translate into reduced access to health services, education, and safety.

Connectivity challenges remain significant, though the landscape is evolving. While digital access has historically been constrained by sparse coverage, high costs, and concentration of broadband services in a few urban centers, recent expansion of satellite-based solutions—such as Starlink—has begun to extend internet access to some rural and underserved areas. However, these services remain relatively expensive and unevenly distributed, limiting their widespread adoption. Persistent power shortages continue to hinder the reliable operation of information and communication technology (ICT) infrastructure, and poor road access to outlying towns complicates network maintenance and service delivery. As a result, many businesses, service providers, and households still face barriers in effectively using digital tools for market access, financial transactions, education, and governance. Overall, despite emerging improvements, weak and unequal digital connectivity continues to constrain the development of modern service sectors, restrict access to information, and reduce the efficiency of humanitarian and development operations that increasingly depend on real-time data exchange.

Prevalence of Informality

South Sudan's towns and cities are dominated by economic informality, where most enterprises operate outside formal registration systems. Small-scale trade, transport services, artisanal production, and informal markets form the backbone of urban economic activity, largely cash based and only loosely connected to formal financial systems. While this results in limited collection of license fees and taxes, informality cannot be understood solely as a governance gap. It also reflects a historically grounded mistrust of the state, which many communities have experienced as extractive and unreliable. In this context, remaining informal is often a rational and, at times, preferred strategy—allowing individuals and communities to retain autonomy, reduce exposure to predatory practices, and navigate economic uncertainty on their own terms (Banerjee and Duflo 2012).

At the same time, the predominance of informality shapes the structure and prospects of urban economies. While these activities provide essential livelihoods, their unregulated and small-scale nature can constrain productivity, limit access to finance, and make it difficult for enterprises to grow or integrate into wider markets. Many microenterprises remain survival oriented, with limited capacity to scale or diversify. This contributes to an urban economy heavily oriented toward non-tradable goods and services, where demand is largely confined to the city and its immediate surroundings. As supply increases in such sectors, prices and wages can be driven down, reinforcing low-income equilibria. Thus, informality both sustains livelihoods and reflects adaptive responses to state fragility while posing longer-term challenges for broad-based economic transformation (Lall et al. 2017).

There are several structural barriers that prevent cities from translating urban growth into productive employment. Weak infrastructure—particularly unreliable electricity, poor transport links, and insufficient serviced land—raises costs for businesses and limits competitiveness and the ability to diversify city economies toward tradables, which are better placed to deliver more productive job opportunities. Regulatory uncertainty, overlapping mandates, and burdensome licensing fees and taxation discourage formalization and investment. In South Sudan, business licenses applications are accepted only in Juba, which puts an additional burden on businesses located elsewhere. Access to finance is extremely limited, with few banking facilities and high collateral requirements, leaving most small firms and entrepreneurs excluded from the formal banking system and access to credit. Combined with political instability and insecurity, these conditions make South Sudan's business environment among the most challenging in the region, limiting private sector development and job creation.

Urban residents therefore rely heavily on informal livelihoods that combine rural and urban strategies. Even within city limits, households often cultivate small plots while engaging in casual labor, motorcycle taxi services, water trucking, or home-based enterprises. Displaced populations, returnees, and migrants are particularly dependent on these subsistence activities and lack the skills, capital, or documentation to access formal work. Furthermore, these informal livelihoods are precarious, seasonal, and highly sensitive to shocks—from flooding and eviction to market disruptions—leaving large parts of the urban population trapped in low-productivity activities. The youth face particularly stark challenges, with limited education and job opportunities, which also contributes to conditions that push young men toward gangs or armed groups, reinforcing urban fragility.

Available evidence suggests that while urban inflows are clearly generating economic activity and supporting the expansion of Juba's urban economy, these gains remain uneven and largely informal and have not yet translated into broad-based productivity growth or inclusive improvements in living standards. Juba has experienced exceptionally rapid population growth which has underpinned its expansion as the country's primary economic hub. The concentration of government institutions, humanitarian agencies, and businesses in the capital has created a wide range of livelihood opportunities, including small businesses, trade, and service provision, alongside employment linked to the public sector and aid economy. Migration to Juba is also partly motivated by perceived access to better economic opportunities and services, reinforcing the role of inflows in driving urban economic activity. However, this growth is largely informal, with a narrow base. Nationally, the informal economy accounts for about 34 percent of GDP and over 60 percent of nonagricultural employment, with even higher shares among migrant workers (around 80 percent in informal employment) (Chipanda 2026). While many households—including IDPs—are economically active, most remain "productive but poor," with only a minority achieving self-reliance (WBG 2019). At the same time, high levels of poverty, unemployment, and food insecurity persist even in urban areas, including Juba, reflecting the limited translation of economic activity into improved welfare (UNDP 2020b).

Evolving Governance Structures and Institutions

South Sudan's governance structures and institutions remain weak and fragmented, undermining the effective management of rapid urbanization. Since independence, the country has struggled to establish a coherent legal and institutional framework for urban development. Key legislations such as the Land Act, Physical Planning Act, and Local Government Act (LGA, 2009) are outdated, inconsistently enforced, or yet to be fully operationalized. The absence of updated bylaws, building codes, and urban planning regulations has created an institutional vacuum where overlapping mandates, customary land tenure, and ad hoc decision-making dominate. This weak regulatory environment limits transparency and predictability, discourages investment, and fuels disputes over land and resource allocation.

Institutional capacity at both the national and subnational levels is severely constrained. Core ministries such as MLHUD and municipal governments lack sufficient staffing, technical expertise, and financial resources to plan, regulate, and deliver urban services. Fiscal decentralization is underdeveloped, with cities and towns heavily reliant on unpredictable transfers from the national government and weakly coordinated revenue systems. Municipal finance systems are often manual, prone to leakage, and unable to capture the growing urban tax base. This has constrained the ability of local governments to provide basic infrastructure and services, leading to growing frustration among urban residents and a widening gap between state institutions and citizens.

Urban governance is further complicated by South Sudan's fragile political settlement and localized power dynamics. Cities and towns are arenas of competition between state actors, customary authorities, and informal providers of services and security. Political and military elites frequently capture urban land and resources, while displaced populations, returnees, and marginalized groups struggle for recognition and access. Customary authorities play an essential but often unregulated role in land administration, leading to overlapping claims and tenure insecurity. These dynamics exacerbate urban fragility, with conflicts over land and exclusionary governance arrangements reinforcing inequalities and undermining social cohesion.

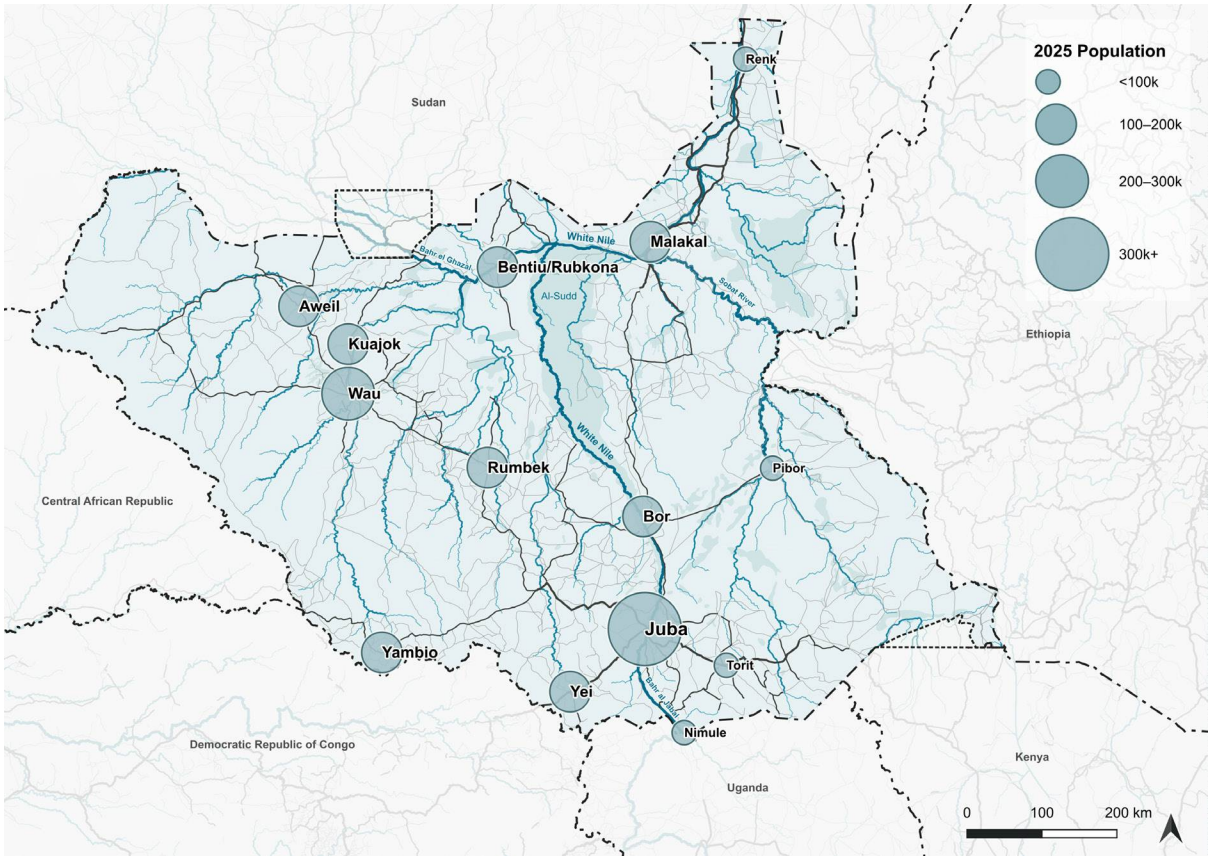
Despite these weaknesses, there are opportunities to strengthen institutions and governance frameworks. Ongoing reforms, such as the planned update of the Land Act, the development of a National Urban Development Strategy, and the adoption of resilient building codes, provide entry points for building more effective and accountable governance structures. Strengthening municipal finance; investing in capacity development; and clarifying institutional roles between national, state, and local governments will be critical. Equally important will be embedding participatory and inclusive governance approaches that involve civil society, women, and youth, ensuring that urban development responds to the needs of South Sudan's diverse urban populations.

South Sudan as a Multi-Scalar Urban System

South Sudan's urban landscape can be understood as a multi-scalar system of cities, with urban functions distributed across a hierarchy of local towns, regional centers, and the national capital. Juba, the country's primary city, sits at the top of this hierarchy, functioning as

the political-administrative capital and the primary economic, financial, and logistical hub. Most of the population and urbanization is located in Juba, followed by Wau and many state capitals and strategically located other secondary cities and towns such as Renk (Figure 12). Juba monopolizes higher-order services, including specialized health care, tertiary education, and international trade and diplomacy. The nation's secondary cities and 10 state capitals, such as Wau, Malakal, and Yei, are heavily dependent on Juba for administrative coordination and access to critical services. This dependency is a direct result of a highly centralized governance model and historical investment patterns that have favored the capital. The resulting network is a fragile hub-and-spoke system where weak and often insecure transport corridors restrict the flow of goods, services, and people, limiting the functional autonomy of subnational urban centers and restricting the development of a more integrated and resilient national urban system.

Figure 11. Map of South Sudan showing urban areas with population sizes based on 2025 estimates indicated by circle size, along with major roads and waterways



Sources: Population: World Bank estimates; Infrastructure and geographic features: OpenStreetMap; Sudd: Food and Agriculture Organization (of the UN).

Secondary cities are emerging as crucial hubs for service decentralization and absorbing crisis-driven population movements and performing a vital function in a country marked by fragility and displacement. Lessons from other fragile contexts highlight the role of these secondary urban centers as more than their formal administrative functions. Cities such as Wau, a regional administrative center for western South Sudan; Renk, the border town connecting

to Sudan; and Aweil, a critical agricultural trade hub serve as the first point of arrival and refuge for large numbers of IDPs as well as returnees and refugees. This crisis absorption role is especially strong in urban areas like Bentiu, which has transformed into a major hub for humanitarian operations and hosts one of the world's largest IDP camps, and Bor, which has absorbed significant populations displaced by both recurrent conflict and devastating floods. By hosting displaced populations and providing a platform for the delivery of essential humanitarian services, these cities are de facto centers for crisis management. However, this function lacks significant planned investment, placing a strain on their already limited and overstretched infrastructure, weak municipal services, and limited local resources, both for displaced and host communities. This both exacerbates social tensions and heightens vulnerability for refugees, IDPs, and the host community.

While South Sudan's cities concentrate drivers of fragility such as land disputes and youth unemployment, they also harbor significant sources of resilience that can be leveraged for stabilization and recovery. Urban fragility is driven by a complex interplay of national and local factors, including intercommunal violence often exploited by political elites, a lack of formal economic opportunities for a large and growing youth population, and chronically weak governance that has eroded public trust and undermined the social contract. Most factors of fragility are deeply gendered; women and girls often face heightened risks of gender-based violence in poorly lit, underserved neighborhoods and have less access to formal employment, pushing them into more precarious livelihoods. These drivers manifest differently across South Sudan's urban contexts (Table 4), from the severe conflict-related damage in Malakal to the chronic intercommunal violence and cattle raiding that destabilizes Pibor and its environs. However, these same cities are also sources of profound resilience. This resilience is rooted in adaptable livelihoods such as subsistence agriculture, fishing, and petty trade, which sustain populations when formal markets fail. It is also found in the diverse ethnic trading networks in Wau, which facilitate commerce across community lines, and the productive agricultural hinterlands that support cities like Yei and Aweil, providing crucial food supply. Furthermore, customary and community-based organizations, along with women's groups, often provide foundational local governance, mediating disputes and fostering social cohesion where formal state institutions are absent, ineffective, or distrusted.

Table 4. Drivers of FCV and sources of resilience at the national, subnational, and city levels in South Sudan[15]

FCV Drivers and Sources of Resilience at the National and Subnational Levels	
FCV Drivers	- Intercommunal violence is influenced by several factors, often advantageously leveraged by elites, creating a bidirectional link between local and national conflict dynamics. - Lack of investment in social and economic opportunities excludes youth from participation, rendering them vulnerable to cooptation, and reduces the opportunity cost of violence. - Lack of service and infrastructure provision has eroded civilian expectations of the state and reduced incentives for political leaders to build capacity in governance.

[15] Based on WBG (2021b) and WBG (2022a).

Sources of Resilience	- Traditional and customary authorities have maintained flexible and participatory characteristics in the absence of formal, trusted alternatives while community organizations have been foundational to local-level governance and strengthened local ownership. - Adaptable livelihoods, notably farming, fishing, and small business/casual labor, provide critical economic and social benefits. - Customary, community, and ecclesiastic organizations have the potential to foster social cohesion by engaging with communities at the local level and play an important role in mediating local disputes. - Women play a significant role in peacebuilding efforts and supporting social cohesion and reconciliation. - Relative high degree of mobility aids communities to flee violence, escape floods, and tap social networks. - Social networks, and the capital within those networks, provide critical support in times of hardship.

Urban Area	Drivers of Fragility	Sources of Resilience
Juba	- Pervasive land disputes fermenting local grievances - Youth unemployment, gang violence, and social exclusion	- Concentration of economic activities (market and center for imports/distribution) - Collection of local revenues - Seat of central, state, and local government as a basis for administration and governance
Wau	- Periodic intercommunal conflict - Political grievances resulting in armed conflict and factional violence	- Diverse ethnic trading networks - Agricultural hinterland supporting food supply - Strong social and family networks among the communities
Bor	- Significant rounds of conflict (1991, 2013, 2014, for example) have left historical grievance and can be used as a mobilizing force - Prone to conflict over land and resources	- Strategic location on the Nile River with port and good road and market access to Juba - Fertile floodplains and riverine areas provide essential pasture for cattle and fishing
Yei	- Conflict-driven displacement - Insecurity disrupting farming and trade	- Fertile farmland and strong local agriculture - Cross-border market networks
Kuajok	- Political and military elites hail from the area, making it vulnerable to national contestations - Flood-prone with seasonal access challenges	- Strong cattle-based pastoral economy - Main market for both county and Warrap State
Rumbek	- Persistent communal violence and disarmament campaigns - Weak economic diversification	- Strong pastoral networks - Central geographic location in Lakes region
Bentiu	- Legacy of conflict with high levels of displacement - Widespread flooding (quasi-permanent) - High reliance on humanitarian assistance for basic service delivery (against reduced funding) - Transition of PoC sites to IDP camp	- Flood protection and reclamation of settlement land providing room for camp-based IDPs - Unity State strategy and implementation plan for permanent solutions - Port and market access - Large presence of humanitarian/ development partners (coordinated assistance)
Aweil	- Cross-border cattle migration amplified by conflict in Sudan leads to tension with local communities - Historically, tensions focused on access to water points and the destruction of crops	- Productive agricultural hinterland with strong regional trade networks and proximity to Sudan encourages market activity historically - Largely mono-ethnicity (Dinka Malual) mitigates likelihood of intracommunal violence

Urban Area	Drivers of Fragility	Sources of Resilience
Malakal	- Interethnic grievances exist between Padang Dinka and Shilluk communities over control of Malakal Town. - Conflict in 2013 has induced large-scale displacement and destruction of Malakal Town - Recent handover of PoC sites to the government by the United Nations Mission in South Sudan (UNMISS) may be considered as a potential risk	- River transport and trading networks - Agricultural floodplain economy - Functional ties due to proximity between Malakal Town and former PoC sites
Yambio	- Road isolation limiting market access - Sporadic armed group activity	- Fertile land and diverse crops - Strong local farming economy
Renk	- Historical cross-border tensions and cattle migration - Substantial inflow of refugee populations from Sudan straining local services - Significant arms proliferation	- Strategic border location and river access (cross-border trade with Sudan) - Productive irrigated farming areas
Nimule	- Smuggling and informal trade pressures - Infrastructure strain from heavy transit	- Border town along main transport route to Juba - Active cross-border commerce
Pibor	- Due to practice of cattle raiding into Jonglei, threat of revenge attacks - Isolation with poor road access - Significantly affected by seasonal flooding	- Strong pastoralist social networks - Community coping strategies
Torit	- Cyclical conflict between cattle keepers and local communities - Interruptions to agriculture and additional practices due to cattle herds (grazing, trampling, and so on)	- Agricultural hinterland - Proximity to regional trade routes

Targeted policy reforms and strategic investments can transform these urban centers from sites of vulnerability into engines of growth, stability, and resilience. Rather than viewing the current trajectory of unplanned, crisis-driven urbanization as something to be reversed, it is more realistic to recognize that cities will continue to grow—driven by conflict, climate shocks, and the pull of economic opportunity—and that the key challenge is to channel this growth toward tangible and widely shared development dividends. Adopting clear and implementable policies on urban land management and planning, strengthening both formal and customary justice and dispute resolution systems, and investing in climate-resilient basic infrastructure could unlock significant economic potential and improve municipal revenue collection. For example, by strengthening its role as a trade and logistics gateway with targeted infrastructure investments and streamlined customs procedures, Nimule could anchor economic growth for the entire southern corridor, benefiting producers and consumers alike. Likewise, targeted investments to support the private sector and improve connectivity through road rehabilitation could unlock the agricultural potential of Wau, positioning it as a hub for agro-processing and value chain development. Understanding the potential of South Sudan's cities as engines for job creation, inclusive growth, and stability can foster the foundational reforms and targeted investments needed to build a more resilient, equitable, and prosperous urban future.

III - Deep Dive: Urban Conflict and Fragility

Key Messages

- **South Sudan's urbanization has been shaped by conflict**, producing 'forced urbanization' on city outskirts while hollowing out many urban cores. Conflict-driven displacement has fundamentally altered migration patterns and spatial development across cities and towns.
- **Urban development is constrained by national fragility dynamics and local drivers** such as spatial inequality, land conflict, crime, gang activity, and limited opportunities for youth. Both national- and city-level factors reinforce each other to create complex and persistent urban fragility.
- **These intertwined pressures result in high levels of 'everyday fragility' for residents**, who face insecurity, poor services, and frequent small-scale shocks such as floods, fires, and food shortages. Urban neighborhoods often feel ungoverned or poorly governed.
- **The complexity of South Sudan's urban fragility stretches local institutions** beyond typical capacity and financing challenges, weakening already fragile social compacts between citizens and the government. Local governments struggle to respond effectively to rapidly growing needs.
- **Yet cities remain places of refuge and opportunity**, and reducing urban fragility will require tailored, city-specific approaches that address both local drivers and national-level political and economic conditions. Improved services, youth livelihoods, land management, and safety measures will be most effective when paired with broader reforms targeting the country's structural drivers of fragility.

Introduction

Years of conflict and displacement, including waves of peace, have reshaped South Sudan's cities. During the 2013–2016 civil war, following initial violence in Juba (December 2013), urban centers like Bor, Bentiu and Malakal became battlegrounds, with violence later spreading to Wau and Yei triggering both displacement and destruction. By 2017, 1.8 million people were internally displaced.

The net impact on cities and towns was complex—differing from town to town and over time. As insecurity increased in some towns, urban cores were hollowed out as residents were displaced—some to rural regions and others to UN PoC camps on the outskirts of the town (for example, in Juba or Malakal) driving a changed urban spatial structure. As conflict declined, residents did return to some cities and towns and urbanization resumed. More recently, since civil war broke out in Sudan in mid-April 2023, refugees and returnees escaping conflict in Sudan have continued to move to urban areas, placing pressure on infrastructure and services in hosting towns such as Renk and Aweil. Internal displacement therefore led to periodic depopulation and de-densification from some cities, while those displaced people

sought shelter and refuge in others driving significant urbanization. Within cities, conflict and displacement also led to significant changes in settlement patterns, as ethnic groups moved within or out of cities like Malakal, Wau, and Juba—often located in camps on the outskirts of cities.

Drivers of national fragility continued to shape urban areas, intensified by local factors, and resulted in complex urban fragility, albeit one with pockets of resilience. National drivers are visible in the elite capture of institutions, intercommunal violence, and limited opportunities for youth. Endogenous drivers of fragility including crime, gang violence, food insecurity, and land conflict are also present—posing significant challenges for urban residents and local policy makers. Sources of resilience, however, are also present. Cities and towns continue to attract South Sudanese citizens; poverty and access to services are better than in rural areas, as are perceptions of safety and security and social cohesion. Nevertheless, given the rapid urbanization, addressing these challenges while building sources of resilience will be critical for improving people's livelihoods, job creation, and service delivery; increasing the competitiveness of cities; and supporting urban residents' resilience to climate shocks.

This section summarizes the key drivers of urban conflict and fragility in South Sudan and outlines policy recommendations to address some of these urban challenges. It consists of three parts: (a) the analytical framework and the methodology used for the background research for this chapter, (b) the transformation of cities due to conflict in South Sudan, and (c) key exogenous and endogenous drivers of fragility in South Sudanese cities and their manifestation in people's lives. Policy recommendations are included in Annex III in this report.

Box 1. Urban fragility: analytical framework and research methodology

Fragile situations are characterized by "the combination of exposure to risks and insufficient coping capacity of the state, governance system, and/or communities to manage, absorb, or mitigate those risks" (WBG 2020a). The term is usually understood in conjunction with conflict and violence (together, FCV). Conflict refers to the use of violence by organized groups or institutions, sometimes including the state, to settle grievances or assert power. Violence, in this sense, refers to interpersonal, state, and criminal violence. The term fragility has been criticized for ambiguity, and for not being sufficiently attentive to how fragile states actually work (Boege et al. 2009; de Waal 2020; Hagmann and Hoehne 2009). Nonetheless, the term remains widely used in both academic and policy literature.

A city is said to be fragile when it is unable to fulfill its core functions owing to the manifestation of internal and external risks. On the other hand, a city is said to be resilient when it can maintain and potentially improve the delivery of its core functions before, during, and after exposure to shocks and stresses (Bosetti et al. 2016; Davis 2012; De Boer 2015; de Boer et al. 2016). *Urban fragility* remains difficult to measure, but it is usually characterized by a deterioration of the social compact between city authorities and residents or a subset of residents; a failure to deliver essential public services including basic municipal services, safety, and security; high levels of social, economic, and/or spatial exclusion (often on the basis of

ethnicity and race); and an inability of communities to manage or absorb shocks. Fragile cities are characterized by weak institutions; local authorities fail to mitigate these and other context-specific risks including those arising from environmental challenges, forced displacement, and rapid migration. *Urban conflicts* occur when organized groups and individuals use violence to settle grievances, access resources, or assert power. This could occur at a localized and community level or at a citywide level. It could occur in support of national political and power entities, in support of or call for citywide changes, or at a local level over a localized grievance or in parts of the city that are under-governed. It includes state and political violence (for instance, protests and interethnic and group-based violence). Cities may also be affected by a conflict that is unfolding in another region of the country or in a neighboring country, especially through forced displacement or disruption of trade and logistical routes. The third key concept is *urban violence* which refers to interpersonal violence, including criminal and gender-based violence. Fragility, conflict, and violence are often interconnected. For instance, conflict and violence can accompany national-level contestation for political power, as had occurred in Juba in 2013. Similarly, powerful political actors can and often do call on militia and gangs to support their claims to power. Needless to say, cities can remain fragile, even in the absence of open conflict and violence.

The drivers of urban fragility may be 'exogenous' or 'endogenous', and they manifest in the lives of urban residents as 'everyday fragility'. Exogenous drivers of fragility are external to the urban environment. They include the nature of the national political settlement, forced displacement (including conflict and climate refugees and IDPs), elite capture of institutions, the national macroeconomic context (including youth employment and unemployment), weak justice systems, and climate crises. Endogenous drivers of fragility are related to, and often overlap with, the exogenous drivers but are specific to the urban context. They include local governance arrangements, political violence and protest movements within cities, poverty and income inequality, spatial exclusion—especially in relation to services and jobs—conflict over land, and sexual and gender-based violence. The combination of exogenous and endogenous drivers of fragility manifest in the lives of individuals as 'everyday fragility'. For instance, the fear of violence can lead to spatial segregation (sometimes along ethnic lines) and altered daily routines—as reported by urban residents in Malakal. People may invest in security measures or adjust routes to avoid high-risk areas, incurring additional costs. Everyday fragility results in the loss of trust in institutions and can heighten the risk of small-scale disasters, such as fires or flooding, exacerbated by urban sprawl and poor governance. Everyday fragility is gendered—as insecurity has very different effects on women and men because of the different impacts on their livelihoods. For instance, the activities of gangs in peri-urban areas may affect women collecting firewood outside towns more negatively than men engaged in petty trade.

Displacement can be a significant outcome of fragility affecting urban spaces but also a driver of fragility in cities, especially because it increases the demands on resources for urban residents and may affect social cohesion and service delivery. Displacement—internal and the movement of refugees and returnees fleeing the conflict in Sudan—has had a major impact on urbanization in South Sudan. The analysis of displacement in this chapter follows the approach outlined in the World

Bank white paper titled 'Forced Displacement: An Agenda for Cities and Towns' (WBG 2021a). It emphasizes the need for a 'people in place' approach which focuses on *people*—the forcibly displaced and hosts—and *places* where they are located and institutions managing that place.

This chapter uses a mixed methods approach and draws on a review of literature; descriptive statistical analysis, especially of displacement-related datasets; interviews with key informants; geospatial analysis; and in-depth case studies of some cities. The detailed geospatial analyses focused on Wau and Malakal, with a particular focus on the drivers and manifestations of urban FCV in Malakal. The in-depth spatial case studies were of Bor and Bentiu and focused specifically on the effects of internal displacement on the cities. As with most fragile contexts, the statistical data available on urban contexts in South Sudan are limited. For instance, a census was last completed in 2008, before South Sudan's secession from Sudan, and while various efforts have been made to estimate the population (such as the 2021 Population Estimation Survey, published in 2023),[16] the results remain contested (Ting Mayai, 2023). In general, data on poverty and livelihoods remain extremely limited in South Sudan, with little or no data on employment and labor market outcomes, intra-household inequality, or disaggregation by gender. As a result, this chapter draws on multiple nationally representative surveys conducted by various international organizations.

Conflict and Displacement as Drivers of Urbanization in South Sudan

The roots of urbanization in South Sudan can be traced to the colonial period. Some of the first settlements, which became the precursors to South Sudanese towns, initially emerged during the expansion of the predatory slave and ivory trade and gained prominence during British colonialism. In the 1820s, Ottoman Egyptian rulers established the Turkiya colonial state in Sudan (Thomas 2015, 2017). Legal and administrative changes in Khartoum resulted in the mass displacement of farmers from lands located on the Nile's rich banks. Many of those displaced from their lands joined the slave and ivory trade funded by Sudanese and European merchants to the south (in modern day South Sudan) (Ahmed and Rahman 1979; Burton 1988). As merchants began to penetrate further into erstwhile southern Sudan, they created small settlements, which became administrative centers. By the 1870s, local merchants had become the de facto rulers of the districts which they traded with (Collins 1968). For instance, Rumbek was first established as a *zeriba*[17] by a European trader of some notoriety (Burton 1988). Wau also emerged in a similar manner. After the 1898 defeat of the Mahdist forces in Sudan and the establishment of the Anglo-Egyptian condominium in 1899, these former slaving stations were transformed into military and administrative headquarters by the British. Nonetheless, they remained associated with punitive British raids aimed at pacifying pastoral populations and continued to be avoided by many locals (Badiey 2014; Thomas 2015). Even Juba, the future capital, was only established

[16] Completed by the National Bureau of Statistics (NBS), in collaboration with the United Nations Population Fund (UNFPA) and other agencies.
[17] Fortified encampments used in nineteenth-century Sudan for ivory and slave trade (cf. Johnson 1992).

in the 1920s, initially as a military mission station. Customary rule through native administrations was established alongside colonial law—a form of legal pluralism which continues in practice in some matters such as land, till date.

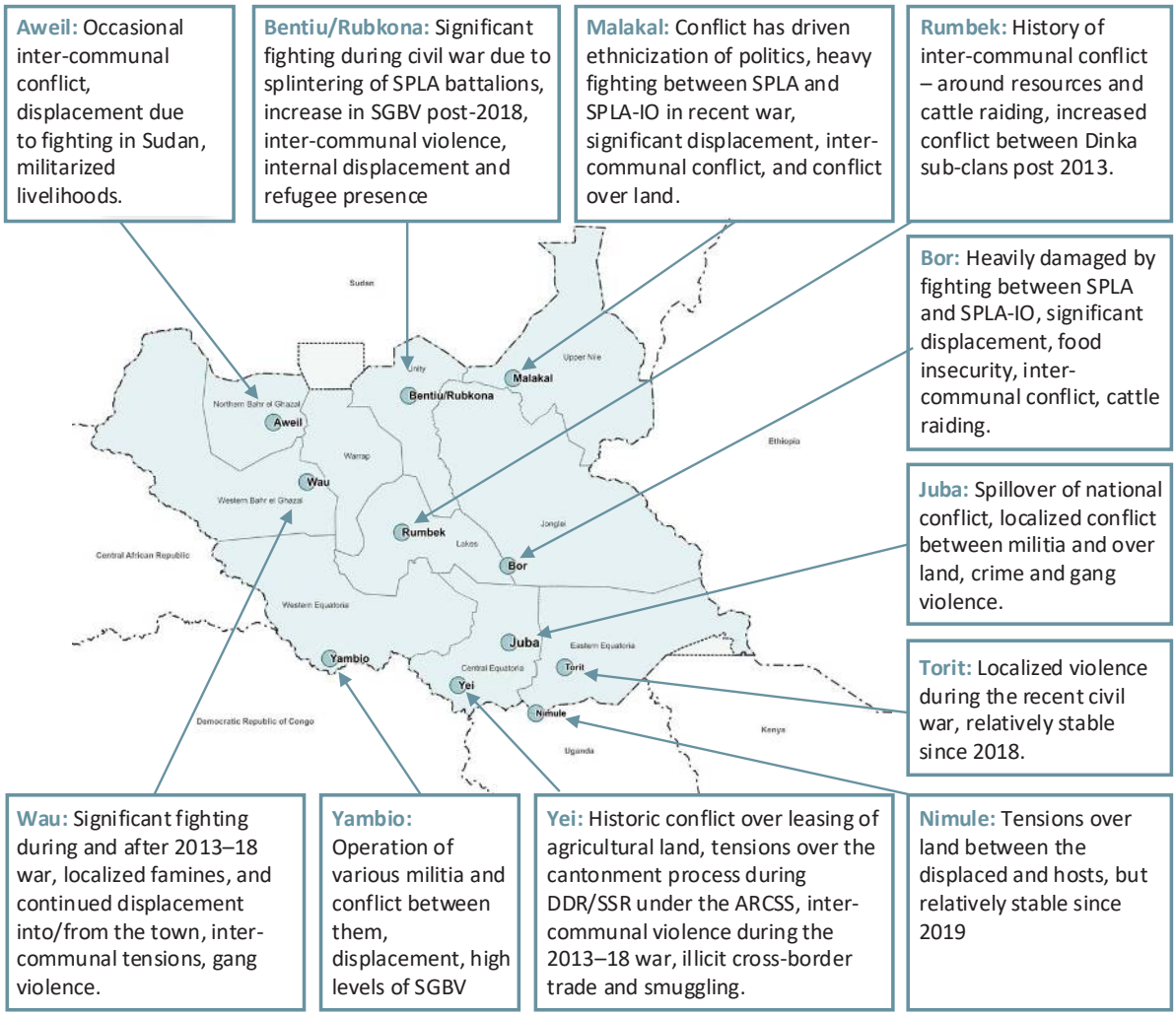
Urbanization in South Sudan has always been shaped by patterns of conflict. It took place slowly in southern Sudan, and even by 1955, only 2 percent of the population lived in towns (Henin 1963). During the Second Sudanese Civil War (1983–2005) fought between the Sudanese Armed Forces (SAF) and the SPLM/A, many of the urban centers were heavily contested, with transport, commerce, and trade being affected. Many towns experienced significant outward migration during this period though the overall urban population increased. Large numbers returned after the signing of the CPA in 2005, especially in the lead-up to independence in 2011. Nonetheless, there were sporadic instances of displacement even during this period, caused by violence and food insecurity. The multiple waves of displacement are a key reason for persistent land conflicts in the country.

After conflict broke out in Juba between the Sudan People's Liberation Army (SPLA) and the SPLA-IO in December 2013, rates of urbanization declined further. They were already slowing before the outbreak of conflict, but population outflow from urban centers increased in 2016–17, when the Agreement on the Resolution of the Conflict in South Sudan (ARCSS) collapsed, and fighting spread through the country. In September 2018, another peace agreement was signed between the conflict parties, known as the R-ARCSS, followed by the formation of the Transitional Government of National Unity (T-GONU). Not all cities were equally affected by the conflict. While many of these cities have been relatively stable since the end of conflict, new challenges have emerged in the form of land conflict, criminality, and gang violence (see snapshot in Figure 12).

IDPs and returnees increasingly settle in or close to urban settlements, accelerating urbanization trends. In September 2024, more than one-quarter (539,484; 27 percent) of all IDPs lived within 10 km of major cities, with the largest number of IDPs living near Bentiu, Malakal, Juba, and Bor (Figure 14). Furthermore, 13.6 percent of all IDP returnees in South Sudan are located within 10 km of urban centers.[18] The latter were joined by more than a million returnees from abroad as well as economic, disaster, and climate migrants driven by rural economic distress, continued insecurity, and widespread land dispossession by elites (Craze 2024; Thomas 2015).

[18] In 2024, there were nearly 1.85 million IDPs in South Sudan, while 1.84 million IDPs had returned to their place of origin (IOM 2024b).

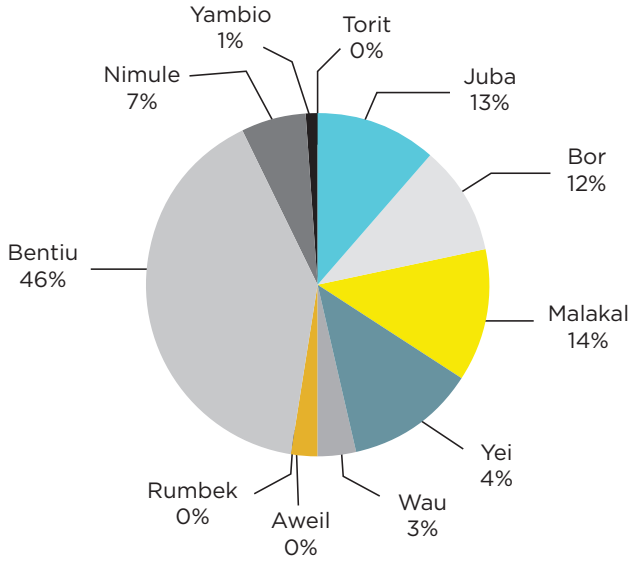
Figure 12. Snapshot of fragility and conflict in South Sudanese cities



Source: Original figure for this report using data from the United Nations Office for the Coordination of Humanitarian Affairs (UN-OCHA) and CSRF (2026).

Note: DDR = Disarmament, Demobilization and Reintegration; SGBV = Sexual and gender-based violence; SSR = Security Sector Reform

Figure 13. IDPs living within 10 km of major towns as a proportion of all IDPs



Source: Original calculation based on IOM (2024b).

More recently, South Sudan's cities and towns are increasingly hosting refugees and returnees from Sudan, again affecting the complex urbanization process. Renk Town has emerged as the primary transit center and temporarily accommodates refugees from Sudan before their relocation to the Maban refugee camp or the returnees' onward movement to their areas of origin within South Sudan or elsewhere. As of June 2025, 1,182,373 individuals had moved from Sudan to South Sudan. Of these, 806,654 are South Sudanese nationals (or refugee returnees), while 369,500 are Sudanese nationals.

South Sudan's urbanization is deeply shaped by interconnected migration systems involving IDPs, returnees, and refugees, rather than linear rural–urban movement. National data show the scale and overlap of these dynamics: Over 2 million IDPs and more than 2–3 million returnees are distributed across thousands of locations, many of them urban or peri-urban. Evidence indicates that mobility is often cyclical and multi-sited, with households moving between displacement sites, towns, and rural areas over time rather than settling permanently. For instance, in areas such as Yei and other conflict-affected towns, IDPs frequently live within host communities rather than in camps while maintaining ties to places of origin and returning when conditions allow (GoSS 2024). Studies on displacement and return further highlight that many South Sudanese adopt hybrid livelihood strategies, where some household members remain or return to rural areas for agriculture or asset protection, while others stay in towns to access services, markets, or humanitarian assistance. This is reinforced by gendered mobility patterns, where, for example, men may remain in rural areas while women engage in urban informal economies, illustrating functional household splitting across locations. The recent influx of returnees from Sudan has intensified these dynamics, with populations settling in towns such as Juba, Wau, Bentiu, Rubkona, and Renk while maintaining cross-border and rural linkages.

In summary, conflict and displacement have caused significant changes to settlement patterns and social cohesion dynamics within cities, though there are contextual variations. Displacement trends have remained consistent, even as the number of conflict events have declined—pointing to the role of rural dispossession and insecurity driving movement to cities while pointing to urban areas as a source of resilience for the country (Craze 2023, 2024).

The Drivers of Urban Fragility in South Sudan

The national drivers of fragility, including the militarized and elite-dominated governance system, intercommunal violence, a weak justice system that perpetuates impunity and violence, and limited socioeconomic opportunities, shape and manifest in urban areas. Local rivalries and tensions among ethnic groups are instrumentalized by national political elites in the pursuit of their political and security interests. The absence of an effective justice system has meant that there is little oversight of or redress against elite corruption—and the absence of efficient conflict resolution and grievance redress mechanisms at the local level has contributed to inter- and intracommunity disputes (including over land) (Ibreck 2019). Limited socioeconomic opportunities have contributed to the importance of employment in the security sector (especially among men and boys), as well as economic precarity and food insecurity—especially for poorer urban residents. These exogenous drivers of urban fragility also affect the functioning of institutions (especially those responsible for urban governance, security, and service delivery), by shaping

patterns of conflict within the city. Most of these exogenous drivers of urban fragility cannot be resolved through urban policies.

Cities and towns also experience endogenous drivers of fragility, most notably increased gang violence and crime; disputes and conflicts over land; a breakdown in social cohesion; spatial, social, and economic exclusion; and livelihoods crisis. Along with the national drivers, these result in heightened experiences of everyday fragility for urban South Sudanese. Crime and gang violence have a significant impact on livelihoods. Conflicts over land are instrumentalized by political elites along communal lines, further eroding social cohesion that is already under pressure in some cities due to rapid inward movement of migrants and the displaced. Limited access to education, vocational training, and economic opportunities reduces the opportunity cost of crime and violence and leaves young people susceptible to instrumentalization by political and military elite. Each of these endogenous drivers of fragility are discussed below.

The urban security situation appears to be improving despite increased gang violence and criminality. Armed Conflict Location and Event Data (ACLED) suggest that open conflict as measured by conflict events and civilian deaths have declined in South Sudan after the signing of the R-ARCSS in September 2018, and after the formation of the T-GONU (Figure 15). These fatality figures should not be taken at face value, or as indicative of peace. This is because the data are 'noisy and muddled' (Kalyvas 2006; Spagat et al. 2009; Williams 2016). More importantly, in South Sudan, data on conflict and deaths can also be misleading in the absence of context (Dawkins 2021).[19] Nonetheless, the broader findings on the security context are borne out by multiyear surveys on perceptions of peace, which suggest that South Sudanese women and men are feeling more secure than a few years ago (Figure 16).[20] In particular, and compared to rural areas and IDP-hosting areas, both men and women living in urban areas feel more secure (Dawkins et al. 2023). Despite this, the overall security context remains extremely fluid, with recent changes increasing tensions within the ruling coalition.[21] Criminality, gang violence, and cattle raiding appear to have become the primary sources of everyday insecurity for residents.

The complex interplay between national and local drivers of fragility manifests in the emergence of youth gangs. Some are connected to elite and militarized patronage networks and are reportedly deployed as part of protests and other acts of strategic violence in urban areas. They also have easy access to small arms because of the proliferations of weapons throughout the country. Amid a widespread youth livelihood crisis, informal gangs reportedly act as a replacement for lost or ruptured kinship networks, providing social support and resources needed for survival (Felix da Costa 2024; Kindersley 2022; Luedke 2020). Much of this flows from the overwhelming securitization of livelihoods in South Sudan. Since there are few opportunities for waged labor, and little investment capital for small businesses, there are limited personal possibilities for most of South Sudan's young residents beyond maintaining a basic and often

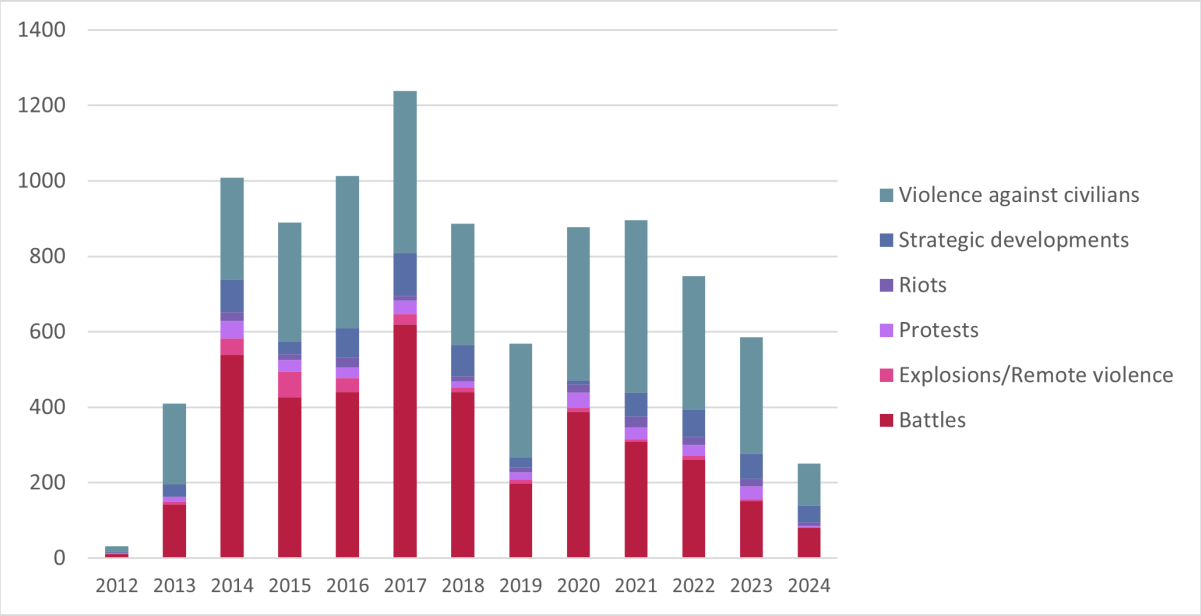
[19] For instance, counting combatant deaths depends entirely on the classification of the dead as either combatants or civilians. This is complicated in the case of groups who could be classified as either. For example, South Sudan's 'White Army' is an ad hoc mobilization of cattle camp youth without clear central command, which sometimes aligns with insurgents (Thomas 2015). Whether observers count these youth as civilians or combatants depends on what they use death counts for.

[20] The findings of this survey, disaggregated by location and gender, can be found at https://peacerep.org/perceptions-peace-south-sudan/. The survey has collected data at four points from 2021 to 2023. See Dawkins et al.(2023) for details.

[21] Since March 2025 violence (organized, between armed actors) spiked in Upper Nile, and it is currently spreading into Jonglei, Eastern and Central Equatoria, and Unity.

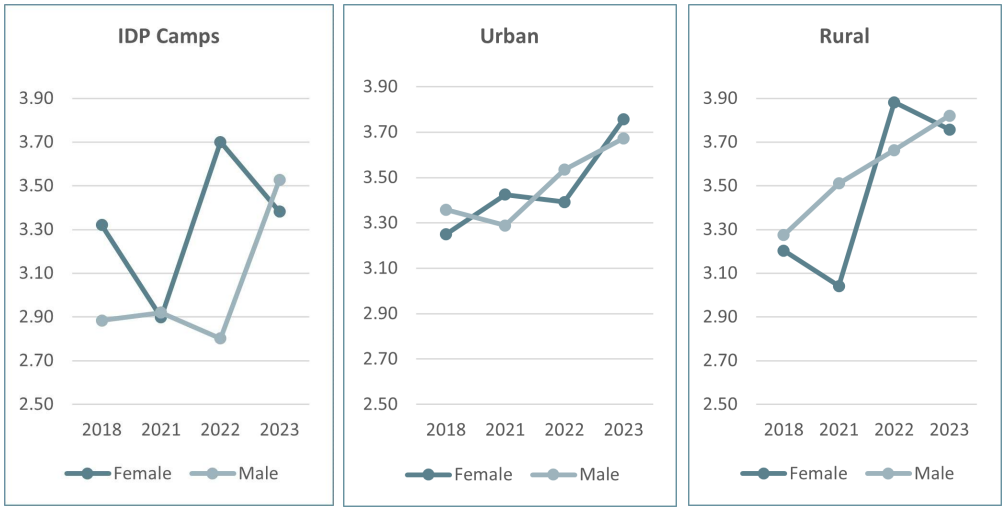
precarious subsistence. Some residents seek out opportunities within the security sector, in militias, as well as self-arming or working in local auxiliaries and 'self-defense' or raiding groups (Kindersley 2022). Further, being part of gangs, militia, or the security sector sometimes acts as a form of social contract where elite patrons provide some form of support for youth. Multiple failed demobilization efforts (de Waal 2023; de Waal and Boswell 2020) have also resulted in the growth of informal urban militias in some cities, which challenge the ability of state authorities to guarantee security for residents.

Figure 14. Political violence, 2021–2024



Source: ACLED 2024.[22]

Figure 15. Perceptions of everyday safety by gender and type of environment



Source: Dawkins et al. 2023.
Note: 1 = very unsafe, 5 = very safe. N = 13,323. Data collection in 4 rounds: 2018, 2021, 2022, and 2023.

[22] *Strategic developments* refer to significant developments beyond both physical violence directed at individuals or armed groups as well as demonstrations involving the physical congregation of individuals such as large land grabs and declarations of emergency.

Box 2. Urban crime and violence

Criminality and gang activity has emerged as a significant cause of insecurity in South Sudan's cities. Data collected by the UN suggest that, in the last few years, the most significant proportion of reported crimes consist of murder and shootings, assault, and theft and robbery (including on roads). Respondents in Juba, Wau, and Malakal also pointed to the significant effects of everyday fragility in the form of criminality on people's lives and livelihoods. In Wau and Malakal, for instance, where many residents rely on agriculture and collection of timber/firewood products on the outskirts of the town, the effect on livelihoods is particularly harmful. Criminals also pose a particular threat to people coming into or traveling outside town. The effects of gang violence are gendered because women have reportedly been sexually assaulted by gangs and are disproportionately at risk due to their role in collecting firewood and timber. "When people move outside Wau town in search of land for cultivation, wild food, and firewood collection, they are threatened or looted by gangs, or unknown gun men." The operation of these gangs leaves large areas difficult to travel through.

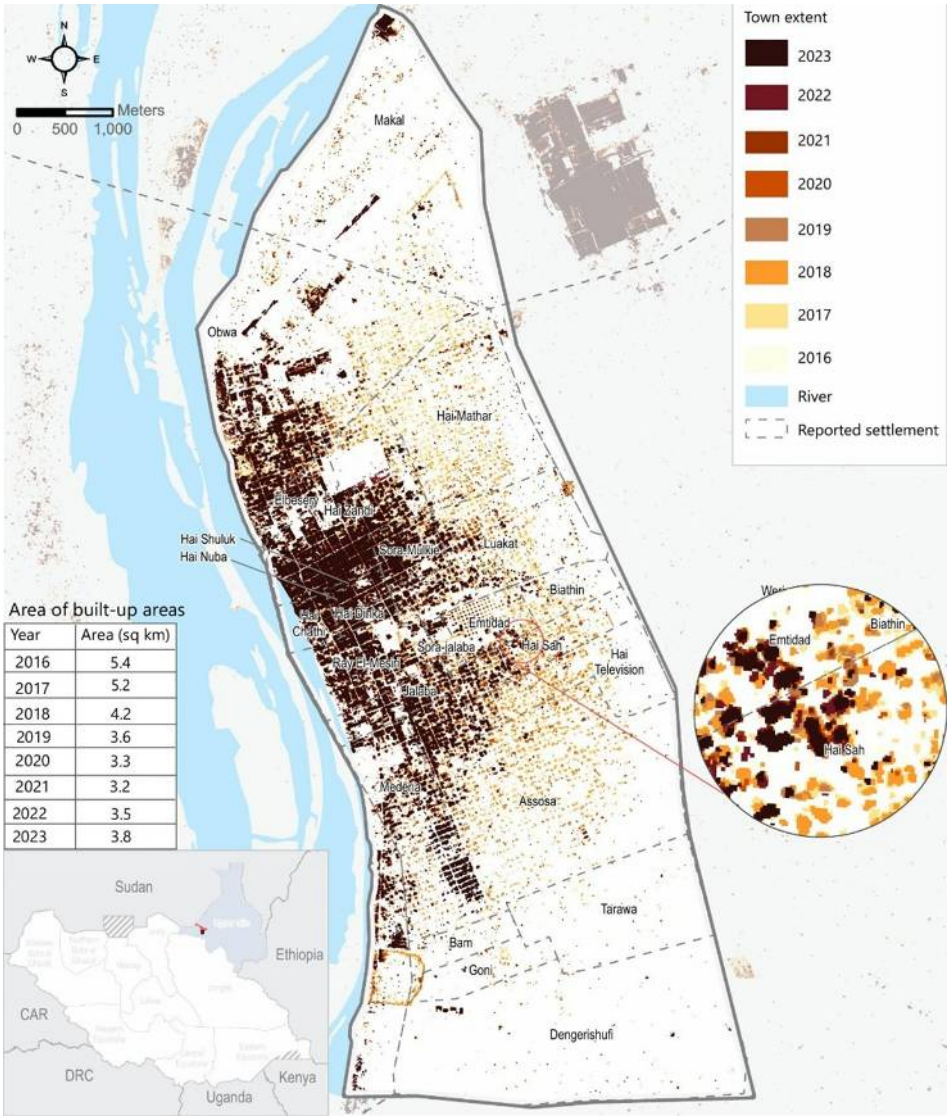
Many residents blame the ongoing crisis of livelihoods and youth involvement in political patronage networks for the increase in criminality. As one interviewee noted: "…crime is increasing due to the country's economic crises. Youth are suffering and there are no job [sic] and that is why they have turned to crime in order to survive." The proliferation of small arms in the country is another contributing factor, as are the number of non-demobilized security sector personnel. There were also numerous reports in FGDs of soldiers or 'unknown gun men' robbing people, which some FGD participants attributed to the fact that government workers did not receive salaries between October 2023 and September 2024. While soldiers and policemen reportedly received one month's salary in October 2024, other government workers did not.

Source: REACH/IMPACT 2024a, 2024b.

Changing settlement patterns within cities have led to a spatial and service delivery exclusion, although the extent and nature of the impact vary from one city to another. In Malakal, for instance, widespread destruction of buildings and infrastructure due to conflict led to the shrinking and de-densification of the urban core built-up area (from 5.4 km^2 in 2016, to only 3.2 km^2 in 2021 before increasing slightly to 3.8 km^2 now; Figure 17). In other cities, such as Wau, the built-up area has fluctuated, decreasing slightly during the years of the war and then increasing once again. However, the population density of areas where IDP camps are situated—often at the periphery—has increased substantially. Despite this, services—especially health care—remain largely concentrated in the town center. This means that communities in peripheral parts of the city must travel long distances to access health care services. Similar dynamics are visible in other conflict-affected cities, like Bentiu and Bor.

Notably, service delivery in urban areas is better than in rural areas, a source of national resilience and increasing the 'pull factor' toward cities and towns. Future planning for services in cities should attempt to remedy the uneven access to services among city dwellers, while also expanding services.

Figure 16. Malakal Town - Change in built-up area (2016–2023)



Source: REACH/IMPACT 2024a.

Land disputes over secondary occupation and squatting, boundary disputes between individuals and between communities, land grabbing, and unlawful expropriation of land and property[23] have emerged and remain unresolved and exacerbated by a weak land administration system and an unclear legal framework. Some of these can be traced to the history of land governance in South Sudan, while others are directly caused by conflict and displacement.[24] Land grabbing by powerful individuals is pervasive, and these individuals often intervene in informal land transactions at the expense of poorer informal settlement inhabitants or use unclear land laws to gain access to land. Youth, women, and disabled individuals find it harder to access both land and housing. Communal conflict over grazing land persists, including in areas close to towns. Land tenure is often insecure (McMichael 2014).

[23] KIIs.
[24] Historically, laws were used to restrict the migration of indigenous people to towns, and the distribution of urban land was controlled through a highly centralized and discretionary leasehold system, preventing those without financial or political capital from obtaining leasehold plots (McMichael 2016).

Box 3. Common infrastructure to promote social cohesion

Theories of social cohesion often stress the need for urban infrastructure which facilitates interaction between communities to promote better relationships between groups. Field research in South Sudanese cities suggests that investments in infrastructure need to be context specific. In Wau, key informants emphasized the importance of football fields in promoting community interaction. "Sport is good. I see many kids coming from different communities to play in these football fields. It makes them happy and brings them together and it can build good relationships among themselves." In the same vein, FGD participants and key informants also referred to several other places that help build relationships, including markets, churches, games clubs, youth centers, and theaters, as well as a multipurpose center built by NGOs. In Malakal, where social cohesion levels are much lower in general, interviewees were more skeptical about the efficacy of common infrastructure in building strong community relationships. As an aid worker noted: "We need to look at the root causes of the conflict… We need to not only bring different groups together for an event, because it is shallow peace. Are we doing the right things or are we just doing these because of the rapid implementation cycle, where we need to show results?"

These challenges are compounded by displacement: Returnees often find their land or housing expropriated or occupied, and the lack of effective dispute resolution mechanisms makes it very difficult for them to regain access to land.

The legal framework around land is often unclear and contradictory, although the drafting of a National Land Policy is promising. There are relevant laws in the 2009 Land Act, the LGA (2009), and the 2011 Transitional Constitution of South Sudan, but these are often contradictory. On the ground, statutory and customary land authorities often coexist and sometimes seek to exercise jurisdiction over the same land, especially in peri-urban areas (Badiey 2014, 2018; Kindersley 2019). While many of the remedies for addressing land disputes fall outside the competence of urban authorities, addressing these issues will be critical for the development of South Sudan's cities. At the time of writing, a draft National Land Policy has been prepared but has not yet been approved by parliament.[25]

Food security remains a major concern in urban areas. While South Sudan faces high food insecurity in general, several cities are in regions that are acutely food insecure.[26] Other than Yei, all major cities are in counties that fall within the Integrated Food Security Phase Classification (IPC) Phase 3 (Crisis) or worse. The situation in Malakal is the most acute. Almost all households in Malakal list food assistance as their greatest need, given the disruption of supplies from Sudan due to conflict.

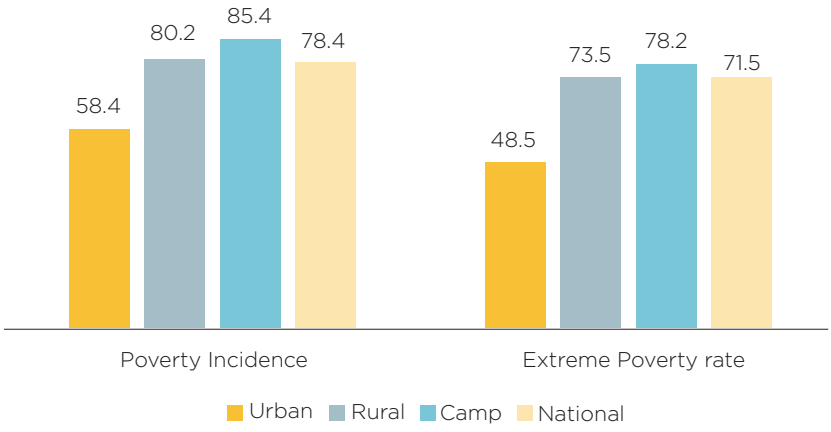
Poverty rates are lower in urban areas, but livelihood opportunities remain limited. Existing data suggest that rates

[25] Interviews with the local government, Juba.
[26] For July–September, 2024, when the last food security assessment was completed by IPC, 4.5 million people were in IPC Phase 3 (Crisis), where households have major food consumption gaps or are only able to meet minimum food needs by depleting essential livelihood assets or through crisis coping strategies. Of these, another 1.7 million people were in IPC Phase 4 (Emergency), suggesting large food consumption gaps resulting in acute malnutrition or excess mortality, which are only avoided by employing emergency livelihood strategies. Nearly 41,000 were experiencing catastrophe or famine-like conditions, with many in Malakal County (IPC 2024).

of poverty are extremely high *across* the country but lower in urban areas where households rely more on waged labor than agriculture (Figure 17) (WBG 2024b; estimates based on Food Security and Nutrition Monitoring System Plus [FSNMS+ 2021] and Household Budget Survey [HBS 2022]. Among IDPs, only 7 percent of households said that all working age members (between 18 and 75) have access to income-generating activities, and nearly 40 percent said no members have access to income-generating activities (IOM 2024a).

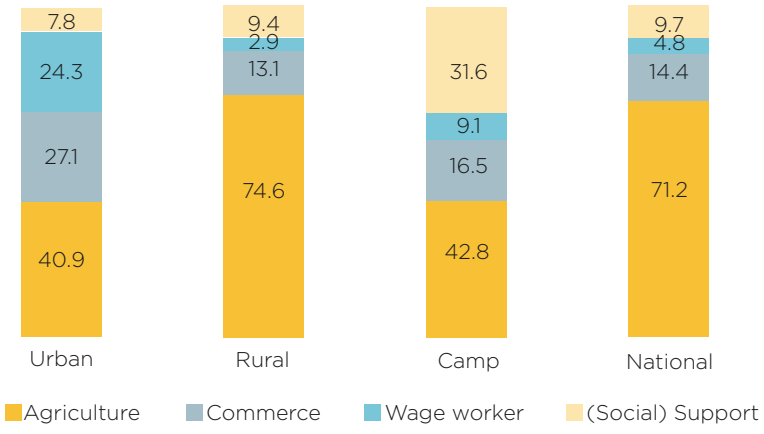
Household welfare in urban areas is generally superior to that in rural areas. Nonetheless, livelihood opportunities are extremely limited in urban areas, and households earn less from existing livelihoods due to recent inflation and economic crises (Figure 18). Further, the livelihoods people pursue are arduous and face seasonal challenges. In both Malakal and Wau, livelihoods such as firewood collection, making of charcoal, collecting of rock and sand, and even petty trade are easier or only possible in the dry months.

Figure 17. Poverty and extreme poverty rates, 2021–22



Source: WBG 2024b (estimates based on FSNMS+ 2021 and HBS 2022).

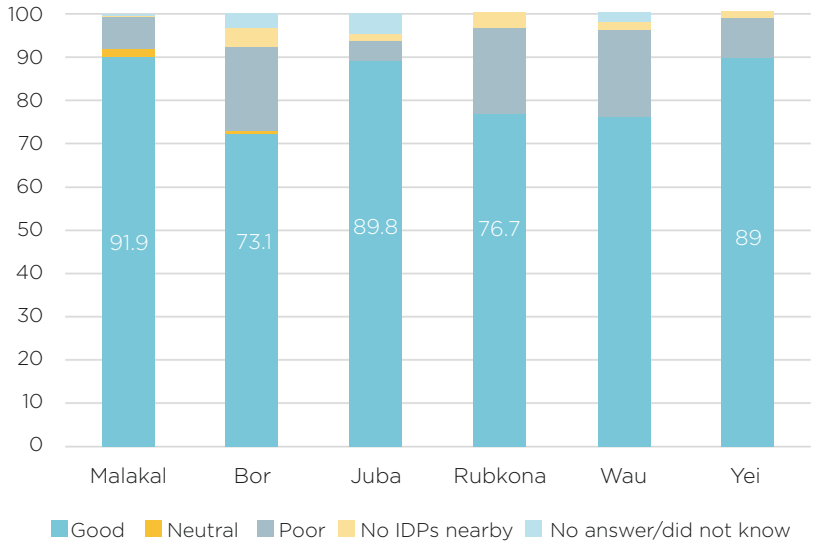
Figure 18. Sources of livelihood by area, 2021–22



Source: WBG 2024b (estimates based on FSNMS+ 2021 and HBS 2022).

Levels of social cohesion[27] have improved in urban areas in recent years even though they remain relatively low at the national level. IDP-host relations have improved significantly since the end of the conflict, and data collected by IOM suggest that in some of the major towns, these relationships are generally quite good (Figure 20). In general, uneven access to resources is not seen as a source of tension between communities, or between host communities and the displaced. These dynamics can vary widely between towns, or even within the same town. For instance, these broader trends are applicable to Wau where community members reported good relations between communities and between the displaced, returnees, and hosts and noted that neighborhoods were not segregated by ethnic groups. Nonetheless, localized tensions did persist in certain neighborhoods or in IDP settlements. In Malakal, on the other hand, residential segregation continues to persist, and levels of social cohesion are low. Land disputes, in particular, remain a crucial cause of tension, segregation, and conflict. As an FGD interviewee observed, "There is tribalism in Malakal which comes as a result of struggles over land… small disagreements can escalate into a bigger fight." Many of these conflicts can be traced to the alteration of communal dynamics in the lead-up to independence and after the signing of the CPA in 2005 (Craze 2013) though they manifested most clearly in the conflict after 2013: "The conflict of 2013 was the beginning of all the chaos you can witness in the city… the war was fought on tribal identities, this changed from the good city known before to the ruined town you see these days."

Figure 19. IDP relations with host communities



Source: IOM 2022.

In conclusion, urban fragility in South Sudanese cities results from exogenous and endogenous drivers as well as an interplay between both. However, even within this complex web, there are pockets of resilience. These include the perceived safety of urban areas, better access to services, improved poverty outcomes, and better social cohesion than in many rural areas.

[27] Social cohesion usually refers to "a sense of shared purpose, trust and willingness to cooperate among members of a given group, between members of different groups, and between people and the state" (Chatterjee et al. 2023).

IV - Deep Dive: Urban Climate and Disaster Resilience

Key Messages

- **Severe and escalating climate vulnerability:** South Sudan faces intensifying floods, rising temperatures, and recurrent droughts. Nearly half of the population is exposed to repeated flooding, with precipitation projected to increase further over the course of this century.
- **Displacement and mounting urban pressure:** Widespread flooding between 2019 and 2022 affected most states, displacing approximately 300,000 people and damaging critical infrastructure. Climate-driven inward migration is concentrating in major cities—Juba, Wau, Bentiu-Rubkona, and Malakal—overstretching basic services, intensifying resource competition, and heightening the risk of social tension and conflict.
- **Compounding impacts across key sectors:** Climate shocks are undermining rain-fed agriculture, fisheries, water and sanitation, health, energy, transport, and ecosystems. Increasing heatwaves—evidenced by school closures in 2023–2024—and growing water scarcity are amplifying disease burdens, undernutrition, and livelihood losses.
- **High urban disaster risk with uneven spatial patterns:** Aweil, Juba, Yei, Wau, and Bor face the highest overall urban disaster risk. Flooding is the dominant hazard, with pluvial flood risks rising as cities expand into low-lying areas. Heat risk is medium to high across all urban centers, while drought indirectly affects cities through disrupted rural–urban economic and food systems.
- **Persistent preparedness gaps despite policy progress:** Emergency preparedness and response (EP&R) remain highly donor dependent, constrained by stalled legislation, fragmented institutional mandates, limited early warning capacity, and minimal resilient infrastructure. Few subnational DRM committees are operational, and critical response assets—such as boats, pumps, and fire services—are scarce, significantly limiting effective disaster response.

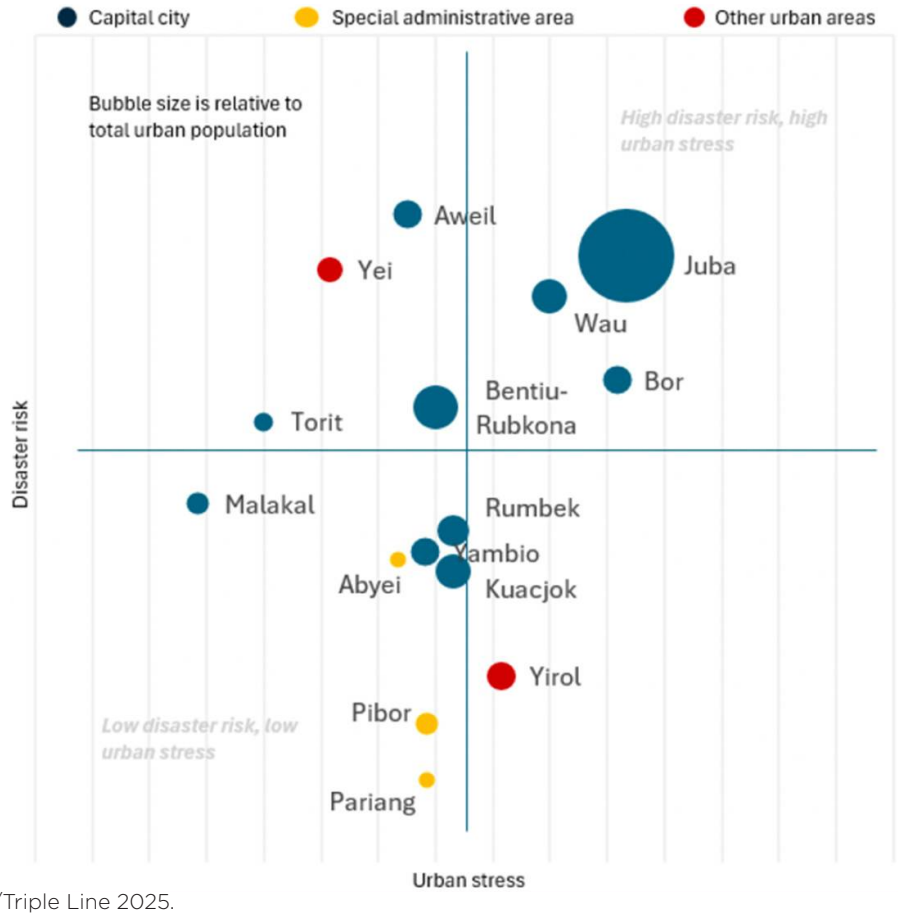
Drivers and Patterns of Urban Disaster Risk

Urban areas in South Sudan face compounding disaster risks as climate shocks—including recurrent flooding and extreme heat—intersect with persistent conflict to produce multilayered vulnerabilities. A countrywide analysis of urban disaster risk indicates that all major cities—Juba, Wau, Aweil, Yei, and Bor—exhibit high exposure and vulnerability to climate-related hazards, although risk profiles differ by hazard type. Aweil, the state capital of Northern Bahr el Ghazal, for example, experiences particularly elevated risks from drought and heat stress as well as from both fluvial and pluvial flooding. Evidence shows that flood impacts are concentrated in low-income neighborhoods, affecting water points, residential roads, and other essential community infrastructure. Wau, the capital of Western Bahr el Ghazal State, by contrast, is highly exposed to drought and rising temperatures. The lowest surface temperatures occur along river corridors and in the central districts, where relatively dense tree cover provides localized cooling. The highest temperatures are recorded in the most densely built-up areas with limited vegetation and high concentrations of

impervious surfaces. Climate projections suggest that the number of days per year with a heat index above 35°C will increase by an average of 19 days, intensifying already severe heat stress experienced by many residents. With anticipated increases in temperature and frequency of extreme heat events, heat-related health and livelihood impacts are expected to escalate. Juba is exposed to a combination of fluvial flooding, extreme heat, and drought. Low-lying northern zones of the city, particularly those adjacent to wetlands, are especially prone to pluvial flooding during intense rainfall events. These areas coincide with expanding residential settlements, increasing the potential for disruption to housing, mobility, and service delivery.

South Sudan's urban disaster risk landscape is changing rapidly, driven by climate change and inadequately managed urban growth. Climate-induced shifts in rainfall patterns are increasing the likelihood of extreme precipitation and severe floods, while rising temperatures are amplifying urban heat stress. Yet risks are even more strongly shaped by 'urban stress', that is, the rapid and inadequately planned urbanization, characterized by high population growth rates and the influx of forcibly displaced people (Figure 21). The expansion of irregular and low-income settlements into hazard-prone locations—such as flood zones—constitutes a major driver of future disaster risk. As unplanned development continues, pervious surfaces decline and ad hoc drainage or diversion measures proliferate, making low-lying areas more susceptible to sudden and destructive flooding.

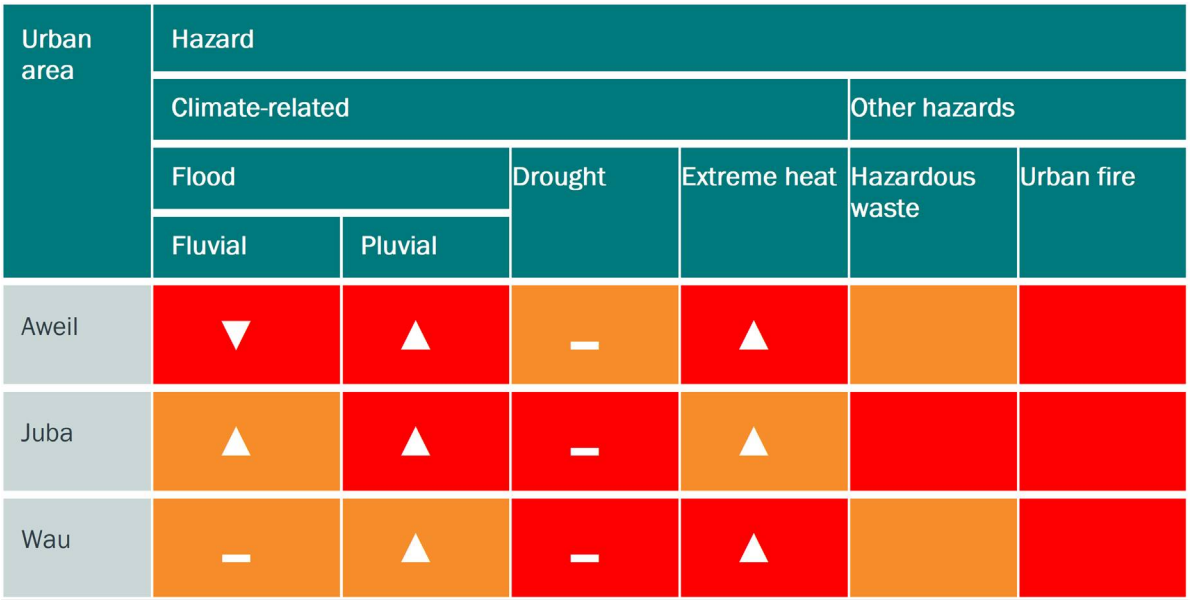
Figure 20. Disaster risk (vertical axis) and urban stress (horizontal axis) scores for cities in South Sudan



Source: WBG/Triple Line 2025.

A detailed disaster risk assessment was undertaken for Aweil, Juba, and Wau—three cities that experience high disaster risk in combination with high urban stress.[28] Pluvial flooding, resulting from heavy rainfall, is generally the dominant type of flooding. Not all cities are susceptible to fluvial flooding, which occurs when rivers and streams overflow their banks, inundating adjacent low-lying areas: Aweil is susceptible, but in Juba and Wau, fluvial fooding is limited and mostly affects the city edges. All three cities are also vulnerable to heat risk due to high temperatures, limited green spaces, and the types of building materials used. Climate change is projected to increase both flood and extreme heat risks. Drought risk, which all urban areas already experience, is expected to remain comparable to the current situation based on meteorological conditions. As indicated in Figure 22, Aweil, Juba, and Wau also experience significant nonnatural urban disaster risks, such as urban fires and hazardous waste. Urban fires occur relatively frequently, while hazardous waste presents major public health challenges. Rapid urbanization is placing increased pressure on already limited resources, compounding both climate-related and other hazard-induced disaster risks.

Figure 21. Summary of urban disaster risk assessments



Source: WBG/Triple Line 2025.

Key: Orange and red shading indicate moderate and significant impact, respectively. These ratings reflect our understanding of the relative importance of hazard risks in Aweil, Juba, and Wau. Future climate outlook trends are shown as stable, increasing, or decreasing, accompanied by the relevant icon.

Flood Risk

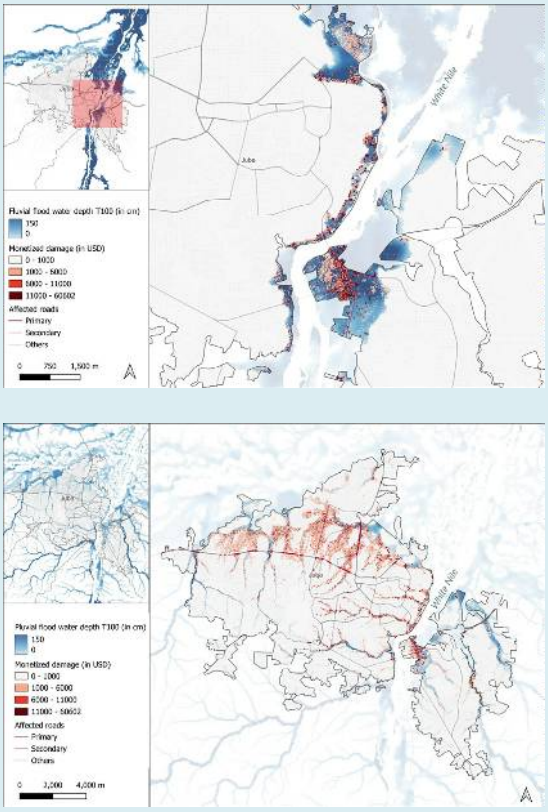
All case study cities are susceptible and vulnerable to flooding but exhibit different patterns of flood risk—determined by the type of flooding, as well as the exposure and vulnerability of people and assets. As illustrated in Figure 23, affected areas vastly differ between pluvial (or flash flooding, caused by heavy precipitation) and fluvial or riverine flooding, with the concentration of assets in the urban core showing particularly high estimated monetized damage in modeled flash flood events.

[28] See Annex IV: Background Reports and Diagnostics: Assessing Urban Disaster Risks and Investment Options for Urban Disaster Risk Reduction in South Sudan.

Figure 22. Flood risk in Juba and Wau

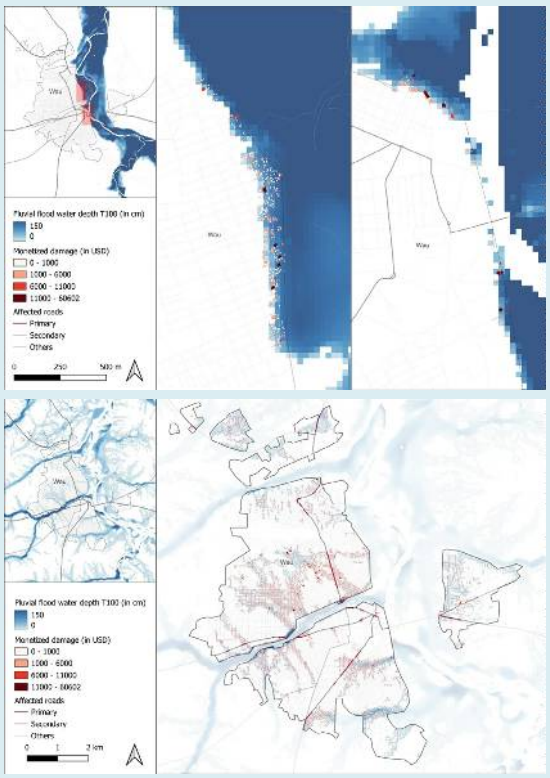
Juba

- Juba experiences limited fluvial flooding along the White Nile, east of the city center.
- The tributary north of Juba touches the city boundaries during events with a return period of 100 years.
- The northern parts of Juba, including areas such as the Gudele blocks (western/ northwestern part of the city), the airport area, and the city center are particularly vulnerable to pluvial flooding due to their relatively low-lying topography.
- The inundation pattern on the northern parts is different from the pattern on the southern parts: In the southern parts, the inundation is less extensive (smaller streams) and the number of exposed people and assets are limited.



Wau

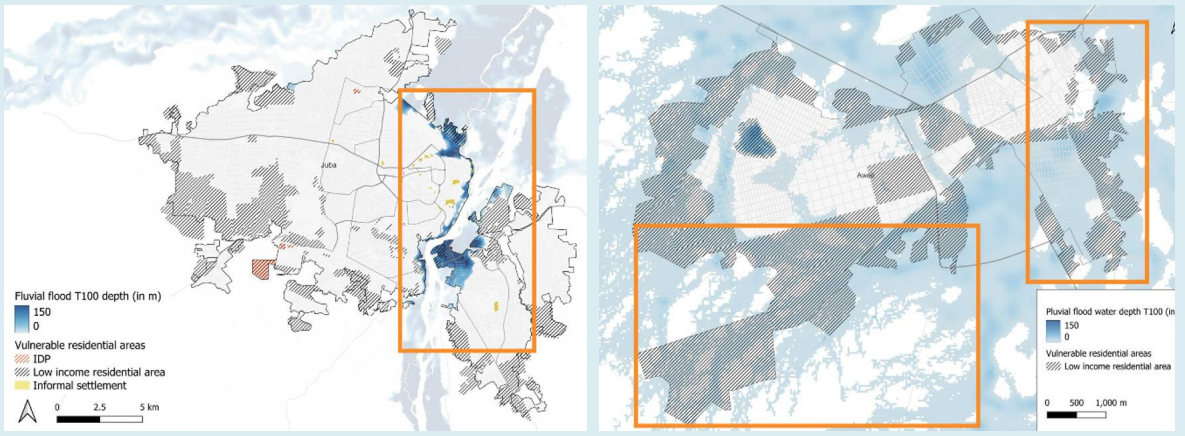
- Much of urban Wau is situated on higher ground, making it less prone to flooding.
- The risk of fluvial flooding is low. Only buildings on the riverbank are at risk.
- Pluvial flood hot spots south of the airport in Wau are—as usual—associated with natural low-lying areas and show flow paths toward the river crossing the city, and to a lesser extent toward the Jur River.
- In the areas north of the airport and on the east bank of the Jur River, ponding occurs at multiple locations but without a clear structure.



Source: WBG/Triple Line 2025.

The analysis also confirms that informal settlements and low-income residents are particularly vulnerable to flooding. Informal settlements, populated by forcibly displaced populations and urban poor, are typically located in peripheral and low-lying and hazard-prone areas, such as along rivers or in wetlands, making them particularly vulnerable to flooding (Figure 23).

Figure 23. Flood exposure of informal settlements in Juba and Aweil



In **Juba**, the east bank of the White Nile hosts low-income, commercial, and mixed-use developments, while the west bank includes similar structures along with informal settlements and some medium-income households.

In **Aweil**, the highest damage occurs in the east and south of central Aweil, where building density is relatively high. Most of this damage affects structures in low- and medium-income residential areas.

Source: WBG/Triple Line 2025.

In all cities, the inundation of roads and transport networks is a major challenge, affecting the mobility within cities and the access to critical infrastructure, such as schools and health facilities. In Juba and Wau, 20-year return period floods bring water close to power stations and airports, and 50-year events breach their grounds (Figure 25). The example of Aweil shows that residential roads have the highest exposure, with more than 32 km of roads affected in 20-year events, severely restricting movement and access to infrastructure and services (Table 5).

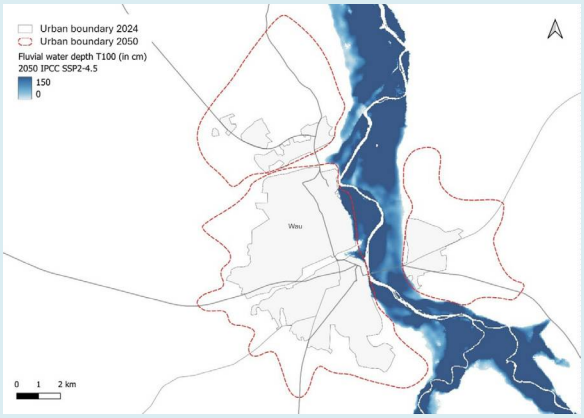
Table 5. Total kilometers of roads affected by floods - Aweil example

Road category	Return period								TOTAL
	T5	T10	T20	T0	T100	T200	T500	T1,000	
Path	4.0	4.0	13.5	22.2	30.7	33.5	33.9	34.9	176.7
Primary	0.6	0.6	1.7	2.5	4.0	4.5	4.5	4.7	23.1
Residential	11.2	11.2	32.6	68.7	109.8	123.9	127.1	137.9	622.4
Service	0.1	0.1	0.1	0.2	0.4	0.5	0.5	0.5	2.4
Tertiary	0.5	0.5	3.0	6.2	8.6	9.7	10.0	10.7	49.2
Track	2.1	2.1	8.6	25.5	46.2	48.6	49.4	51.8	234.3
Unclassified	0.9	0.9	2.1	4.2	6.1	6.6	6.7	7.4	34.9
TOTAL	0.0	19.4	61.6	129.5	205.8	227.3	232.1	247.9	1,123

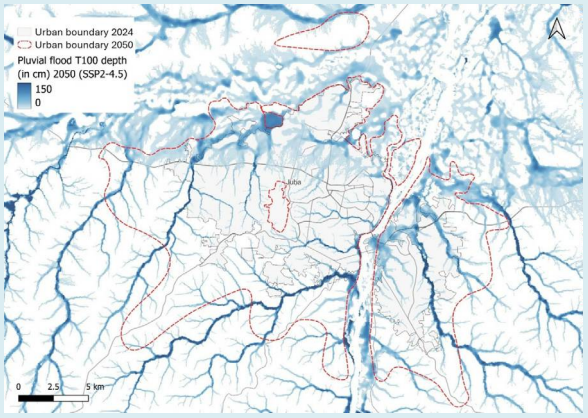
Source: WBG/Triple Line 2025.

Future changes in flood risk are determined by climate change and urban growth—with the latter constituting the more significant driver. Climate change projections based on the Fathom 3.0 flood model (SSP2-4.5, reference year 2050) indicate that climate impacts on annual expected damages (AED) are not uniform. Considering the uncertainties of the available model, it is not possible to accurately predict how changing rainfall patterns will influence the frequency and intensity of flooding at the city level. Undoubtedly, however, the projected and inadequately managed growth of urban areas into hazard areas, along with the expansion of permeable surfaces and loss of green areas, will result in an increase in urban flood risk across South Sudan.

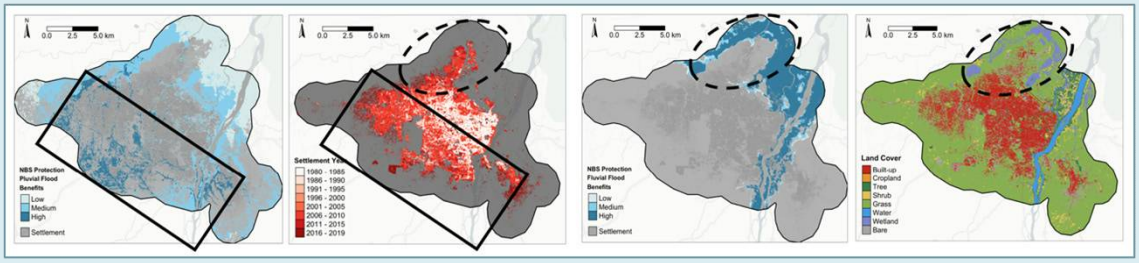
Figure 24. Flood exposure of urban expansion areas



In **Wau**, urban expansion is not expected to increase fluvial flood risk the projected growth areas lie outside flood-prone zones



In **Juba**, given the relatively flat terrain, pluvial flooding is expected to impact on the projected expansion areas due to the limited capacity of the existing drainage system.



In **Juba,** several areas showing high urbanization trends are observed toward main protection areas for pluvial flood management. Protection of existing green spaces in this area can help control future urban expansion, helping avoid higher flood risk in the future. Recent urbanization is also observed near the main protection areas within the floodplains, which show existing wetlands (highlighted with dashed line). Protection of this area from urbanization should be of utmost importance when making development plans and housing regulations for the city.

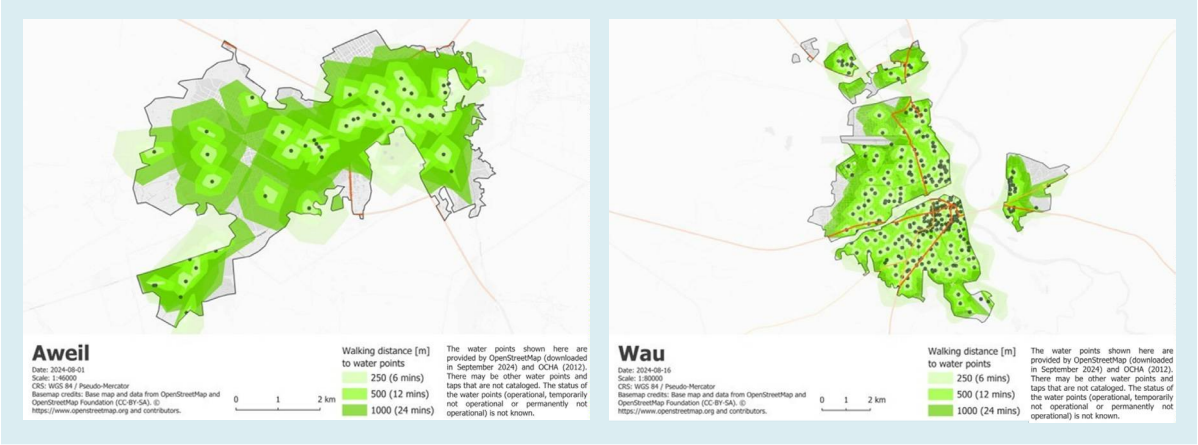
Source: WBG/Triple Line 2025 (top); GFRR 2025 (bottom).

Drought Risk

Drought, water scarcity, and limited access to water resources remain significant risks in all cities. There is a high concentration of water points in the city center and market areas. In contrast, the outskirts tend to have fewer water sources, resulting in more limited availability and access compared to central areas (Figure 25).

Despite existing tap water schemes, local wells and sources frequently dry up during the dry season, exacerbating water shortages. Climate projections indicate drought risk will remain at or slightly higher than current levels during the dry season. Rapid urban growth increases demand on already limited water resources, further straining water availability.

Figure 25. Service area coverage of water points in Aweil and Wau

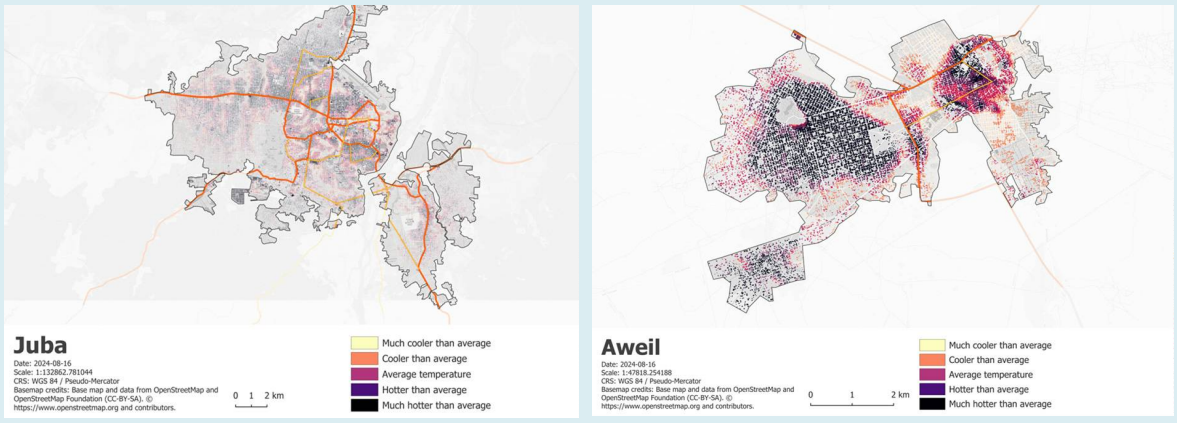


Source: Prepared by World Bank/Triple Line based on Open Street Map (2024) and UN-OCHA (2012) data.

Heat Risk

Urban areas in South Sudan are vulnerable to heat risk due to high temperatures, limited green spaces, and the types of building materials used. Areas with high building densities and limited tree cover tend to experience the most intense heat. Juba benefits from cooler zones, along the river, and near seasonal waterways, where more greenery contrasts with the hotter, built-up urban areas (Figure 26). Heat risk is anticipated to increase with rising temperatures and more frequent extreme heat events, especially in the hotter areas in the north of the country. Rising temperatures under SSP2-4.5 are projected to increase heat days above 35°C by 35 days in Aweil and 13.5 days in Juba by 2050, with higher thresholds (40°C and above) also seeing notable increases, signaling a significant intensification of heat-related risks across urban areas. Heat risks are further compounded by rapid urban growth (for example, densification of built-up areas and decrease in impervious surfaces and open areas), which intensifies 'heat island' effects.

Figure 26. Heat risk in Juba and Aweil



In **Juba**, 34 percent of buildings are located in areas significantly hotter than the city average. These heat-prone zones are densely built, demonstrating an urban heat island effect.

Two distinct hot spot areas are evident in **Aweil**: one near Maper Akot in the east and another near the police station in the west, both indicating heightened heat vulnerability.

Source: WBG/Triple Line 2025.

Urban Fires

While systematic data records are not available, recent trends indicate an increase in urban fire incidents, with several occurring in the past few years. Urban fires happen relatively often and are an important hazard in the dense informal city neighborhoods. Key causes include electrical faults, waste burning, and fires in market areas, where structures are often built from flammable materials such as iron sheets and grass. In January 2024, a fire destroyed the entire Maper Akot market area in Aweil, with approximately 80 shops completely burned (Figure 27). The exact cause of the fire remains unknown, but interviews pointed out two possible sources: the burning of (potentially hazardous) waste and tea-making activities within the market. In Juba, the most recent incident occurred at the Customs Market, destroying multiple shops and coming dangerously close to the state broadcaster's premises, exposing poor planning and constraints in firefighting and emergency response capacities.[29]

Figure 27. Location of the urban fire in Maper Akot, January 2024

Source: Photos provided by local traders.

[29] https://www.radiotamazuj.org/en/news/article/major-fire-destroys-shop-at-jubas-custom-market.

Hazardous Waste

Solid and hazardous waste poses a significant public health challenge. Hospital waste—including syringes, needles, expired drugs, and other medical materials—presents a particularly serious hazard, as there are no designated dumping sites (Figure 28). Most urban residents lack access to reliable waste management services, resulting in widespread dumping and burning of waste in open areas, which can result in urban fires, especially in densely populated areas. In Juba, for example, it is estimated that only 25 percent of waste is properly collected, while approximately 50 percent is incinerated in uncontrolled dumpsites.

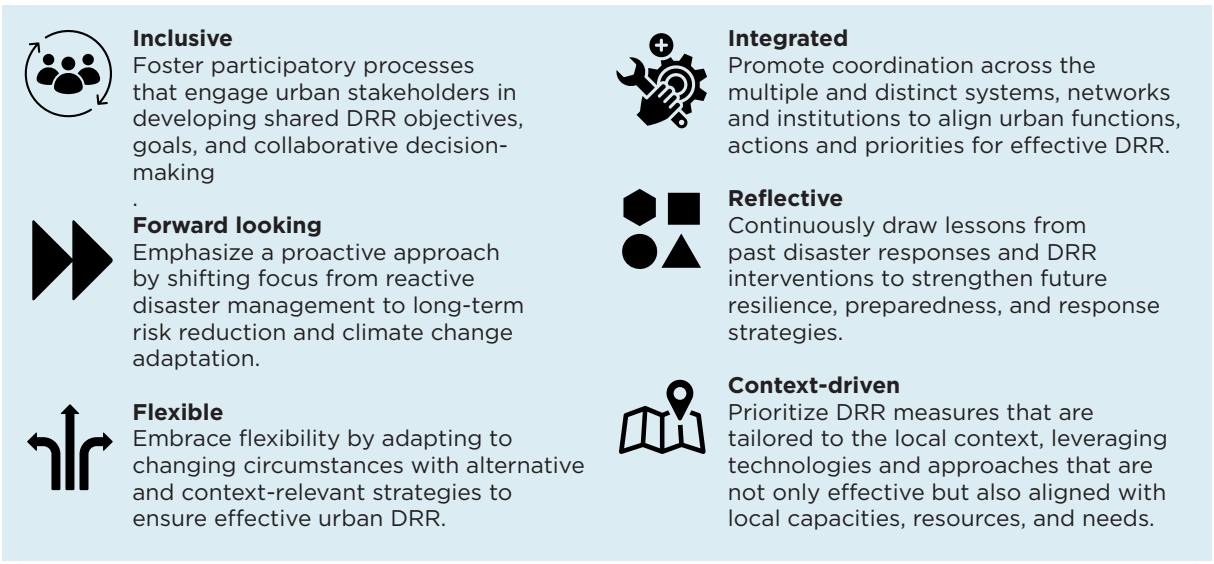
Figure 28. Hazardous waste dumping location

Source: World Bank/Triple Line 2025.

An Integrated and Spatial Approach to Urban Disaster Risk Reduction

To address the evolving urban disaster risks in South Sudan, a holistic and longer-term approach is required, integrating urban development, land management, and DRM. Solely addressing disaster-related issues without considering the basic functioning of urban systems will not lead to improvements in urban conditions. To achieve maximum impact, interventions must be strategically targeted to both reduce disaster risk and promote resilient, green, and inclusive urban development. These interventions should be seamlessly integrated with broader urban management frameworks, operations, and maintenance plans to ensure long-term sustainability. The prioritization of policy and investment options is guided by six guiding principles that embody this overarching approach: (a) Inclusive, (b) Integrated, (c) Forward looking, (d) Reflective, (e) Flexible, and (f) Context-driven (Figure 29).

Figure 29. Guiding principles for urban DRR



Source: WBG/Triple Line 2025.

A broad spectrum of urban DRR measures is available, which can be categorized in various ways. One common classification distinguishes structural and nonstructural interventions. DRR measures can also be categorized based on their functional roles. Structural and nonstructural measures do not preclude each other, and most successful DRR strategies will combine both types. As both urbanization and climate change accelerate, there is a growing need to shift from the current overreliance on structural defenses, such as the dikes that keep floodwater out of urban areas, toward more adaptable and incremental nonstructural measures such as prohibiting settlements in hazard-prone areas.

Structural measures tend to have a high up-front cost and can result in increased impacts if they fail or are overtopped. These considerations, and the fact that there will always remain a residual risk, lead to the need to incorporate nonstructural measures into any DRR strategy. Nonstructural measures aim to enhance safety and resilience by improving planning, governance, and the management of urban development, thereby reducing exposure and vulnerabilities to risks.

In the rapidly urbanizing cities of Aweil, Juba, and Wau, the opportunity to better plan the development of new urban areas is crucial to mitigating the projected increase in future disaster impacts. For example, analysis of past and current satellite imagery suggests that Aweil's future growth is likely to continue westward and southwestward from recently developed areas. To mitigate flood risks, urban expansion needs to be guided toward these lower-risk zones rather than into flood-prone areas. Additionally, undeveloped areas to the north and south of the city center could be preserved as potential floodwater retention zones. Such measures can play a vital role in mitigating flood risks while contributing to sustainable urban development. Unlike structural measures, nonstructural measures typically do not require substantial up-front investments. However, their effectiveness depends on a robust understanding of hazards and the implementation of adequate early warning systems (EWSs).

Emergency Preparedness and Response

The South Sudanese EP&R system is heavily dependent on humanitarian organizations operating in South Sudan. A systematic assessment of South Sudan's capacities using the Ready to Respond (R2R) methodology revealed poorly developed capacities (Figure 30).[30] Fundamentally, government capabilities are hampered by

- Gaps in legal mandates to enable DRM committees to have authority and associated budget lines and overlapping mandates that prevent efficient decision-making;
- A lack of the necessary physical infrastructure;
- A lack of financing mechanisms that would allow funding to be released on time to respond to emergencies;
- Poor vertical integration, leading to a critical lack of coordination between the national and subnational DRM platforms (where those platforms exist at the subnational level); and
- Poor information flow preventing dissemination of information from EWSs.

Figure 30. Diagnostic scores for South Sudan based on standardized indicators for EP&R

Source: WBG/JBA Consulting 2025.

[30] See Annex IV: Background Reports and Diagnostics: Assessing Emergency Preparedness and Response Capacities at National and State Level and Developing an Investment Plan.

Legal and Institutional Frameworks

South Sudan's EP&R framework is situated within a fragile legislative and institutional environment, characterized by fragmentation and chronic under-resourcing. The Draft Disaster Risk Management Bill represents a step toward establishing structured governance. However, in its current form, it lacks defined organizational mandates for ministries, key positions, and EP&R-related committees. Its non-ratified status further renders it nonbinding, limiting enforceability and obstructing implementation, particularly at the state and local levels.

The Ministry of Humanitarian Affairs and Disaster Management (MHADM) is identified as the lead authority but faces challenges due to limited authority, overlapping mandates, and weak vertical coordination. Implementation gaps are exacerbated by inadequate dissemination of plans, limited involvement of local actors, and procedural inefficiencies. Although technical working groups exist, these are often ad hoc and donor dependent and lack continuity, which undermines inter-sectoral coordination and institutional memory.

South Sudan currently lacks formal ex ante EP&R financing mechanisms. Government funding is reactive, unpredictable, and reliant on donor inflows. There is no dedicated budget for EP&R, and subnational institutions rarely receive timely fiscal transfers, instead depending on needs-based donor proposals. Some ministries maintain internal financial oversight structures; however, these remain informal and are not suited to emergency contexts. The lack of rapid disbursement protocols and contingency budget lines, combined with politicized procurement processes and limited capacity for conflict-sensitive financial planning, severely impairs readiness. Emergency procurement and insurance markets are underdeveloped. International humanitarian actors continue to fill critical gaps yet risk perpetuating parallel systems.

Information

Community engagement in EP&R in South Sudan is vital, given the limited reach of state mechanisms and the recurrence of crises. Customary leaders and informal community structures, such as dike committees, disaster response teams, and water user groups, play frontline roles. Although the LGA (2009) provides a legal foundation for decentralized disaster management, its implementation remains ad hoc and heavily dependent on humanitarian assistance. Efforts to institutionalize Community-Based Disaster Risk Management (CBDRM) are fragmented and under-resourced and often dissolve following the conclusion of donor-funded projects. The inclusion of women, youth, and persons with disabilities in preparedness planning is inconsistent. Furthermore, the sustainability of community structures is undermined by weak integration with formal systems.

EWSs operate across both national and regional platforms, including the South Sudan Meteorological Department, IGAD Climate Prediction and Applications Centre (ICPAC), Early Warning, Alert and Response System (EWARS), and Famine Early Warning Systems Network (FEWS NET). However, their effectiveness is constrained by poor communication infrastructure, limited local capacity, and a lack of standardized dissemination protocols. Alerts often fail to reach rural communities due to barriers such as language, literacy, and limited access to radios. While health-related early warning (via EWARS) shows relatively greater integration, systems for hazards such as flooding and droughts lack functional cross-sector linkages. Indigenous knowledge, although trusted and widely applied at the community level, remains excluded from formal EWS frameworks.

Information Management Systems (IMS) reflect a dual-track environment. Government platforms such as Water Information Management System (WIMS) are slowly emerging yet remain siloed and underutilized. Humanitarian actors manage more advanced systems, yet these often bypass national systems, reinforcing institutional fragmentation. There is currently no interoperability framework or standard operating procedures to guide information exchange among government, partners, and communities, particularly at subnational levels. Capacity constraints in digital infrastructure, technical expertise, and reliable electricity further restrict the use of real-time data and timely coordination of response.

Geomatics remains a notably underdeveloped aspect of South Sudan's EP&R system. While humanitarian agencies such as IOM, UN-OCHA, and the Food Security Cluster use geographic information system (GIS) and remote sensing for flood mapping and displacement tracking, government institutions rely heavily on external platforms. Ministries face consistent limitations in access to software, trained personnel, and licensing, and there is no centralized geospatial data infrastructure. In peripheral areas such as Aweil, GIS capacity is virtually absent. Although geomatics has supported valuable flood and mobility mapping, the lack of a national framework and interagency data-sharing mechanisms significantly constrains institutionalization and long-term capacity development.

Facilities

South Sudan's EP&R facility infrastructure remains in a nascent and fragmented state, with substantial institutional and operational gaps across emergency operations centers (EOCs), training centers, logistics systems, and emergency shelters. The system remains heavily reliant on humanitarian actors for functionality and delivery. The newly announced National Humanitarian Coordination Centre (NHCC), to be established under the Relief and Rehabilitation Commission (RRC), aspires to serve as the central command for national-level disaster coordination. However, the center is yet to be implemented and currently lacks an institutional mandate, staffing, and the supporting infrastructure required for sustained operations.

Fragmentation continues within the command-and-control landscape, notably in the Public Health Emergency Operations Centre (PHEOC), which operates under the Ministry of Health for health-related emergencies yet functions in isolation from broader disaster coordination structures. The absence of EOCs at the state level further constrains subnational crisis management, resulting in response efforts that depend on temporary and ad hoc coordination arrangements without dedicated facilities or personnel.

Training capacity is critically limited. A dedicated emergency management training center is lacking, as is a standardized curriculum for EP&R. Existing training is sporadic, donor led, and typically conducted in temporary or informal settings. This has led to significant skill deficits among national and local responders in core areas such as logistics, communications, and incident command. Furthermore, the use of simulation exercises to build operational readiness remains minimal.

Logistics and response infrastructure are similarly weak. Emergency operations rely almost entirely on the UN-led Logistics Cluster and IOM-managed humanitarian hubs. Government entities lack national or state-level warehouses, stockpiles, or staging facilities. Insecure operating environments, deteriorated road networks, and seasonal flooding further delay response efforts and constrain government visibility and leadership in logistics. Without structural

investment, government-led response capacity will remain reactive and externally dependent.

Emergency shelter provision is almost exclusively coordinated through the Shelter and Non-Food Items (NFI) Cluster, co-led by the RRC and humanitarian partners such as IOM and the United Nations High Commissioner for Refugees (UNHCR). Government involvement is minimal, with no pre-identified evacuation centers or shelter stockpiles. Site planning is frequently improvised and lacks consistency in protection-sensitive and conflict-sensitive design. Vulnerable populations, particularly women, girls, and persons with disabilities, are inadequately considered in most shelter arrangements, exacerbating risks in displacement settings. The closure of schools due to extreme heat in 2025 further underscored the absence of viable alternative emergency shelter options.

Equipment

South Sudan's equipment readiness for EP&R remains critically inadequate. Operational capacities are fragmented and heavily dependent on humanitarian partners. While over 1,200 health facilities support emergency social services, these remain overstretched and unevenly distributed, particularly in rural areas. Mobile clinics and community-level surveillance systems, such as the Boma Health Initiative, address essential service gaps, but their long-term viability is undermined by reliance on donor funding. Psychosocial and safe burial services are underdeveloped, with informal practices common and lacking standardized protocols. Mortality management is notably weak, with no designated burial sites or prepositioned kits and community volunteers often conducting burials without protective equipment.

ICT systems face severe challenges in infrastructure, human resource capacity, and operational integration. Outside Juba, connectivity is limited or nonexistent, leaving responders reliant on personal mobile phones or outdated radio systems. Emergency communication capabilities are almost entirely facilitated through humanitarian platforms such as those operated by UN-OCHA, with minimal utilization of government-led systems. Despite the presence of platforms and GIS dashboards, government institutions often lack the trained personnel, equipment, and funding required to operationalize them. The absence of a unified emergency communication framework significantly hampers coordination, particularly in flood-prone or remote areas.

Hazard-specific response capacity remains extremely limited. Stakeholders report an absence of national or subnational inventories for essential response tools, including boats, pumps, rescue kits, and basic materials such as sandbags. Flood responses are typically manual, relying on locally sourced materials and community labor. Preparedness and response for droughts and wildfires is largely reactive and led by external actors. Critical equipment such as mobile water tanks, rescue boats, and early warning sensors is either unavailable or nonfunctional. There is currently no centralized equipment registry or structured system for the prepositioning or redistribution of emergency supplies across states.

In the area of urban firefighting and technical rescue, the situation is particularly concerning. Outside of Juba, fire brigades lack vehicles, water trucks, and basic personal protective equipment (PPE). Within Juba, the fire service operates with only two UN-donated fire trucks which are insufficient for the city's growing high-rise infrastructure. There is no national fire safety policy

or coordination mechanism in place. Informal settlements lack basic safety provisions such as escape routes, signage, and fire awareness training. At the state level, fire brigades are largely untrained and unequipped. Humanitarian-led fire safety committees operate in isolation from government structures. Without a comprehensive national fire service strategy and targeted investment in training, equipment, and interagency coordination, urban areas remain highly vulnerable to escalating fire risks.

Personnel

South Sudan's EP&R personnel component is significantly constrained by the absence of a functional incident management system. Mandates remain unclear, communication channels are fragmented, and interministerial coordination is weak. Institutions formally tasked with disaster coordination such as the MHADM and the RRC lack sufficient staffing, technical protocols, and operational authority. At the state level, officials are frequently unaware of national policies, operate without incident command structures, and are routinely excluded from planning and decision-making processes. Consequently, disaster response remains predominantly ad hoc and reactive, with international actors such as UN-OCHA stepping in to fill coordination and logistical gaps in the absence of a government-led command structure.

Training and knowledge development remain severely underdeveloped. Despite policy commitments, there is currently no national training framework, curriculum, or certification system for EP&R personnel. Training provision is fragmented, donor led, and largely inaccessible to state and local officials, resulting in persistent capacity gaps, particularly in technical areas such as logistics, early warning, risk communication, and incident coordination. Subnational officials report strong demand for capacity building but have limited access, reinforcing disparities in skills and institutional reliance on external partners.

Similarly, exercises and drills lack national ownership. Simulation exercises are conducted irregularly, primarily funded by donors, and often limited to health emergencies or sector-specific clusters. Multiagency drills involving security forces, fire services, or civil defense actors are rare, with minimal input from subnational and community-level actors. Even high-profile exercises, such as the 2019 Ebola Simulation Exercise (SIMEX), lacked structured follow-up mechanisms, thereby limiting institutional learning. The absence of a national simulation schedule, standardized evaluation templates, and centralized knowledge repositories further weakens preparedness and inhibits the retention of lessons learned across exercises.

International support coordination remains heavily donor driven, with humanitarian actors sustaining most of the operational EP&R capacity. While the MHADM and the RRC are formally responsible for aid coordination, real-time leadership is typically exercised by UN-OCHA and other UN-led cluster systems. Coordination frameworks are fragmented, under-enforced, and insufficiently aligned with national systems. No centralized mechanism exists for tracking donor activities, and aid flows are predominantly managed through parallel platforms. State-level authorities report limited visibility over international support, undermining localization efforts and government accountability. Without stronger institutional leadership, improved logistical coordination, and integrated planning systems, current partner-led approaches risk entrenching parallel systems rather than contributing to sustainable national resilience.

V - Deep Dive: Leveraging Cities for Jobs and Economic Recovery

Key Messages

- **Job creation is a critical priority in FCV settings,** as it supports economic recovery and helps reduce the risk of youth being drawn into violence or gang activity.
- **City administrations play a central role in generating jobs,** both through their direct functions—such as planning, service delivery, and budgeting—and through coordination with national ministries on economic development, mobility, and youth opportunities.
- **Effective job creation requires action at the national and local levels**. National reforms will improve the policy and business environment and targeted, place-based investments within cities will strengthen economic nodes and deepen promising value chains.

Introduction

Cities globally play an important role in generating more and better jobs and driving economic growth. Urban populations benefit from 17 percent higher wages and a 43 percent rise in household net income when density doubles. However, the link between urbanization and economic growth has been weaker in Sub-Saharan Africa due to more fragmented spatial forms, which weaken agglomeration economies, inadequate transport links between key cities, lack of formal housing and basic services with effects on productivity and access to jobs, and labor markets lacking skilled workers (Lall et al. 2017). Relatedly, job creation remains sluggish, as only 18 percent of private sector jobs are generated in African cities compared to 88 percent in cities globally. This calls for a closer look at the reforms needed to further unlock the growth potential of African cities so they can create more productive jobs.

Urban job and competitiveness strategies in FCV settings must directly address the needs and dynamics of displaced people and youth. While cities continue to draw people due to the pull factor of economic opportunities, they also become home to displaced people experiencing the push factor from conflict and climate events. Therefore, any efforts to enhance jobs and competitiveness through spatially targeted investments in cities in FCV countries must address the socioeconomic inclusion of displaced persons residing in urban areas, manage the dynamics between displaced persons and host communities, and pay particular attention to the youth. Many young people have been drawn into violence due to limited opportunities, with some recruited into armed groups as a means of survival. The lack of stable employment and education has exacerbated their vulnerability, making them susceptible to exploitation (see Deep Dive: Urban Conflict and Fragility).

This section assesses national-level policy and business environment challenges and opportunities. It includes three city spotlights covering (a) Juba (Central Equatoria) as the national and state capital and South Sudan's primary city, (b) Wau (Western Bahr el Ghazal) given its importance as a regional trade and administrative center, and (c) Nimule (Eastern Equatoria) for its strategic location near the border with Uganda which accounts for 80 percent of the cargo entering South Sudan (WBG 2025b). The section analyzes the challenges faced by urban businesses to identify barriers, including infrastructure, regulation, and access to finance, as well as growth opportunities aligned to national development plans and city-level sectoral potentials.

South Sudan's Economy at a Glance

South Sudan's economy is heavily reliant on oil, which accounts for approximately 88 percent of its total goods exports and 90 percent of government revenues, making it one of the most oil-dependent economies globally. The agricultural sector, despite employing a significant portion of the population, contributes minimally to GDP due to low productivity, recurrent flooding, and ongoing conflicts, with a 6.2 percent increase in harvested area and 8.3 percent increase in crop production in FY24 compared to FY23, yet still facing a significant output gap. The industrial sector, primarily oil related, has been severely affected by the February 2024 Dar Blend pipeline rupture, leading to a sharp decline in production to 60,000 barrels per day from 144,000, causing a projected 30.2 percent economic contraction in FY24/25. The services sector, though growing slightly at 2.3 percent in FY24, remains underdeveloped, and non-oil revenues, while improving due to tax reforms, are insufficient to offset the fiscal deficit, exacerbating economic vulnerabilities.

South Sudan faces profound economic constraints driven by its overreliance on oil, persistent conflict, and weak governance, compounded by external shocks like the Sudan conflict and climate-related disasters. The 2024 oil pipeline disruption has led to daily losses of approximately US$7 million, severely straining export revenues and fiscal balances, with international reserves dwindling to US$64 million (0.3 months of imports) by June 2024. Rampant inflation, reaching 105 percent annually in 2024 and 177.9 percent projected for FY25, coupled with exchange rate volatility, has eroded household purchasing power, with the cost of the minimum expenditure basket rising 20 percent year-on-year to SSP 448,640 in January 2025. Recurrent floods, affecting states like Unity and Warrap, and ongoing insecurity disrupt agricultural production and trade, while weak public financial management and limited data availability hinder effective policy responses, perpetuating poverty and food insecurity for 76 percent and 70 percent of the population, respectively, in 2022.

South Sudan's economic geography is shaped by its landlocked position, vast arable land, and uneven distribution of resources and infrastructure, with oil fields concentrated in the northern and eastern regions, particularly Upper Nile and Unity States, driving the economy's core. Juba serves as the primary economic hub, hosting trade, services, and administrative functions, while Wau acts as a secondary commercial center with historical significance as a trading post. Nimule is a vital trade gateway, facilitating significant cross-border commerce. Despite 80 percent of the land being suitable for agriculture, productivity is low due to flooding, poor infrastructure, and conflict, with key agricultural zones in the Greenbelt (Central and Western Equatoria)

and along the Nile River frequently disrupted. As a result, South Sudan remains highly dependent on imports of basic foodstuff and other agricultural products from Uganda, which in turn raises food insecurity. The ongoing war in Sudan and internal conflicts have severed trade routes, particularly affecting border areas, while limited road networks, large wetlands with seasonal flooding, and reliance on river transport via the Nile exacerbate economic isolation, constraining diversification and exacerbating regional disparities in poverty and food insecurity.

Barriers and Opportunities to Jobs and Competitiveness in South Sudan

South Sudan's political situation and lack of economic diversification restrict its ability to compete in global markets and sustain broad-based growth. According to the 2024 Enterprise Survey, the three 'biggest obstacle[s]' cited were political instability (19.6 percent), access to land (16.2 percent), and access to finance (14.9 percent) (WBG 2024c). All these factors contribute to the business environment being less predictable and difficult to make major investment decisions in, which are essential for firms to assess in terms of the potential to reach scale and create more jobs, particularly in urban areas.

Nevertheless, the country's young population, with 38 percent below the age of 15, presents a potential demographic dividend if sufficient youth-focused policies with an emphasis on skill building and job creation can be put in motion. As of 2022, unemployment remains high among those under 30, with 46 percent of the unemployed falling in this age group, and in-group unemployment peaking among 15–19-year-olds. This poses an additional challenge given the FCV context where young men may become more susceptible to joining gangs and militias.

The country's infrastructure and services further hinder competitiveness. The transport sector suffers from poor infrastructure, with the Juba–Nimule Road being the only one of few sealed routes (aside from Juba–Bor and Juba–Terekeka), leading to high freight tariffs (US$0.20 per ton-km, twice that of neighboring Sudan) and delays due to informal checkpoints (WBG 2025a). Electricity access is severely limited, with exorbitant tariffs and unreliable supply, placing South Sudan far behind neighbors where access ranges from 10 to 77 percent (Schoeten et al. 2021). Water and sanitation services are equally deficient, with inconsistent tariff application in cities like Juba and Wau and unregulated private providers charging exorbitant fees, increasing operational costs and reducing business productivity. This also often promotes a reliance on surface water (for example, Nile), which risks exposing employees and consumers to waterborne diseases and river pollution.

Limited warehousing and storage facilities, especially cold storage, coupled with reliance on temporary solutions, lead to high post-harvest losses and increased costs in agriculture. This further exacerbates food insecurity in South Sudan, which in 2023 was among the 10 most food-insecure countries globally (IPC 2024). A weak domestic logistics sector, characterized by inadequate modern facilities and limited integration of technologies like global positioning system (GPS) tracking, undermines the efficiency of value chains. These logistical constraints reduce the ability to effectively store, process, and distribute goods, both domestically and for export, limiting market access and economic scalability.

The construction sector is a critical market system underpinning durable urbanization, particularly in relation to

the availability and affordability of locally sourced construction materials and appropriately skilled labor for household-level building. Supply chains for key inputs—such as sand, soil, cement, timber, poles, bamboo, and roofing materials—are shaped by a mix of informal trade, limited numbers of licensed vendors, household-level extraction often constrained by land access dynamics, and intercounty sourcing, all operating within conditions of high transport costs, weak connectivity, seasonality, and regulatory barriers. These factors directly influence the accessibility and cost of materials, with implications for the quality and durability of housing that households are able to construct, even in contexts where infrastructure investments are progressing. In parallel, the availability of skilled labor suited to small-scale, incremental housing development remains a key determinant of construction outcomes and differs significantly from the capacities mobilized for large contractor-led infrastructure.

Access to formal financial services is a significant barrier, with only 15 percent of businesses nationwide and 44 percent in urban areas having access to formal banking services (WBG 2024c). Limited access to credit, driven by both demand- and supply-side factors, restricts business growth and investment, particularly for small and medium enterprises (SMEs). The entrepreneurial ecosystem is underdeveloped, with enterprise support policies primarily targeting the small formal market, leaving informal businesses, which dominate the economy, underserved and unable to scale effectively. Without addressing these structural issues—through improved infrastructure, diversified economic activities, youth integration (including IDPs and returnees), and enhanced financial access—South Sudan's competitiveness will remain severely constrained. Similar issues and constraints are prevalent at the city level discussed in the next section.

In summary, four structural barriers stand between South Sudan's cities and their potential as engines of jobs and competitiveness:

1. **The regulatory and business environment remains inhospitable to private enterprises.** South Sudan scores in the bottom quintile of all measured economies across multiple B-Ready 2025 dimensions—including a score of just 36 points on Regulatory Framework and 16 on Public Services—reflecting overlapping mandates, burdensome and centrally administered licensing, and a graft burden that affects roughly 27 percent of firms (WBG 2020b).
2. **Land is the country's most pervasive structural bottleneck,** but the challenge goes beyond mere administrative dysfunction: Insecure tenure; elite capture; land grabbing; and the near-complete absence of functioning cadasters outside Juba, Wau, and Renk mean that businesses cannot rely on land as a stable foundation for investment, let alone as collateral. Nearly half of all firms—48.6 percent—cite access to land as a major or very severe constraint, double the Sub-Saharan Africa average (WBG 2020b).
3. **Power remains a binding constraint on urban economic activity.** South Sudan has one of the lowest electricity access rates in the world: 94.7 percent of the population nationally and nearly 70 percent in urban areas lack access. Tariffs range from US¢29 to US¢53 per kWh against a regional average of US¢17 cents, and 65 percent of businesses are forced to rely on costly diesel generators. Expanding reliable and affordable electricity supply will require not only public investment

but also a fundamental rethinking of private sector participation in energy delivery (WBG 2023a).

4. **Finally, and perhaps most acutely, access to finance is negligible.** South Sudan's domestic private sector credit-to-GDP ratio stood at just 1.9 percent in 2021—the lowest in Sub-Saharan Africa, against a regional average of 38.9 percent—and only 5.8 percent of adults held a financial account as of that year. With no public credit registry, no collateral registry, and a banking sector whose lending activity is largely directed toward the government, commercial financing for SMEs is effectively nonexistent. Only 7 percent of firms report access to formal loans (WBG 2025b).

Together, these four barriers—a hostile regulatory environment, insecure land tenure, inadequate power infrastructure, and a financial sector that does not intermediate—define the core reform agenda for any strategy that seeks to make South Sudan's cities genuine anchors of economic recovery.

National-Level Challenges

Trade and Transport

Trade efficiency is one of the most important levers for boosting the competitiveness of South Sudan's cities as every urban business depends on fast, predictable access to regional and global markets. About 94 percent of manufacturing firms source at least one critical input abroad—almost twice the Sub-Saharan African average of 56 percent, underscoring a structural import dependence that amplifies the price of goods sold in urban markets (WBG 2024c). Because the Nimule Corridor now handles roughly 80 percent of merchandise trade by value, congestion or insecurity instantly reverberates through urban food prices, factory input costs, and ultimately household welfare (UNDP 2021b). Although customs clearance has improved to 8 days, faster than the regional average of 15 (WBG 2024c), hidden logistics costs remain. For example, formal border fees add 11 percent to the cost, insurance, and freight (CIF) price of a 50 ton maize consignment, and multiple official and informal checkpoints add 13 percent in 'road taxes' on imports from Uganda (CLIMIS 2015). On the other hand, 39 percent of firms cite limited market access as their top constraint—well ahead of electricity or security (WBG 2020b). Only 3 percent of firms export abroad, in part due to a lack of competitiveness (WBG 2024c). Without cheaper, faster, and more reliable trade arteries, cities cannot scale agro-processing, light manufacturing, or service exports, all of which are essential for diversifying away from oil.

Delivering this connective infrastructure requires a strategy that matches macro-level policy with microlevel infrastructure improvements. At the policy level, better adoption and alignment with the East African Community (EAC) and the African Continental Free Trade Area (AfCFTA) commitments may provide firms with a greater market (UNDP 2021b). Yet regional gains will stall without increasing domestic capacity in relevant institutions, including the National Revenue Authority, to automate customs and reduce graft that currently affects 27 percent of firms (NRA 2020; WBG 2024c). Similarly, growth in key agricultural exports—where South Sudan has a strategic comparative advantage—would benefit from a certification system by the South Sudan National Bureau of Standards to increase their trade potential. Targeted infrastructure interventions can reduce import costs, for example, upgrading and expanding the One-Stop Border Post at Nimule, digitizing cargo tracking,

and introducing risk-based customs inspections. Other interventions, such as cutting in-city checkpoints and expanding hard-surfacing arterial roads along critical corridors and feeder roads that link cities and urban markets to rural areas, will also reduce costs associated with regional transport. Complementary measures—small-scale cold-storage hubs and working-capital facilities for processors—can further shorten value chains and let firms move up from raw-commodity trading to higher-margin agro-processing. Since these local gains compound through agglomeration, every percentage-point drop in trade friction translates into wider urban labor demand, higher non-oil revenue, and a more competitive urban economy.

Digital Technology and Skills

Digital infrastructure remains a weak link in South Sudan's competitiveness story. Internet use remains limited, with penetration still in the low teens in recent years, and smartphone adoption correspondingly low, reflecting a legacy of underinvestment that bypassed the mobile expansion seen elsewhere. Where coverage exists, it is often slow and costly: 3G remains the dominant network with limited reach beyond major urban areas, and the price of 1 GB of data still absorbs a significant share of average monthly income—well above the global affordability benchmark of 2 percent (WBG 2022b). These constraints continue to weigh on business activity and broader digital uptake. At the same time, emerging technologies such as low-earth orbit satellite internet services, including Starlink, have the potential to significantly expand connectivity across both urban and rural areas, particularly if the regulatory environment remains enabling and shared-access models help offset relatively high subscription costs.

Momentum is building for hard infrastructure upgrades with an urgent digital skills push. A new fiber connection from Uganda has already encouraged operators to expand 4G coverage, and the regulator's July 2024 approval of Starlink is enabling near-universal satellite broadband. Human capital, however, is the binding constraint: Only 34.5 percent of adults are literate and digital literacy is likely to be much lower (WBG 2022b). Supply is thin because most of the 5,382 public schools lack electricity or computer labs, South Sudan remains the only Horn-of-Africa state without a National Research and Education Network, and teacher training in ICT is minimal (WBG 2022b). Nevertheless, strengthening the legal and regulatory environment for digital business and supporting the expanding market demand for digital access, while simultaneously improving digital skills curricula, are important first steps in enabling long-term digital transformation.

Access to Services

Basic and social infrastructure deficits also remain a major impediment on urban productivity. South Sudan is estimated to have one of the lowest electricity access rates in the world, coupled with very high electricity tariffs and unreliable supply among the few that are connected to the existing electricity grids. The vast majority (94.7 percent) of the population has no access to electricity (WBG 2023a) which puts South Sudan far behind its neighbors, ranging from 10 to 77 percent (JEDCO 2025; WBG 2023a). Urban areas have significantly better access to electricity (30.2 percent) compared to rural areas (1.7 percent). In urban areas, 14.0 percent of the population is connected to micro and mini grids, and 16.2 percent have off-grid technologies such as solar-powered homes (WBG 2023c). Most of South Sudan's functioning electricity supply and distribution infrastructure is located in Juba, with very little working equipment in other cities and rural areas. The country's total installed power capacity is approximately 103 MW, mostly from thermal sources, of which around

76.5 MW is operational, but only around 34.5 MW is available to the public.[31] Some solar plants and mini grids exist throughout the country. Electricity costs range from US¢29 per kWh on the public network to US¢53 on cooperative mini grids—both well above the regional average of US¢17 (AfDB 2013). Consequently, about 65 percent of businesses run diesel generators, yet 68.4 percent still experience outages and 21 percent of firms classify electricity as a 'very serious' obstacle to growth (WBG 2024c). Although the typical firm now suffers just 1.7 blackouts per month—below the Sub-Saharan African norm of 7.4—each event still affects overall productivity.

Some improvements are beginning to bend the curve, but they need to be locked in and scaled. For example, firms can now secure a grid connection in seven days—one-sixth the regional average (WBG 2024c). However, to turn these improvements into a durable advantage, policy makers should continue to invest in critical utility infrastructure and potentially explore off-grid or decentralized solutions to increase capacity. Digitizing services such as integrating smart meters and utility billing can also curb leakages and improve payment discipline.

Access to Land

Land administration remains South Sudan's most pervasive structural bottleneck, as insecure tenure, opaque permitting, and weak dispute-resolution mechanisms inflate costs and increase uncertainties for all potential urban investors. Nearly half of all firms (48.6 percent) describe access to land as a 'major' or 'very severe' constraint, almost double the Sub-Saharan African average of 26.5 percent, and the burden is felt most keenly by small (30 percent) and medium-size (16 percent) enterprises that lack political capital to navigate contested claims (WBG 2024c). The symptom list is long: Registering a title scores just 36.8 on the Business Ready Index (2020) versus a regional mean of 53.6; securing a construction permit scores 50.5, again below both the Sub-Saharan African benchmark and even fragile peers such as the Democratic Republic of Congo (59.5) (WBG 2020b). About 24 percent of businesses report being asked for informal payments to obtain a permit, and a similar share face gift requests during tax inspections, signaling how discretionary authority distorts land markets. Because credit registries are nonexistent (credit information score = 0), land is the only viable collateral, yet dispute risk keeps banks from valuing plots accurately and helps explain why just 7 percent of firms can access formal loans. Stakeholder conversations reveal that these governance gaps already derail flagship projects: Legal wrangling over asset control halted development of the Juba Special Economic Zone, stalling what should have been a key hub. They also carry climate and conflict penalties—53 percent of firms report experiencing physical asset damage during extreme weather (WBG 2024c), and unresolved communal claims can flare into violence that disrupts supply chains. In short, without predictable, affordable, and climate-resilient land access, the competitiveness gains from trade facilitation and improved power supply will stall at the city gate.

Early reform signals are visible but need to be consolidated into a coherent, high-level modernization program. The MLHUD has drafted a National Land Policy that seeks to clarify land tenure categories and enact

[31] The remaining 42 MW serves the Paloch oil field as captive power. Other generation plants attached to isolated distribution networks in smaller cities and towns, including South Sudan's state capitals such as Wau, Malakal, Rumbek, and Yambio, and other towns such as Yei, are nonoperational due to lack of adequate maintenance and destruction during the civil war.

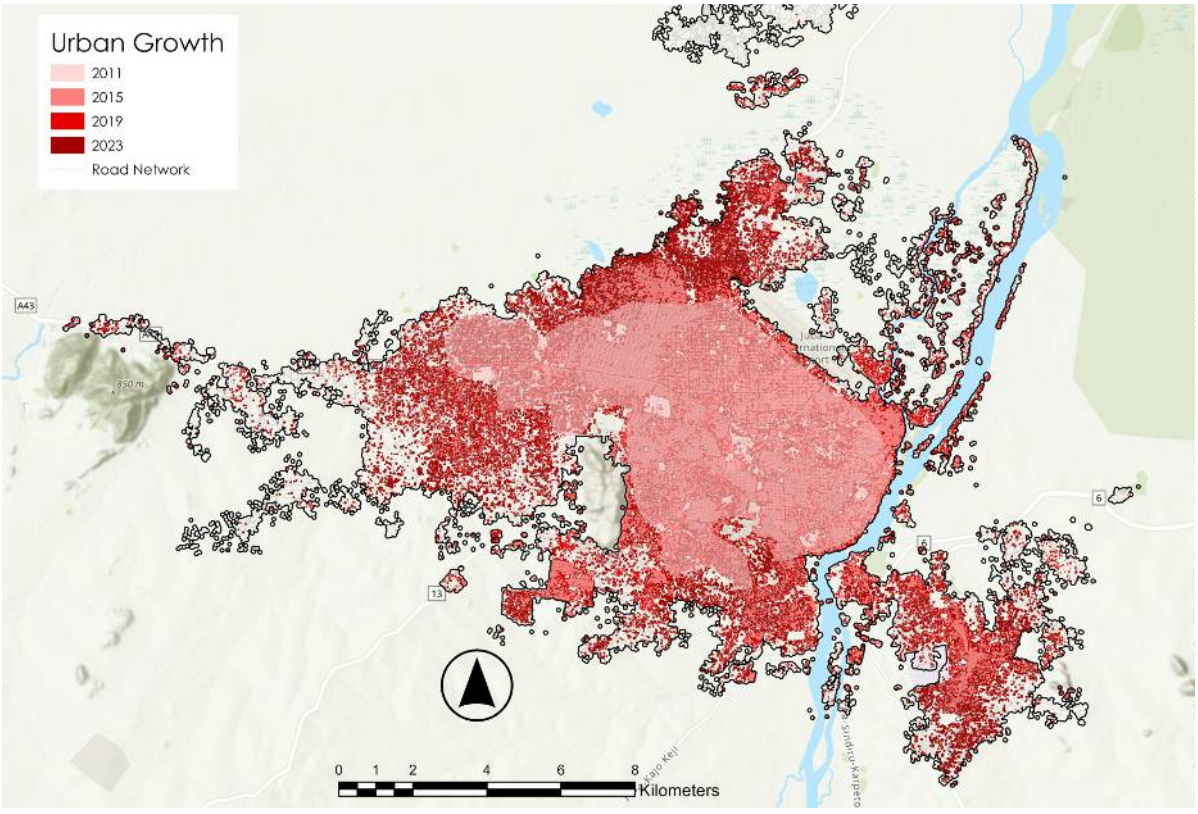
Community Land and Public Land Acts setting out institutional arrangements and procedures for governance of land while also conducting an inventory of land in urban and peri-urban areas and on that basis enact a National Physical Planning Act (MLHUD 2023). To lock in these gains, policy makers should accelerate the mapping of urban parcels, prioritizing industrial corridors within cities; establish serviced 'land banks' for SMEs inside municipal growth poles, bundling titles, flood-risk certificates, and basic trunk infrastructure so that small investors can lease secure plots at transparent rates; and embed climate-hazard layers into zoning bylaws. These measures can convert today's speculative and exclusionary land market into a transparent asset base that underwrites credit growth, lowers entry barriers for domestic manufacturers, and anchors the broader urban competitiveness and peace-building strategy.

City-Level Spotlights – Challenges and Opportunities

Juba: South Sudan's Engine of Growth

Juba's population growth has fueled a significant expansion of the city's urban footprint, affecting its economic geography. Juba is expanding outward in all directions, including east of the Nile, driven by the jobs clusters in Gumbo and Rejaf (Figure 31). Most people and jobs tend to be concentrated in the central area (Juba Payam), with clusters scattered in other parts of the city, particularly around transport hubs and junctions. The peripheral settlements are generally less connected, experience greater infrastructure and service deficits, and are often where IDPs and returnees find themselves with limited opportunities.

Figure 31. Juba urban growth (2011–2023)



Source: UN-Habitat 2023. Calculations using Synthetic Aperture Radar (SAR) Sentinel-1 data; Atlas of Urban Expansion - http://atlasofurbanexpansion.org/cities.

Juba is South Sudan's most important center of employment by established businesses, though high degrees of informality constrain the city's competitiveness and limit city revenues collected from business licenses and related fees. There are roughly 7,500 established businesses in Juba, and only 60 percent of them have a bank account. About half of the businesses are located in Juba, and together, they employ 66 percent of all workers employed in formal businesses (WBG/Pegasys 2024). A high proportion of these workers are engaged in household activities linked to processing and artisanship. This indicates that there is a 'missing middle' of medium-size businesses, indicative of limited growth opportunities as many of these micro, small, and medium enterprises (MSMEs) do not mature into large firms.

Commerce and hospitality are the most important employers in addition to public administration, defense, and other services that include security services. Most formal enterprises are located in the city center (Figure 33), but this is not where most of the population resides and IDPs seem to be particularly disadvantaged as they reside in peripheral camps. The strategic identification of new mixed-use urban cores could help alleviate the congestion in the city center while also making jobs more accessible to residents of other parts of the city.

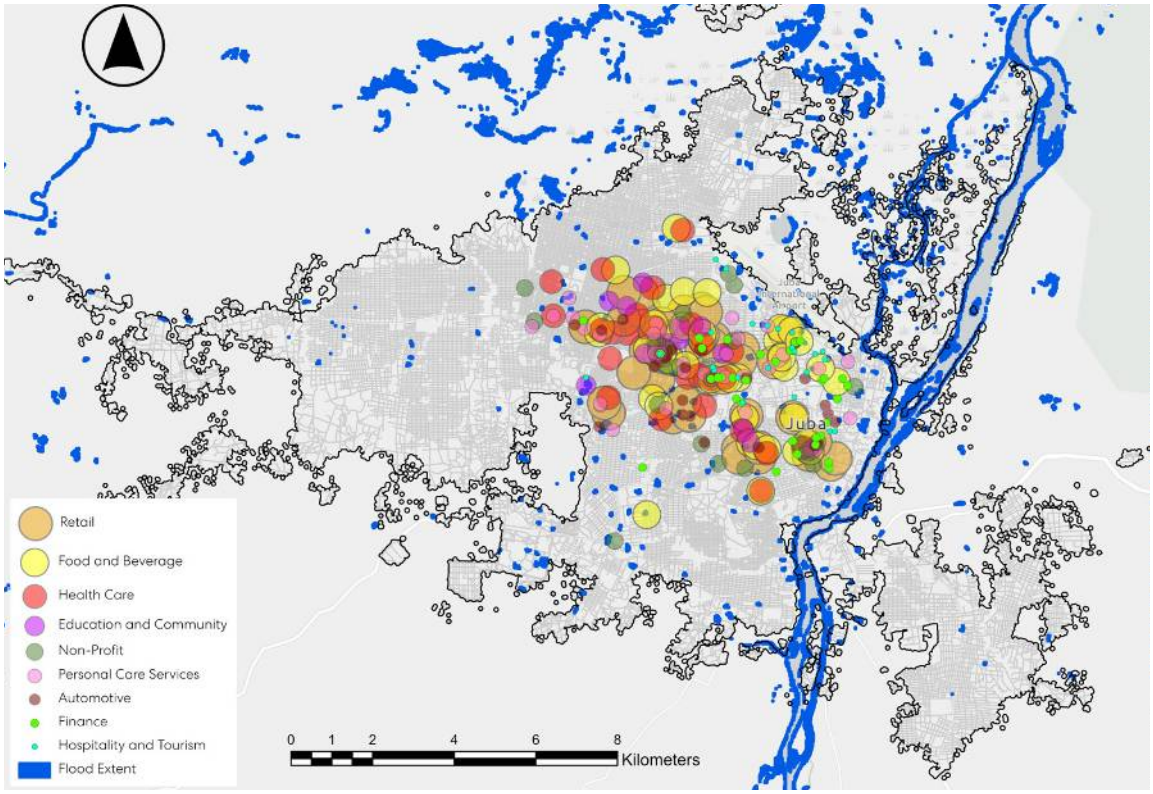
Despite being the main driver of South Sudan's economy, Juba's competitiveness is hampered by basic infrastructure and services deficits. Juba has few paved roads, the majority of which are in the residential and commercial areas close to the international airport. The roads close to the Nile in the eastern part of the city are unpaved and flood during the rainy season, hampering navigability and limiting access to jobs. The Freedom Bridge over the Nile that was completed in 2022 is the second permanent bridge in Juba and has brought improved connectivity to the city's growing eastern area.

In terms of critical services, unreliable electricity is noted as a binding constraint. One in five firms identify electricity "as a major or very severe constraint" (WBG 2024c). Access to water, surprisingly, does not appear to be as major an obstacle, but this could be attributed to the businesses' preference for locating close to the Nile for access to surface water (UN-Habitat 2023). At the same time, this also contributes to pollution and negative health impacts.[32] Digital infrastructure, particularly internet access, is also weak, which in turn limits market access and the ability of firms to identify potential customers and access digital financial products.

Some of Juba's major employment centers include the Konyo Konyo Market, Custom Market, and Suk Libya Market. All three markets are diverse commercial hubs located close to motorized transport hubs (for example, Custom Bus Park for Custom Market) or Juba City Council (JCC, for example, Konyo Konyo Market). They feature vendors selling fresh produce, household items, textiles, and handicrafts. Despite their centrality to Juba's economy, all markets remain constrained due to a lack of formal organization, risk to destruction from fire, insecure land tenure, and lack of access to basic services, most notably reliable utilities and sanitation. Climate-resilient infrastructure (for example, flood defenses) and nature-based solutions could also improve the economic resilience of these areas and protect the local economy.

[32] https://www.voanews.com/a/africa-s-nile-river-suffocating-with-waste/7653563.html, accessed August 5, 2025.

Figure 32. Juba - concentration of economic activities



Source: WBG/Pegasys 2024.

In addition to these markets, Juba has some notable areas of economic activity and potential. Roughly 35 percent of Juba's cover is highly suitable for agriculture. Urban agriculture in the Gurei and Gumbo IDP camps could present an opportunity to create local jobs for IDPs and youth while reducing Juba's reliance on imported produce. Agro-processing also shows potential, but the lack of cheap electricity remains a barrier to scaling production. Similarly, the lack of cold storage and cold logistics affects the potential of fisheries, which could be further developed in the Juba River Port.

Juba is also home to the largest community of manufacturing businesses in South Sudan. As of 2019, it employed 800 workers, the highest of any other city in the country even though this figure represents only 2 percent of the workforce at the time. Compared to neighboring Uganda, manufacturing remains constrained by the cost of labor, electricity, and transport/logistics and the risks associated with land tenure and political instability. Nevertheless, manufacturing clusters exist in Gumbo Industrial Area (transport and logistics), Rejaf/Lologo (beverages), Juba Bypass Industrial area (mattresses, warehousing, and logistics) as well as the Western Industrial Area and Nyakuron Industrial Area (both specializing in building and construction materials). The planned Lamu Port–South Sudan–Ethiopia Transport (LAPSETT) Corridor and the Juba–Nimule Corridor present opportunities for growth through improved market access.

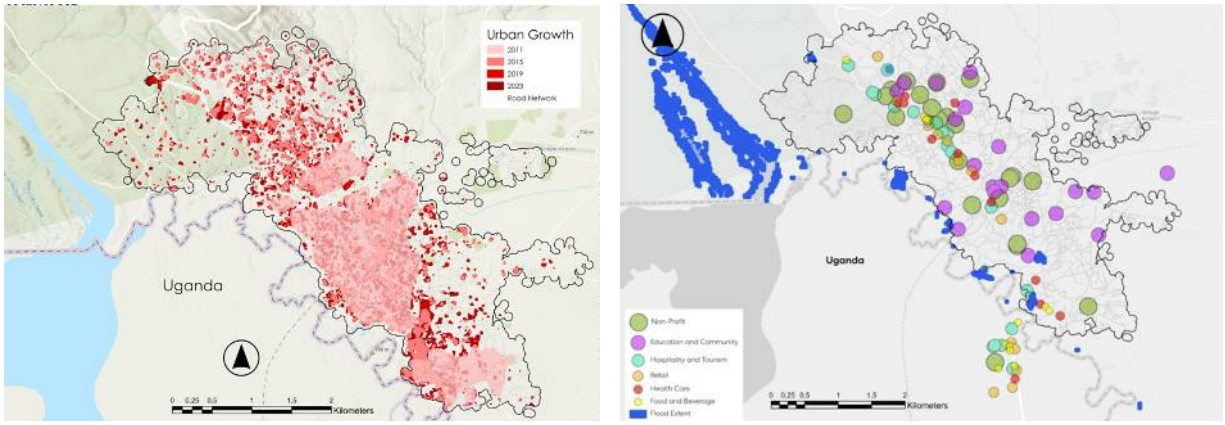
Nimule: The Strategic Border Town

Nimule plays a critical role in South Sudan's economy as the border town through which roughly 90 percent of the country's cargo comes in, primarily from Uganda against which South Sudan runs its largest trade deficit (WBG 2025b). The criticality of the Nimule–Elegu border post and the Juba–Nimule Corridor come into sharp focus considering that South Sudan relies heavily on imported foodstuff (for example, maize, sorghum,

millets, beans) to meet local demand. Issues ranging from weak customs management to heavy rains disrupting the border post and related traffic have the potential of escalating into a food security crisis.

Located in Eastern Equatoria, Nimule's population more than doubled between 2008 and 2025 from 38,000 to 94,000. This rapid population growth is partly fueled by IDPs and returnees and highlights the need to create economic opportunities for the forcibly displaced as well as the host populations. Nimule experienced significant urban growth and continues till date though it has shifted more toward major roads and the Ugandan border, reflecting the relevance of trade and economic development along the transport route as a major driver of economic development (Figure 34). The highest population densities are concentrated within the urban boundary, suggesting a significant urban core.

Figure 33. Nimule - *left*: urban growth (2011–2023); *right*: concentration of economic activities



Source: WBG/Pegasys 2024.

Similar to Juba, Nimule faces infrastructure and service deficits that constrain its productivity. Despite the presence of the Fula Hydroelectric Plant, electricity is a major concern, with around 85 percent of businesses reporting serious or very serious electricity problems. The lack of reliable water infrastructure forces businesses to rely on wells or rivers or purchase water from external suppliers, increasing operational costs and reducing profitability. The lack of sufficient digital infrastructure limits market access and access to finance for firms. Additionally, it slows down the customs process at the Nimule–Elegu border post. Public transport is also limited with negative effects on access to jobs. Nimule does benefit from important roads (Juba–Nimule Corridor, Nimule-Gulu Road, Nimule Airport Road) that have supported its connectivity and allowed it to solidify its position as a trade hub. Nimule has also been developing a dry port since May 2024 to create an inland customs facility (WBG/Pegasys 2024).

Given its location, foreign-owned businesses play an important role in Nimule and create 26 percent of the formal jobs in the border town. The dominance of non-profit establishments in Nimule suggests a community-oriented approach to development, with significant efforts directed toward improving the socioeconomic conditions of the local population. Nimule's primary business activities are geared toward commerce, retail, and hospitality. Most

economic activities are concentrated in the town center, and increasing density could improve access to opportunities. As in Juba, the strategic identification of new mixed-use urban cores in particular could help alleviate the congestion in the town center while also increasing access to opportunities and jobs (WBG/Pegasys 2024).

Wau: Regional Trade and Administrative Center

Wau, the second largest city in South Sudan, stands out as the nation's only city connected to a railway network.[33] With a current population estimated at 232,443, Wau is experiencing rapid growth, with the urban population having nearly doubled since 2008. Much of this expansion is driven by rural–urban migration, as many seek refuge from conflict, and population growth is expected to continue at rates higher than those seen in previous years.

Similar to Juba, Wau is also located on a river—the Jur River, part of the Nile Basin. Much of the recent expansion has taken place in the north and across the Jur River, marking a clear trend of urban growth radiating outward from the central area. The most significant development occurred between 2011 and 2015, with further expansion unfolding in the years that followed. By 2023, the urban area had grown considerably, with new developments spreading both north and east; notably, the emergence of several employment centers stimulated growth in the eastern region across from the Nile. Wau's built-up area now primarily extends northward and westward, reaching into areas across the Jur River. However, this rapid urban expansion has led to peripheral areas becoming less connected to the city's core. As a result, the central regions are the most densely populated, with population density gradually decreasing toward the periphery. IDPs have tended to settle in either larger settlements on the city's periphery (west, south) or smaller settlements closer to the city's core.

Similar to other urban areas in South Sudan, Wau faces basic infrastructure and service deficits, though some areas of opportunity can be found. Wau is partially well connected to Juba, with about half of the route (approximately 320 km) in relatively good, passable condition, while the other half poses significant hazards to drivers. Ongoing insecurity has hindered farmers from tending their crops, adversely affecting food security and the movement of goods. The city's road network is laid out in a grid, but all roads remain unpaved, composed mainly of gravel and earth, and public transport is significantly constrained due to underdeveloped infrastructure, limiting access to employment opportunities. Urban flooding remains a recurrent challenge, affecting educational, community, and logistics infrastructure across the city (Figure 35). Although Wau is South Sudan's only city with a railway network, it remains disconnected for freight transport and faces persistent challenges with its road infrastructure and food supply. The railway was expected to carry freight trains—enabling import and export between South Sudan and the Red Sea via Port Sudan terminals—in 2018, but as of 2025, this has yet to be realized and remains precarious due to the uncertainties in Sudan.

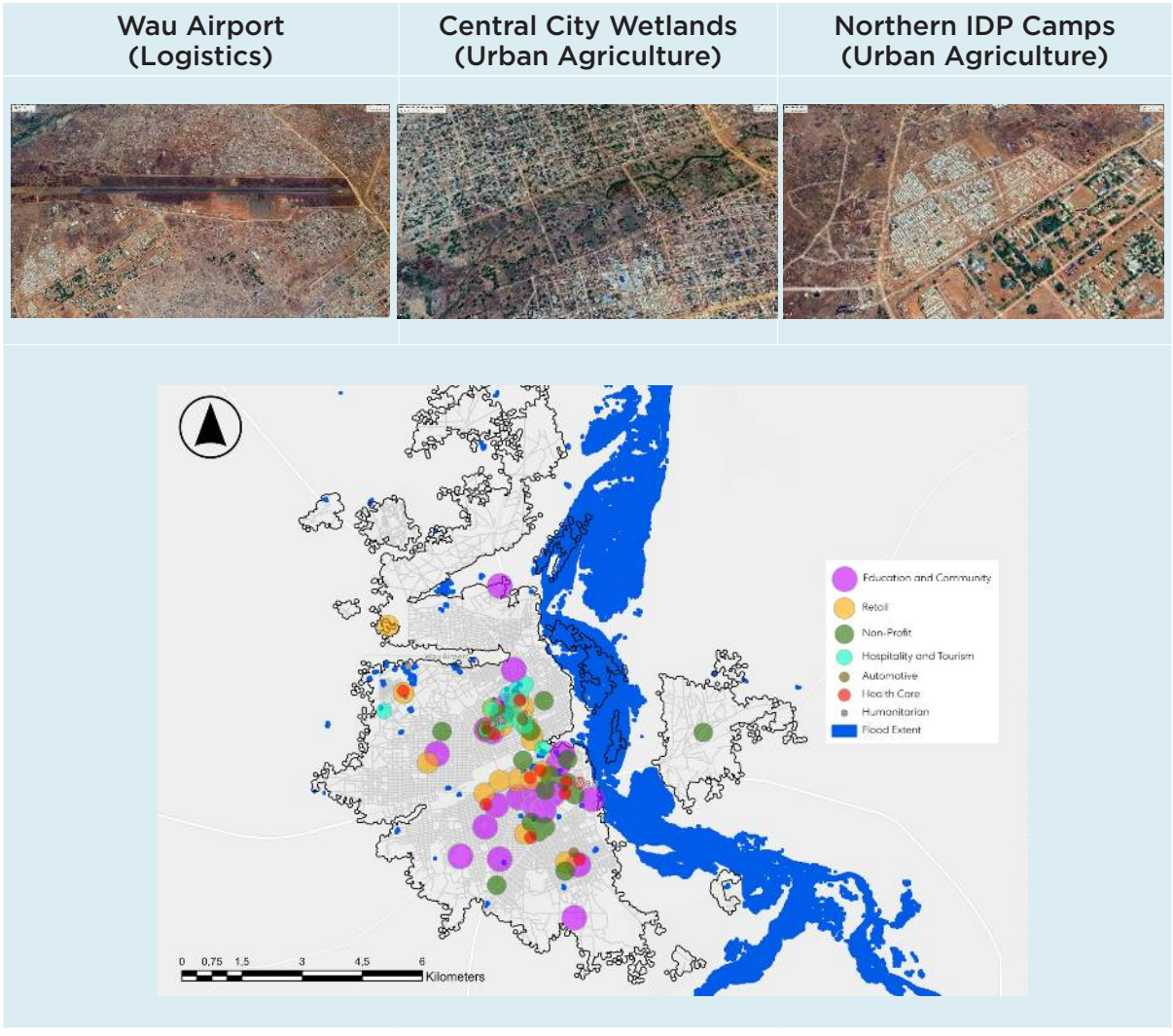
Wau also faces challenges around electricity and water. Stakeholder interviews indicate that the cost of electricity—and its erratic availability—limits the productivity of industries and

[33] Wau is the terminus of the narrow-gauge railway line Babanusa–Wau Railway, which connects from Babanusa in Sudan into South Sudan. Although the physical connection exists (the railway track to Wau is part of the network), regular services are not currently operational.

commercial activities across the city, particularly among larger firms. While water access is not currently a significant challenge for businesses operating in Wau due to the limited scale of manufacturing and agro-processing, a substantial expansion in these sectors would likely increase demand for water. This, in turn, could expose or exacerbate underlying limitations in water availability or infrastructure, potentially making water access a more pressing issue for businesses in the future.

Access to finance in Wau, while still limited, presents a growth opportunity. Over the past decade, the proportion of firms with a current account increased from 5 percent to 25 percent. In 2019, the launch of m-GURUSH—a mobile money platform in partnership with Zain—enabled host communities and businesses to transact with greater ease, reducing reliance on banks that are primarily based in Juba. Further progress was marked in May 2024, when the Governor of the Central Bank of South Sudan and the Governor of Western Bahr El Ghazal State celebrated the establishment of a new institute for banking and finance in Wau Town, a significant milestone for the region's banking sector.

Figure 34. Wau - *top*: important economic clusters in Wau; *bottom*: concentration of economic activities



Source: WBG/Pegasys 2024.

While it can be characterized as a small market town, Wau also enjoys its status as a regional hub for trade and commerce, with its economic activity shaped by its historical and cultural significance. Wau's economy is primarily agrarian with many working in agriculture, livestock rearing, and artisanal trades, while a notable portion of businesses—often micro/small enterprises with fewer than 10 employees—operate in retail and wholesale trade. The city has four major markets that serve as retail and wholesale hubs: Hajar Market, Jau Souk, Wau Market, and Nazareth Market. Unlike other urban areas, Wau appears to record a higher concentration of establishments in education, especially near the city center and the south. Hospitality businesses tend to be located closer to the airport and the UN compound. The proximity of more formal enterprises to the center aligns with population distribution.

In terms of sectors, urban agriculture presents the opportunity of job creation while fortifying food security. Suitable crops like rice, water spinach (Kangkong), and taro thrive in the wetlands. Appropriate measures to prevent wetland/environmental degradation would need to be considered to ensure that the wetlands also continue to play a role in flood risk reduction. In small-scale urban farming initiatives within IDP camps, food security is further enhanced, community engagement is promoted, and reliance on external aid is reduced. Key crops such as tomatoes, spinach, okra, herbs like basil and mint, and small fruits like strawberries are well-suited for small spaces. Relatedly, agro-processing and fishing present some opportunities for value addition and higher wages but have tended to lack investment and have therefore not reached scale.

There are several industrial and logistics sites in Wau, mostly catering to local demand for construction materials and consumables; logistics activities are heavily focused on delivering humanitarian aid. Manufacturing has focused on producing construction materials such as timber and brick for local or regional use, while logistics operations, particularly near the airport and the train station, are largely managed by humanitarian workers rather than private businesses, highlighting a reliance on external support for the transportation and distribution of goods.

VI - Deep Dive: Urban Governance and Institutional Capacities

Key Messages

- **South Sudan's urban governance crisis stems fundamentally from institutional fragmentation that separates authority from responsibility.** The institutional complexity of conflicting mandates means that effective reform requires coordinated action across multiple government levels and agencies.
- **De facto institutions continue to play an important role in the governance of cities and rural local governments** despite clear legal mandates enshrined in the Transitional Constitution of the Republic of South Sudan and the LGA (2009). While the country continues to face challenges in consolidating formal governance systems, these structures remain central to municipal administration and management. Platforms such as the IGTC have emerged as effective mechanisms for coordination among ministries, departments, and agencies (MDAs) at the national level, contributing to the development of priority investments; policy frameworks; and improved alignment across the national, state, and local levels. At the subnational levels, coordination structures—including County Transfer Monitoring Committees (CTMCs), as well as city- and community-level bodies such as City Development Committees (CDCs), City Coordination Teams (CCTs), Block Development Committees (BDCs), and Quarter Development Committees (QDCs)—demonstrated functionality, particularly in the context of externally supported service delivery programs. Collectively, these mechanisms illustrate an evolving, multitiered system of coordination that complements formal governance arrangements and plays a significant role in service delivery outcomes.
- **Cities and states have weak own-source revenue (OSR) generation and are reliant on fiscal block transfers to meet budget commitments.** These transfers are intermittent and unreliable. An increase in cities' OSR allows for greater self-reliance as more costs are more reliably met, and services such as SWM, sanitation, and local road provision can be improved, expanded, and sustainably maintained. OSR can be improved through digitization of tax collection, increased capacity for both collection and enforcement, and mainstreaming of collection responsibilities among levels of government and the South Sudan Revenue Authority.
- **Only three urban areas have a functioning land cadaster**, and most urban councils do not have the capacity to build one. Investments should concentrate on building digital land cadasters and urban planning capacity at the state and municipal levels.
- **Already underfunded services are facing greater challenges due to increased urbanization.** Cities are becoming denser and, in some cases, growing beyond their official limits, placing even greater strain on city services as well as neighboring counties even less equipped to provide the same. Repair of existing infrastructure, as well as increased cooperation between institutions at the national and local levels, can help improve service provision.

Introduction

This chapter explores institutional arrangements, fiscal systems, land governance, service delivery (with a focus on WASH services), and the role of international actors of mandated authorities in South Sudan. The country's City Councils are chronically underfunded and lack the staff, equipment, and skills to provide services and administer governance functions. In addition, increased urban growth and expansion adds pressure onto already strained systems. However targeted, politically informed interventions could incrementally strengthen municipalities and enable them to play a greater role in shaping the country's development trajectory.

Urban affairs are considered to be a decentralized state matter. Policy discussion and planning across departments at the national level therefore tend to de-emphasize urban areas and instead focus on rural areas, where the majority of the population continue to live in one of the least urbanized countries in the world. For instance, no financing planning or allocation is undertaken for urban areas at the National MFP. The DRM Institutions and Regulatory Framework planned by the MHADM instructs payams and bomas (the smallest rural administrative areas) to have their own disaster management committees but makes no provision for city or town councils, which face very different disaster risks. The exception is the MLHUD, charged with planning urban development and holding mandates ensuring urban infrastructure and WASH service provision.

Legislation at the national level directly concerning urban areas is therefore limited. One notable exception is the LGA (2009), which lays out which taxes and fines urban city councils are allowed to levy and other responsibilities they have, such as carrying out public works. Policy for urban development is developed by the MLHUD, which also has overall policy responsibility for land administration, though administrative responsibility again lies with the states. The MLHUD has limited leverage to ensure the policy master plans it has developed are implemented in urban areas, both due to the lack of capacity and funding (the ministry's operating budget for 2023/24 was approximately US$900,000) and the lack of a mandate to enforce urban planning within states.[34]

Other roadblocks to increase government support include the fragmented political buy-in for the introduction of key reforms. Differing priorities and mandates across the government, especially concerning decisions to do with the administration and management of land, and the structures of service provision have in recent years stalled the introduction of new policies in multiple fields. A hallmark of each of these policies seems to be their drafting in isolation from other parts of the government that have a vested interest. Cross-ministerial buy-in and discussions at the highest levels of government are required to break down the silos in which policy is made to ensure a common and agreed approach to reforms.

However, examples from other fragile states offer relevant lessons that could be successfully applied in South Sudan. In Sierra Leone, decentralization after 2004 initially produced fragmented service delivery, but gradual fiscal transfers and donor-supported training helped build municipal capacity (University of Edinburgh/FCDO 2024). In the Federal Republic of Somalia, donor substitution remains dominant in

[34] Interview with MLHUD staff, 2024.

Mogadishu, but recent efforts to channel funds through municipal administrations show that alignment is possible (ODI 2020). In Afghanistan, attempts to formalize land records were often undermined by entrenched political interests, suggesting that technical solutions alone cannot overcome the political economy of land (SIPRI 2015).

Institutional and Governance Arrangements

Under South Sudan's governance system that mirrors a federal arrangement, states are granted a high degree of autonomy. This was seen as a critical feature of the constitutional settlement to ensure stability after the end of South Sudan's internal conflicts. For a lot of governing functions, especially concerning the provision of services, environmental regulations, and management of land and infrastructure, state governments are the primary administrative bodies in South Sudan, with the national government essentially restricting itself to policy formulation in an effort to ensure even administration of policy across the country. Governance inside each state is therefore a matter largely dealt with by each state's own government. Urban government, therefore, is viewed both by the state governments and the national government as a state matter.[35]

National ministries and agencies maintain primary responsibility for policy formulation, with administration of those policies delegated to the state level, which retains primary responsibility for city councils. This reflects the national government's desire to have similar outcomes across all states, while recognizing a lack of capacity to implement policy throughout the country. This framework is muddied by having mandates for similar functions retained by multiple ministries and a lack of coordination between the national and state governments in the formulation of policy that is suitable for multiple states.[36]

Urban governments have many responsibilities with few means to carry them out. The LGA (2009) and the Transitional Constitution (2011) establish municipalities and counties under state governments as responsible for a wide spectrum of functions—from service delivery and waste management to land allocation, market regulation, and even aspects of security (UNDP 2021a). There are contradictions in law on local powers. The LGA, which predates the constitution, lays out roles for local government, suggesting a highly decentralized model. However, the Constitution only lays out guidelines for how local government should be structured, with the powers granted in the LGA largely handed to the state government. No specifics are given on the level of autonomy local governments have from the state governments (WBG/LPS Associates 2024). In practice, the uncertainty over who is empowered to deliver services contributes to a significantly reduced capacity to deliver at the local level. Given the acceptance of both documents as accepted law, it is not certain how the national government would intervene to settle disputes over jurisdiction, as both the state and local governments could cite competing valid claims under the law (WBG/LPS Associates 2024).

The main governing authority of urban areas is a council, called a city, municipal, or town council (from hereon referred to as a city council), as laid out in both the LGA and the

[35] Interview with MFP staff, 2024.
[36] Interviews across national ministries, as well as state ministries in CES, JCC, and Wau Municipal Council, 2024–25.

Constitution. It is headed by a mayor, who is chosen by the state governor. Leadership changes can therefore occur frequently as governors appoint new mayors, or change themselves, which can lead to initiatives stalling or being reversed. Mayors are supported by one or more deputy mayors, who are also political appointees, and by a permanent staff of administrators headed by a chief executive. The council also has a legislative body that enacts a wide range of local byelaws, ranging from the enforcement of law and order, waste management enforcement, and the setting of water prices (in Juba) to public smoking bans, budget approval, and demolition orders for illegally erected structures.

Given the legal uncertainties on the local governance structure, the organization of city councils varies across the country. In Juba, Central Equatoria State (CES), the city council is divided into administrative 'blocks' and further down into 'quarter blocks', each with their own council and administrative capacity and reporting directly to the city council. These are meant to be the equivalents of 'payams' and their subordinate unit 'bomas', which are used for rural areas, and are directly addressed in the national policy. On the other hand, Wau City in Western Bahr el Ghazal State has payams and bomas within the city and no blocks and quarter blocks. The LGA has also made a mention of industrial councils that are supposed to be established in the industrial areas but currently do not exist in South Sudan. Malakal, after having had its entire urban infrastructure destroyed, is innovating its own administrative structures that do not precisely align with other states and urban areas.[37] The blocks have their own staff and budgets and collect separate taxes from the city council. Block councils collect town rates from shops in commercial and noncommercial areas, commercial licenses, and ground rent from every house in every class of land.[38] City councils collect fees for services and building regulation approvals, licenses for buses and taxis, water tanks, private cars, and fines for public order breaches. The level of autonomy of the blocks depends on each city. Juba has recently decentralized provision of services, leading to a jump in the budget for blocks, with a commensurate reduction in the city council budget (see the city spotlight for Juba below).

Given the lack of clear structures, governance responsibilities in urban areas are split between the state government and city council in varying, contradictory, and complex ways. Alongside appointing city mayors, state governments play an outsize role in urban government. Urban areas can represent significant sources of revenue for the state, which have their own revenue collection capacity to collect taxes that are due to the state, as opposed to the local government. The state also plays a significant role in capacitating the local government, being generally responsible for the salary of classified employees, who are higher ranked and higher skilled. City councils are responsible for paying unclassified employees, who are generally lower skilled and lower paid (Table 6).[39]

[37] Interview with the Mayor of Malakal and representatives of the Upper Nile state government; Juba, 2024.
[38] Interview with JCC Senior Director, 2024.
[39] Interviews with Juba and Wau Councils, 2025.

Table 6. Number of employees in urban government for selected urban areas in South Sudan

Urban Area	Classified Employees	Unclassified Employees	Total
JCC headquarters (HQ)	243	107	350
Bentiu	44	45	89
Yambio	50	96	146
Rumbek	75	54	129

Source: Local government response to World Bank data collection request, 2025.

There is significant under-resourcing across all cities for which there are data. Even the best capacitated city in the country, Juba, is run with only 350 staff. Significant portions of the existing urban government labor capacity are dependent on state government revenue for paying salary (Juba 69 percent, Bentiu 49 percent, Yambio 34 percent, Rumbek 58 percent).[40] However, repeated reports from classified employees state that the fiscal transfers required for payment are unreliable, and employees often go months at a time without pay.

State governments also control planning approvals for land located in the city centers, while city councils control approvals for land on the peripheries. Land administration of the most formalized and taxable land is handled by the state Ministry of Housing, Land and Public Utilities (MHLPU), whereas other types of land, including informal land, is handled by the city council.[41] The implication for urban development is that planning approvals for city centers essentially lie with the state government, with city councils essentially shut out of the decision-making on urban densification, but with a greater role in decisions on urban expansion at the peripheries. In instances where urban expansion extends beyond council jurisdiction, approvals lie with county governments. The lack of coordination between the separate jurisdictions can effectively block service expansion or improvements. For instance, attempts to expand electricity and water services in Juba urban area outside of the core city are facing delays because of a lack of planning approvals from the county government, with the state government unwilling to adjudicate by stepping into territory seen as the county's domain.[42]

Together the city council and its subordinate administrative areas work to provide sanitation services, as well as primary health care and some educational units, though coverage in even centrally located areas is low. On paper these and other services such as SWM are the responsibility of state ministries or national corporations, with input from the city council as needed. In reality, many services, such as sanitation and SWM are carried out by city councils, which choose to interpret 'public works' assigned to them under the LGA as including service provision to justify their legal authority to do so.

As urban areas expand beyond their limits into their neighboring counties, county governments, which are meant to administer rural areas, essentially become hybrid urban-rural administrations; however, they do not have the mandates, responsibilities, or resources to deal with such a different administrative environment. There is currently little effort to coordinate planning or policy between city councils and county governments, with limited

[40] Interviews with Juba and Wau Councils, 2025.
[41] Interviews with Juba and Wau Councils, 2025.
[42] Interview with acting Juba County Commissioner, 2024.

communications between such bodies and limited coordination effort exercised by the administrative level above urban councils and rural councils, that is, the state. This is particularly prevalent in Juba, where Juba County council has jurisdiction over approximately 50 percent of the geographic extent of the Juba urban area (UN-Habitat 2023) and yet does not have any resource to administer the required services in urban environments. Consequently, urban residents in the Juba County access services provided in the core urban area governed by JCC, putting pressure on services without giving JCC the means to gather taxes from the residents in Juba County. The county authorities also lack the capacity to collect more taxes.

Municipal Finance

City councils are chronically underfunded and under-resourced and face mounting pressure to provide services to a growing urban population. Officially funded through a combination of OSR and fiscal transfers from state governments, in reality, budgeted block grants are minimally executed, and apart from Juba, South Sudan's cities and towns do not raise meaningful levels of OSR. They do not reliably receive fiscal transfers from states either, leaving many functions paralyzed. Dependence on international partners for key service provision is commonplace, although their presence in cities is not ubiquitous.

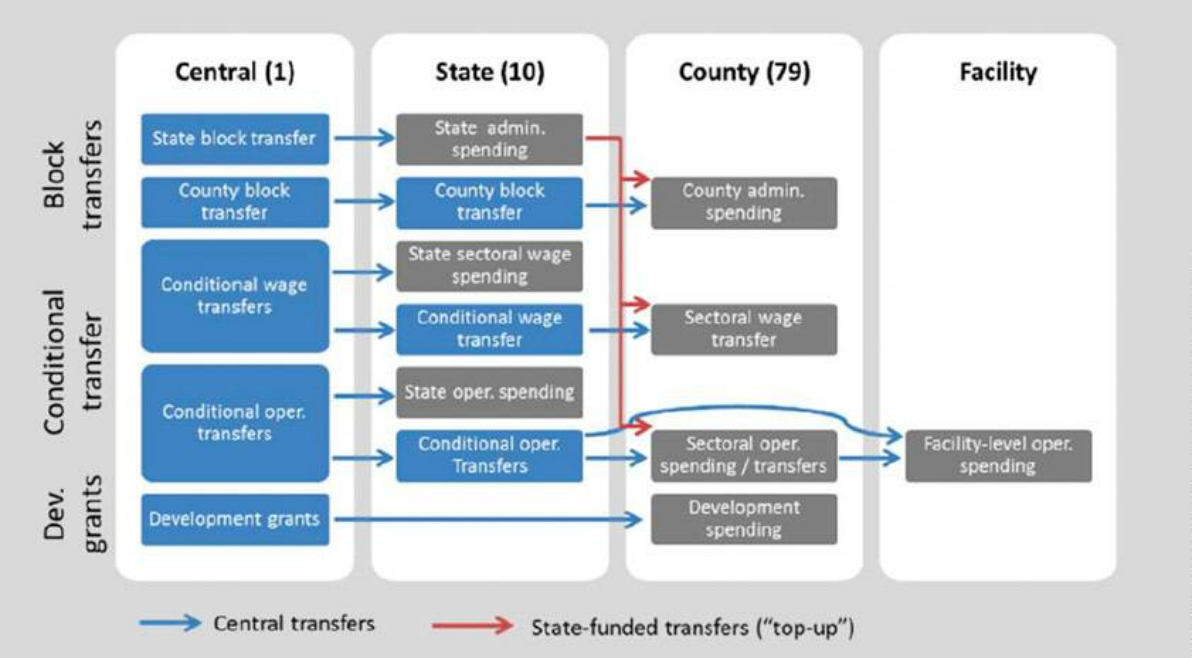
Block Transfers

City councils rely on state governments for fiscal transfers (WBG 2024a; WBG/LPS Associates 2024)**.** In some cases, these transfers complement their OSR, but in most cases, OSR is so low that meaningful revenue only comes through the state. These fiscal transfers are, in turn, funded by the national government, since the state government's OSR is also low. While some funds are earmarked for counties by the national government, no allocation is made for urban areas, leaving the amount allocated to cities at state government discretion.[43] In practice, funds nominally designated by the state for cities are unreliable and intermittent, and city OSR cannot make up the difference. With the rapid expansion of some urban areas from their traditional boundaries into counties, there is uncertainty about which government (city or county) should be paying to provide services, especially WASH services. In practice, city councils are faced with providing more services without being able to raise more revenue or receive more from the state, as those core urban areas become denser and those living in peri-urban areas outside city limits come into the cities to use services.

State governments are the key conduit for funds from the national government. For the 2023–24 financial year, the national government of South Sudan budgeted US$319.7 million in block transfers to the 10 states (GoSS 2024). Transfers are then meant to be made from the state government to individual counties including municipalities. Some of the block transfers are earmarked for counties but with states in charge of the dispersal (Figure 36). As states remain under extreme financial pressure, dispersals of county block granted have become intermittent and unreliable. The majority of block transfers (61 percent) are made directly to states without earmarking of funds. For counties, funds are mostly earmarked as development grants (25 percent) or a straight block grant (7 percent). The remaining 7 percent of funds transferred from the national government to the state is the Sales Tax Adjustment Grant, based on sales tax collection and apportioned to each state (GoSS 2024). The national MFP considers the cities to be entirely a matter for state governments and so does not include them in any kind of funding calculations, leaving states to determine when and how much to transfer to city councils.

[43] Interviews with MFP Staff, 2024.

Figure 35. The fiscal transfer system in South Sudan



Source: WBG/LPS Associates 2024.

The official fiscal transfer system does not include city councils. Figure 36 outlines in detail the block transfer system including the specific earmarks for county development. It should be noticed that while the earmark is direct from national to county government, the actual cash transfer mechanism is routed through the state. Of note is the lack of earmarks at either the state or national level for city councils. Like the counties, the cities are also dependent on the state for sectoral wage transfers, significant sections of their administrative and operating budgets, as well as development spending.[44]

State block transfers to city councils are generally intermittent and unreliable, with salaries unpaid for months.[45] While there is no clear budget submission process from the local to state governments in South Sudan (WBG/LPS Associates 2024), in some instances, local authorities have stopped submitting budgets to the state because they assume those budgets will not be funded.[46] For example, Yambio receives fiscal transfers from the Western Equatoria state government expressly to cover salaries. For fiscal years 2021–22 and 2022–23, Yambio received extremely limited funding from the state government, and then in 2023–24, it received 29 times as much.[47] Such unreliability can prevent effective planning and execution.

To put the intermittency and unreliability of state transfers to cities into context, it should be noted that the state governments are also heavily reliant on block grants, given their weak capacity to raise OSRs. In 2023/24, CES's OSR was US$20.5 million, the equivalent of US$18.05 per capita using the population figures from the 2008 census. In reality, the per capita number will be far lower given unrecorded population growth. The strain on service provision is stark given not only population growth and urban expansion but also the hyperinflation

[44] JCC approved budget 2023–2024; JCC OSR collections 2023–24; Wau Municipal Council approved budget 2023–24; and data on fiscal transfers and OSR from Yambio, Bentiu, Rumbek, and Yei County, 2025
[45] Interviews with Juba and Wau councils, 2024 and 2025.
[46] Interview with Local Government Board (LGB); Juba, 2024.
[47] Data submitted to World Bank by city councils upon request, 2025.

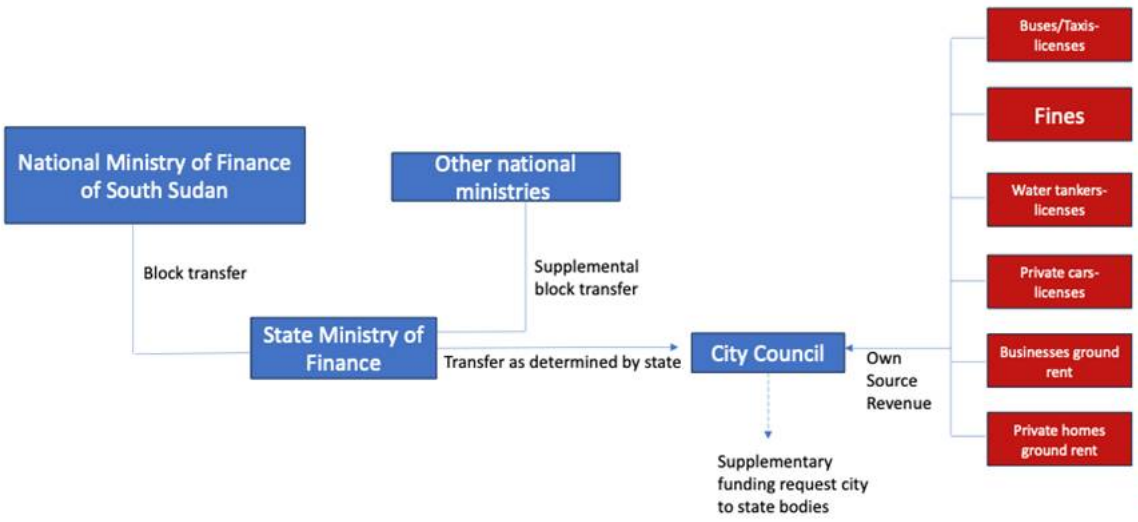
the country has been experiencing. In comparison, block grants from the national government for the same year are estimated using the methodology used by the MFP for the apportionment of funds between states at US$36.27 million, almost 77 percent larger than OSR, and accounting for 64 percent of the combined CES budget of US$56.77 million. JCC's OSR (as opposed to the state's) is US$16 million for the same year. This is equivalent to 28.8 percent of the state's revenue, making Juba a tempting target for additional funds for the cash-strapped state. Requests for such additional funding have been reported by city council officials, and these add strain on the city's already struggling finances.

Own Source Revenue, Tax Collection Capacity, and Mandates

The LGA stipulates clearly what urban municipalities are allowed to levy taxes on. Some taxes are collected at the city level, whereas others are collected at the block level (Figure 37). How revenue is apportioned between the city and blocks is determined by each city. For instance, in Juba, a policy of decentralization of services has led to more revenue being held by block councils in the last financial year as described in the Juba spotlight section below. Revenues are raised by levying taxes or fees on the following (GoSS 2009):

- By city and municipal councils: licenses for the operation of private cars, buses, taxis, and water tankers; service fee for businesses; building permit tax; and multiple fines for breaking regulations and bylaws
- By block councils: annual commercial operating licenses, town rate collected from shops in market areas, ground rate collected from shops in residential areas, and ground rent collected from every house in every land class.

Figure 36. City council revenue cash flows from state authorities and from OSR (red)



In most cases, taxes are collected manually. Taxpayers either come to the council office or block council office to pay fees as they are owed, or collection teams go to taxpayers. The teams consist of collectors, accompanied by guards and police officers, and go to homes and businesses to physically collect the cash owed and to note down arrears when payment cannot be made. The money is then taken to council

headquarters by car. JCC has attempted to digitize this process multiple times. Irregularities in contracting processes have led to the collapse of such systems on multiple occasions, although appetite for digitized tax collection remains.[48] Wau has also stated a desire to digitize tax collection but has so far been unable to do so.[49]

Reported difficulties faced by governments can be collated into two areas: lack of collection capacity and loss of owed revenue. Collection capacity can be affected by lack of human resources, lack of equipment, and lack of reliable, digitized records. This can lead to misallocation of revenue, where the wrong authority collects a tax and because of difficulties both in recording collected funds and those who are authorized to collect them. In turn, this can cause related difficulties for taxpayers should they be asked to pay a tax already paid to another agency or to the wrong personnel and can also incentivize tax avoidance where a taxpayer can claim to have paid elsewhere when they have not. The inefficiency of having multiple agencies frequently collecting tax from the same taxpayers also leads to feelings of frustration.

Collection capacity varies substantially across urban areas, with Juba the best capacitated, to Malakal, which is rebuilding its collection capacity, first by reconstituting maps of land plots and taxpayer records which were destroyed during conflict.[50] In general, however, it is expected that tax collection does not meet the targets laid out in city council budgets, with collection rates even in the better-run cities sometimes ranging between 40 percent and 60 percent of the budgeted need.[51] In Juba, OSR collection in 2023/24 met 56 percent of budgeted need. For the cities for which relevant data are available, this figure can be as low as 19 percent (Yambio) and 21 percent (Yei). Bentiu is an outlier since figures suggest nearly all budgeted revenue is raised, though this could be attributed to the high degree of assistance the city receives from the government and donors in the face of permanent floods. As far as can be determined, no city comes close to being able to rely solely on OSR to fund all activities. Juba is the closest at 56 percent, measured as OSR as a fraction of budgeted expenditure.[52] Figures provided to the World Bank from various South Sudanese urban authorities have been analyzed and enable comparison of OSR per capita (Table 7).

Table 7. OSR per capita (2023/24) for selected urban areas

Urban Area	OSR per Capita (2023/24)
JCC HQ	US$32.25
Bentiu	US$4.47
Yambio	US$1.12
Rumbek	US$4.76
Yei County (including Yei)	US$7.71

Source: World Bank Group (WBG) analysis, based on data provided by city/town councils.

JCC has by far the most OSR per capita (OSR/C), although this must be taken with caution given both the general difficulties estimating the current population in South Sudan and the likely exclusion of additional urban population residing in Juba County in the urban peripheries. OSR/C in other areas is substantially lower, with the next highest being only 24 percent of Juba. This suggests reduced revenue collection capacity, as well as reduced economic activity. While Juba's OSR/C is substantially higher than any other city, US$32 per capita per year remains a

[48] Interviews with JCC, 2024 and 2025.
[49] Interview with Wau Municipal Council, 2024.
[50] Interview with Malakal Mayor, 2024.
[51] City responses to World Bank data request, 2025.
[52] JCC revenue collection rates, 2023–2024. JCC budget 2023–24, as provided to the World Bank.

very low figure given the multiple service commitments on sanitation, primary health care, and education made by the city council, which is put under further strain from demand for city services from populations in peri-urban areas from which the city council receives no income. Given these very low figures for revenue, it is by no means surprising that urban areas in South Sudan are, as elsewhere, significantly dependent on donors for the provision of services. However, most donor-led urban WASH service interventions concentrate on Juba and Bentiu/Rubkona.

Corruption continues to distort urban planning and infrastructure development, undermining the foundations for sustainable urban growth. It manifests through resource diversion, land grabbing linked to illegal changes in land use, weak enforcement of regulations, and heightened investor uncertainty. Public service delivery in cities is often underfunded, with significant implications for human rights as access to basic services remains constrained. At the same time, corruption reinforces inequality and exclusion, as favoritism and rent-seeking—often along tribal lines—shape access to opportunities and resources within a context of weak institutional governance and limited accountability. These dynamics constrain fiscal space for urban development and weaken the effectiveness of urban institutions, highlighting the central role of governance quality in shaping equitable and functional urban systems.

Urban Planning and Land Management

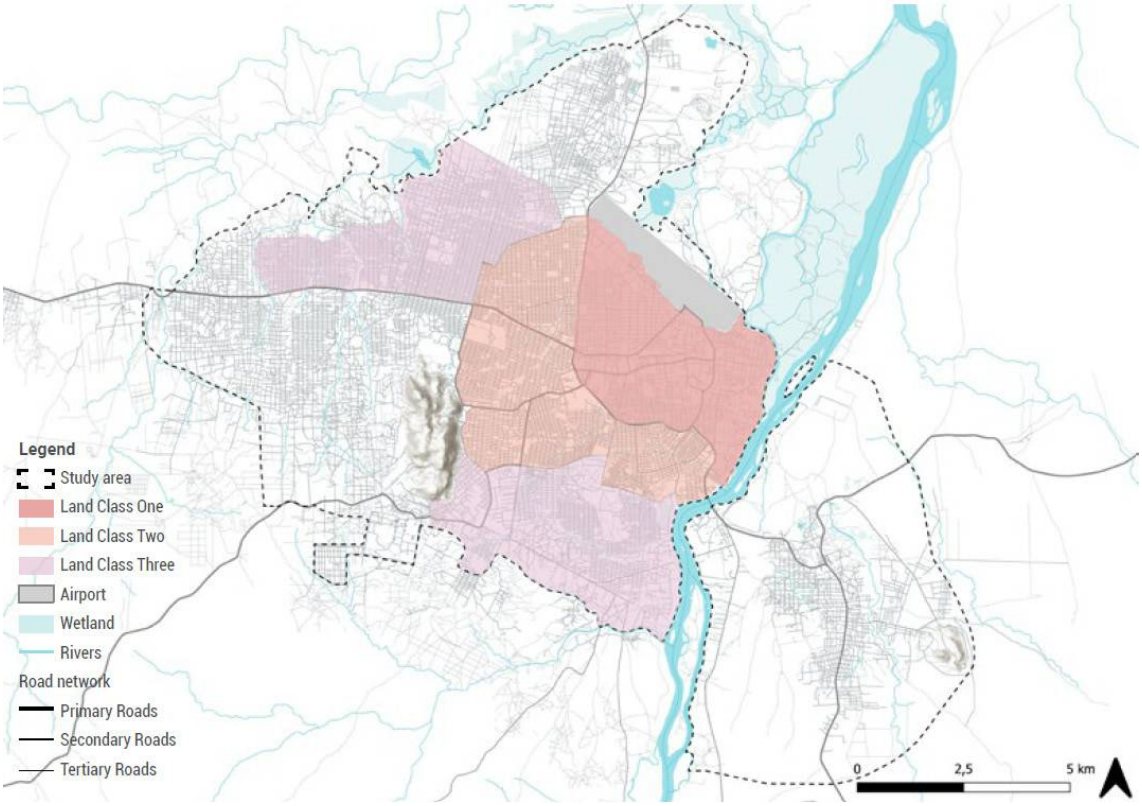
All levels of government in South Sudan lack urban planning and land administration capacity. Given the split between policy at the national level and implementation at the state level that is common throughout South Sudan's governance arrangements, urban planning capacity is retained at the national level by the MLHUD. There is then no urban planning resource at the state level.[53] Coupled with scarce resources for urban planning at the national level, this leaves very little capacity to try and control the growth in urban areas, which has allowed the uncontrolled expansion of urban areas, in particular Juba. At the state level, most states and city councils lack the capacity to determine and enforce land rights crucial to effective implementation of urban planning.

A weak land administration system is characterized by the lack of land ownership data and enforceable planning regulations, providing considerable challenges in the face of urban expansion. Informal expansion causes conflict, puts a strain on service provision, prevents new infrastructure being built, and can have severe environmental consequences. Crucial to the improvement and enforceability of urban planning is the need to improve land administration and management. Land administration is complicated by the lack of cadasters in most urban areas. Juba, Wau, and Renk are the only South Sudanese cities that have existing land cadasters (MLHUD 2023). Even in these areas, not all plots are on record. As cities expand, informal settlements tend to be built on plots of land that are not automatically registered in a cadaster.

Multiple factors prevent the efficient establishment and administration of a land cadaster. The first is capacity. Many city councils and state ministries do not have sufficient skills, staff, equipment, and offices to manage land and planning applications. Enforcement of regulations is also impeded due to the

[53] As stated in interview with CES MHLPU, 2025.

Figure 37. Land class map of Juba



Source: UN-Habitat 2023.

Note: The first, second, and third class are mostly within the official town boundaries, with some third-class land to the south and the west outside the boundary. The unshaded urban area is all informal land (fourth class) and makes up the majority of the expanded urban area.

lack of legal capacity in the court system and the policing system to prevent or reverse land grabs. Wau stands out as a notable exception, where the donation of new court buildings has contributed to documented improvements in law enforcement capacity, enabling more effective settlement of land disputes and enforcement of ownership rights.[54]

In other cases, improved regulations combined with heightened enforcement capacity and a digitized land cadaster would prevent encroachment on wetland and other areas. The lack of drainage also causes rapid erosion of existing roads, especially with regard to non-asphalt roads. In the most extreme cases, land grabbing or building without permission can lead to the diversion of natural drainage channels or the destruction of streets and neighborhoods.

[54] Interview with Wau Municipal Council, 2024

Classes of Land and Implications

Residential land in South Sudan is divided into four classes. First- and second-class land is mostly found within formal city boundaries and is administered by state authorities, which collect taxation revenue from these plots (Figure 38). All revenue, including property taxes and fees for permitting and planning permissions, is split between state MHLPU and the state MFP, with the exception of ground rent collected by city or county authorities. In cities with cadasters, first- and second-class plots are the best documented. First-class land is the largest at 1,200 m^2 and comes with permissions to build multistorey residential buildings. Second-class land is similar, but much smaller at 675 m^2. This makes first- and second-

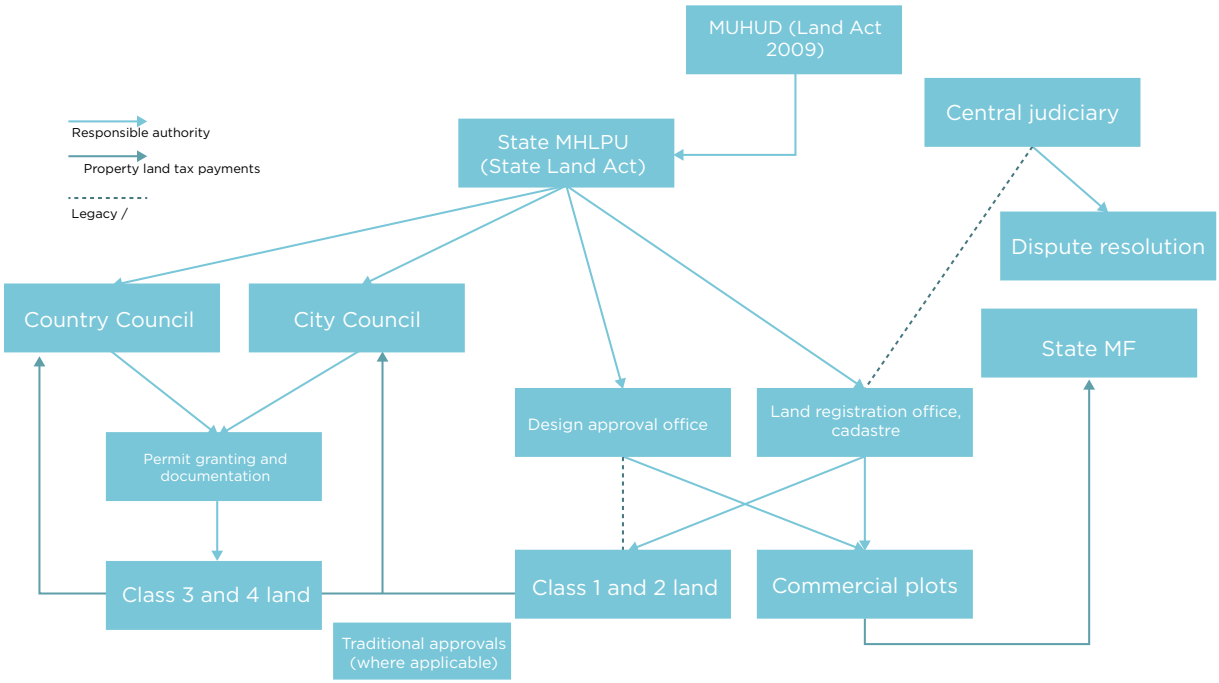
class land expensive and in short supply (especially first-class plots). Given the documentation that exists for the land, it is also easily taxed. This level of expense can result in grabbing of undocumented land (fourth class) on the outskirts of cities to build illegal multistorey homes, leading to cheaper land acquisition costs and evasion of tax (Figure 38).[55] There is a lack of capacity to enforce regulations to prevent such illegal seizures.

Third- and fourth-class land is administered by city councils and county governments. Third-class land plots are only 400 m^2 and have basic documentation which allows for it to be taxed, as well as permissions for small residential buildings. Of the top three classes of land, it has the lowest applicable tax rate and the lowest value. Fourth-class land, usually of similar size, has no documentation, which means it cannot be taxed or officially linked to services. Due to the lack of property ownership information, it is the most vulnerable to land seizure, also given the soaring land prices of first- and second-class plots (ODI 2011). Municipal and county councils are incentivized to document these fourth-class plots, essentially turning them into third-class plots so that they can be taxed and receive services but lack the capacity to do so in a systematic and scalable manner. Expansion of the fourth-class plots is the primary driver of uncontrolled urban growth, especially when it occurs outside the official boundaries of municipal areas. The fourth-class plots tend to encroach into public open space (resulting in disputes) as well as into environmentally sensitive areas such as wetlands or flood-prone areas. Land on the peripheries may also be subject to traditional authorities, and traditional land rights could stand to become a much more important factor in urban land dynamics as cities encroach further into the surrounding rural areas.[56]

There are overlaps in the jurisdiction of land in urban areas. The Land Act 2009 provides the mandates over cadaster and permitting to the MLHUD and the state MHLPU, transferring them from the judiciary, which traditionally held the power (Figure 39). The judiciary, however, continues to hold a large amount of land ownership data, a lot of which is not held by the central and state ministries. Therefore, stakeholders still seek out certifications on ownership from the judiciary, which can contradict more up-to-date certifications issued from authorities. In the practical case, however, the permitting power for major construction in urban municipal areas remains with state authorities, since most land is first or second class in urban areas and because of building restrictions on third- and fourth-class plots. Control over land is sensitive to the taxation revenue from first- and second-class land in urban areas, which currently is mostly paid to state MFPs, and fees for design and permitting approvals on first- and second-class land, which are paid to the state MHLPU.

[55] Interview with JCC and LGB, 2024.
[56] Interview with JCC and LGB, 2024.

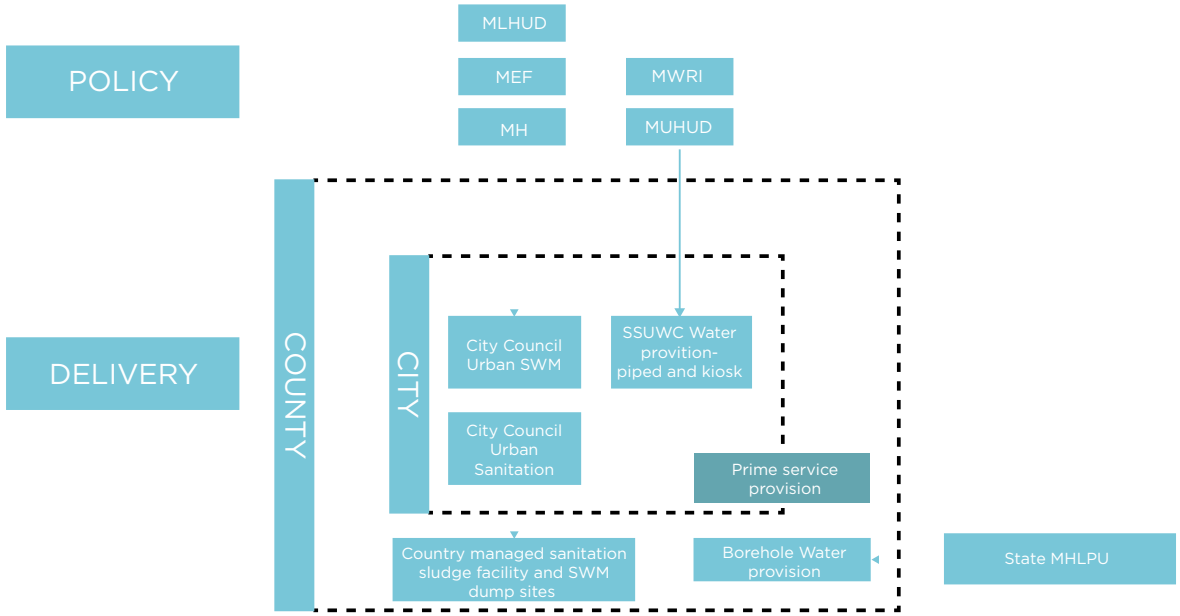
Figure 38. Land institutional map



Challenges in Urban Service Provision

Institutional arrangements hinder the provision of adequate services (Figure 40). Urban public services (such as solid waste collection, water provision, sanitation, and power within existing operating areas) only operate within official city limits, since there is no mandate to extend into urbanized areas beyond and no sustainable way to resource such an extension, also considering the difficulty of providing services. These challenges are exacerbated by the population in urban areas outside official city limits who, with key services not provided in their peri-urban neighborhoods, also must use services within the city limits. Councils are forced to provide services for a larger population without being able to increase revenue collection from their new service users living outside their jurisdiction. Those that cannot journey into the city center to access services are either dependent on private sanitation and water provision where it is available and can be afforded or on borehole provision, groundwater, and open defecation where it is not. County governments have limited capacity to provide the kind of water and sanitation services expected in urban areas but also largely do not collaborate with city councils to facilitate solutions to service provision, most crucially the expansion of services into their jurisdiction.

Figure 39. WASH service provision map



Note: MH = Ministry of Health, MEF =: Ministry of Environment and Forestry, MWRI = Ministry of Water Resources and Irrigation.

Capacity for the provision of services in even the most capacitated cities remains poor by regional and international standards. Where piped water supply is available, coverage ranges from 0 percent of the population in Malakal (where the South Sudan Urban Water Corporation [SSUWC] station is not operational) to 60 percent of the population in Renk, with most other cities ranging from 30 to 35 percent.[57] The remaining population either buys water in tankers from either SSUWC or private suppliers or is dependent on groundwater. The latter is especially true of growing peri-urban areas; in Gumbo, for instance, 80 percent of residents are dependent on groundwater (Borgomeo et al. 2023). A second water treatment plant is under construction there and nearing completion. These systemic gaps in safe, reliable water access have had direct public health consequences, contributing to recurrent waterborne disease outbreaks, including the 2025 cholera epidemic, which recorded nearly 100,000 cases and 1,600 deaths, with major concentrations in Rubkona PoC and Juba (WHO 2025).

Water Services

Provision of water in urban areas is primarily the responsibility of SSUWC, which runs piped water networks in seven urban areas (though Malakal is currently not operational). In addition to piped water to homes and businesses, SSUWC also sells water piped to kiosks. Water is also sold by public sector and private companies from trucks that deliver to various points. This is especially important in informal and peri-urban areas. However, even with water deliveries, full coverage is not achieved, and many peri-urban areas remain dependent on groundwater.

Juba's water system has the highest capacity, although smaller cities such as Renk have larger coverage. This reflects the challenges facing service provision in Juba as it expands and densifies.

[57] Interview with SSUWC, 2024.

Juba has the most widespread piped water system, with 2,293 piped water connections, 71.3 km of piping, and 109 functioning water kiosks operated by SSUWC, as well as water provision by private companies. SSUWC's connections cover 30 percent of the population within the Juba administrative area, though its current capacity only allows for operation 12 hours a day. Water production constraints prevent the entire network from being supplied at the same time; provision of water is staggered throughout the week, and customers tend to store water in tanks on the days the water runs.

Wau is the next largest water provision system operated by SSUWC. Wau has 395 water points, 27 percent of which are nonfunctional, 7 percent of which are partially functional, and 66 percent of which are fully functional (REACH/IMPACT 2024b). Of the water points, the most common type are unprotected wells comprising 36 percent of functioning water points, followed by manual borewells at 32 percent (there is only one functioning motorized borewell) (REACH/IMPACT 2024b). Protected wells, public taps, and water kiosks and storage tanks make up the bulk of the remaining water points. There are almost as many functioning water kiosks (20) as nonfunctioning ones (21) (REACH/IMPACT 2024b). Overall, the distribution of water points across the city is wide, and repair of the high percentage of nonfunctional water points could have a significant positive impact.

In Malakal, the state of water provision reflects an entirely different situation as the city recovers from war and flooding. SSUWC considers Malakal's water network nonfunctional, whereas field research suggests that three of the operational points are from a piped system. In total, there are only 26 water points recorded, of which 20 are operational. Other than the three piped water points, there are 10 storage tanks and 5 public standpoints or taps (REACH/IMPACT 2024b).

SSUWC nevertheless remains dependent on donor assistance to provide services. In Juba, for instance, JICA has been a major force in the provision of water infrastructure, building and opening a water processing plant in 2023 and providing the water kiosk network throughout the city (JICA 2023). International Committee of the Red Cross (ICRC) is building a new treatment facility at Gumbo. The United Nations Children's Fund (UNICEF), in partnership with JICA, also upgraded the water treatment plant, extended pipeline, and constructed four water kiosks and four elevated water tanks in Wau in 2018.

Sanitation Services

Sanitation in urban areas is provided through the city council, which has a separate sanitation department. The legal policy mandate is held by MLHUD to ensure urban sanitation delivery and infrastructure development. Ministry of Health and Ministry of Environment and Forestry have mandates related to the public health and environmental aspects of sanitation. These mandates can sometimes conflict and agreement is needed across departments for any changes to policy.

Rising urbanization continues to put strain on sanitation systems that are already in a state of disrepair from conflict, flooding, overuse, or lack of resources and maintenance. JCC faces strains on the use of latrines from a densifying core population within the official Juba City limits and from those coming into the city proper from the newly urbanized areas of Juba County that now form approximately 50 percent of the Juba urban geographic area.

Additional strain is put on latrines and sanitation services from some of the approximately 28,000 people in the IDP camp to the south of the city.[58] Latrines there are now full and not functional, leading to those who are able to travel into the city to use latrine facilities. In Juba, effluent is taken to Rokwe in Juba County, where the city's one sludge treatment facility is located. It is now operating at over three times its capacity. The plant itself is under the responsibility of Juba County government, which extracts fees for its use and is responsible for its management.[59] The county government, however, does not have the skills and capacity to adequately run the site, which is also operating much beyond capacity.

Other urban areas are facing strains from population growth, as well as a lack of repairs and maintenance of facilities. Wau, for instance, has 169 functioning or partially functional public latrines (no information is available on privately owned ones) and 26 nonfunctional ones (13 percent). All are either shared or communal. The distribution and condition of latrines shows that a large share (74 percent) are close to residential areas, and 85 percent are secured with locks. However, neighborhoods in the south of the city, such as Bazia Jedid, New Site, and Nazareth are over 2.5 km, or a 45–90-minute walk, from their nearest latrine, suggesting higher open defecation rates in these areas than the rest of the city.[60]

Malakal faces a much more acute problem. It has 193 recorded latrines, of which 84 are not functional. Of these, 71 percent are not functioning due to damage from conflict, and a further 23 percent are damaged due to flooding. Of the functional latrines, 61 percent were full or almost full, 63 percent do not have a lock, and only 44 percent are segregated by gender. At least 65 percent are community or government owned (with the government only making up 5 percent), and 21 percent are privately owned. The remainder are made up of NGOs and institutions such as schools and clinics. Local key informants identify a reliance on NGOs for the maintenance of latrines. Latrines are also concentrated in the city center and the river, meaning those on the outer edges face longer journeys.

Solid Waste Management

Operational responsibility for public SWM services falls to the city council in urban areas, for example, JCC in Juba and Wau Municipal Council in Wau. City councils have also subcontracted the service to private providers. In 2020, 95 percent of Juba households lacked access to regular waste collection, leading to open dumping and burning (Mier and Zhuo 2020). Open dumping was also found to be the most common method of waste disposal in Bor in 2017 (John et al. 2018). While Juba had set a target of one-third waste collected by 2023, until 2018, only 2.6 percent of waste had been collected (JICA 2020), and the city only hires 18 people for SWM collection.[61] The little waste actually collected in Juba is taken to an open dump site in Jebel Kujur (Juba County), which has been in hazardous condition since at least 2013 (UNEP 2013).

Primary policy responsibility for SWM lies with the state, and ultimately national, Ministries of Health. Donors also make an important contribution. This

[58] Interview with Association Femmes Leadership et Développement Durable (AFLED) team, Juba IDP camp.
[59] SSUWC would like to rationalize responsibility between water provision and sanitation by taking over urban sanitation to achieve efficiencies, but this would require a legal change to their mandate, with agreement needed between MWRI and MLHUD, the latter of which holds the primary mandate for sanitation.
[60] Wau county reports 7 percent open defecation and 11 percent defecation in an open hole.
[61] JCC budget, 2023–2024.

highlights that SWM is viewed primarily as a health issue, as opposed to an urban planning issue, which would also explain some of the national Ministry of Health's role in the split mandate on urban sanitation. JICA has prepared a Solid Waste Master Plan from 2021 to 2030 for Juba, as well as contributing new garbage trucks to the city.

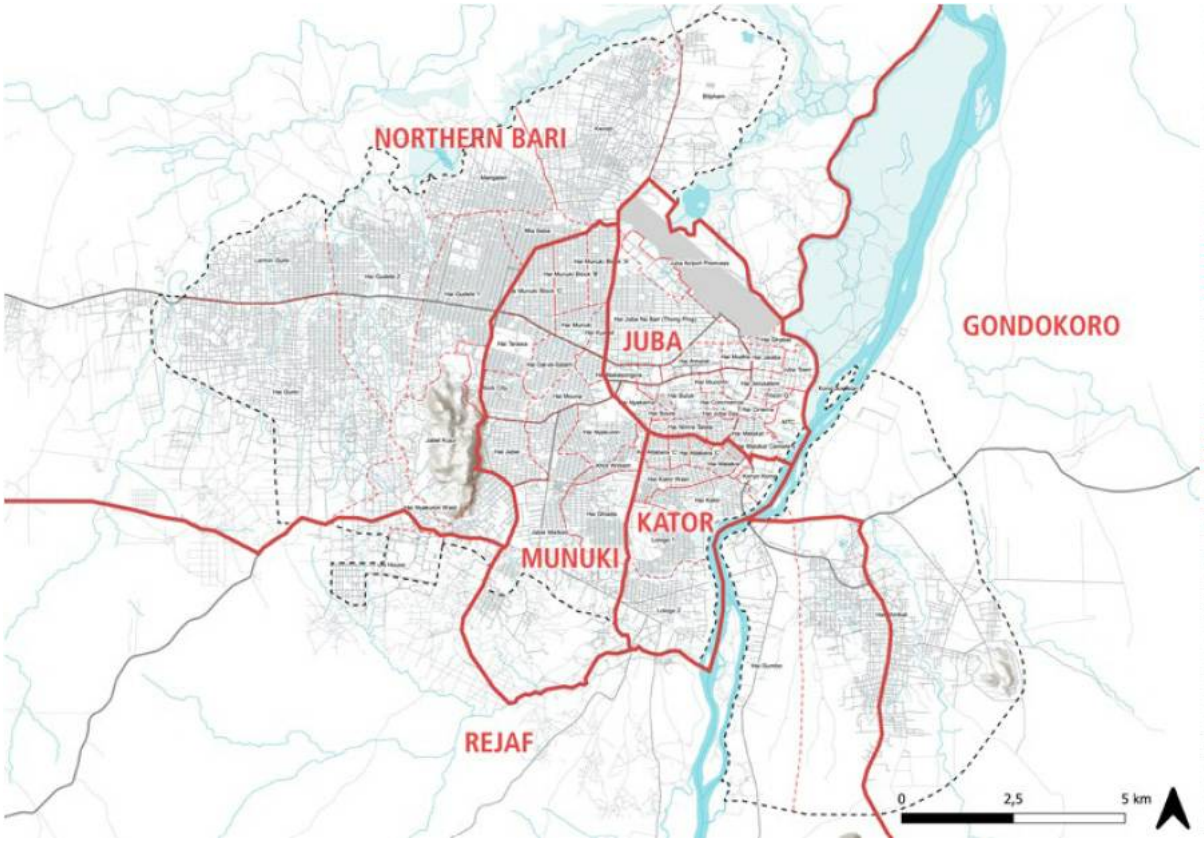
City Spotlight: Juba

Even as the best capacitated city in South Sudan, Juba faces challenges in restoring service provision to the prewar levels in the official Juba City area

and in coping with the strain on service provision from the rapid expansion of the Juba urban beyond the official boundaries. High rates of growth have been driven by migration and forced displacement. Chronic lack of capacity whether in terms of staff, equipment, or funding continues to prevent Juba authorities from adequately addressing their challenges.

A key challenge faced by JCC, responsible for the provision of sanitation, SWM, and primary health services, is that the de facto city urban area has expanded well beyond the official city limits (Figure 41).

Figure 40. Map of the Juba urban area, with the official city boundaries depicted as Juba, Munuki, and Kator blocks



Source: UN-Habitat 2023.

Approximately 50 percent of the Juba urban geographical area lies outside the official boundaries of the three 'blocks' that make up Juba City—Juba, Munuki, and Kator. People residing in the outer urban areas, to the west and north, and across the river to the east, live in Juba County and fall under the authority of the Juba County Administration. JCC's mandate for service provision does not extend into these areas,

and the county government is much less capacitated in comparison. Urban residents in the county areas tend to use services within Juba City, putting further strain on services.[62] Because of the administrative boundary, JCC also cannot extend its tax base to help finance the expansion in demand for services.

JCC Structure

JCC oversees three block councils—Juba, Kator and Munuki—which have their respective budgets, and each oversees quarter councils (Figure 41). The Mayor and Deputy Mayor of Juba, both political appointees, sit at the Juba Headquarters. They are served by the Chief Executive, the permanent bureaucratic head of the council administration, who in turn leads a number of directors of logistics, revenue, planning, environment, infrastructure, WASH/waste management and public order, and so on.[63] The management team oversees 350 employees at headquarters. JCC directly pays 'unclassified' employees, generally lower-skilled employees, which makes up 18.4 percent of all pay. The remaining 'classified' employees, are paid by the state government. JCC regularly pays unclassified employees, but classified employees, including the chief executive and directors, are not regularly paid by the state, sometimes going half a year or more without pay. This has significant knock-on effects on employee productivity.

Around two-thirds of JCC headquarters employees are in the administration and finance department, with a concentration on revenue collection. This represents 254 employees. In comparison, there are only 18 sanitation workers, 9 public health employees, and 8 education workers. Public works, which takes up 25 percent of the budget, has only 9 employees. The weighting toward administration and finance reflects the recent decentralization of operational functions to the block councils, with the exception of sanitation, which is centrally run for the whole city.

However, with the exception of Juba block, the block employment profiles do not reflect the change in resource distribution. Juba block for instance employs 78 public health workers compared to 9 at headquarters. Twenty-two public health workers work in Kator block, but only six in Munuki, suggesting an uneven distribution of public health units across the JCC area.[64] All blocks retain their own rate collection team as some rates are ring-fenced for blocks to collect for their own income. However, Kator still employs 105 rate collectors out of its 332 employees, with less than 10 percent of employees actively involved in service provision (public health, social welfare, and forestry). There are no sanitation or education employees. Munuki follows a similar profile, with a weighting toward administration and rate collection that was meant to have changed with the redistribution of budgetary resources from Juba Headquarters.

Revenue and Finances

In a year starting from February 2023, JCC collected SSP 2.1 billion, equivalent to US$16.6 million. This represents a funding shortfall of approximately SSP 1.65 billion, as the 2023/24 budget had laid out spending plans for SSP 3.75 billion. The 44 percent shortfall is higher than it should have been due to the collections moratorium that was still in effect in the year in question. It is nevertheless evident that JCC does not have the capacity to collect the required revenue to meet spending commitments. Revenue staff at JCC confirm that revenue raised is usually

[62] Interview with JCC Planning Directorate, 2024.
[63] JCC senior director's interview, 2024.
[64] Block employment figures supplied by Juba, Kator, and Munuki block councils to the World Bank, 2025.

only sufficient to meet 40–60 percent of commitments.[65] JCC should also be receiving fiscal transfers from the state government that would help plug some of the shortfall, but these transfers are intermittent and unreliable. Given tight budgets, state authorities choose to make fiscal transfers to the rural areas which they also have responsibility for, given JCC's relatively healthy financial situation compared to rural counties. For example, the State MFP in CES initiated fiscal transfers to local governments for development this financial year but left JCC out of the transfers because it is assumed that the rural counties have less or no OSR. Instead JCC is often called upon to make informal fiscal transfers to other bodies in the state government considering their relatively high taxation revenue compared to state authorities. JCC's fiscal position is further challenged by repayments on a SSP 1.8 billion loan JCC had to take out due to the collection moratorium so that JCC could maintain a minimum level of spending.[66] Of the revenue collection, 30 percent goes to the loan repayment, and as of February 2024, SSP 1.1 billion is outstanding. Repayments are expected to be completed by 2027/28. When added to the 10 percent cost of revenue collection, only 60 percent of the revenue collected is currently available for expenditure.

Attempts to reduce the cost of collection have so far been unsuccessful. A digital tax collection system charged 23 percent of revenues as a fee, leading the percentage of available revenue for expenditure to fall to 37 percent. This contract has since been canceled, returning revenue collection to manual operations and recording. JCC has a well-practiced manual collection system. Tax is collected in person by rate collectors, who form the bulk of employees at both the JCC headquarters and block councils. JCC headquarters (as opposed to the blocks which have their own revenue collection) employs between 70 and 80 rate collectors. They are split into 11 teams headed by the revenue director. Seven teams collect service fees. Each team consists of one rent collector, two local government officers, two local guards, and a plain clothes police officer. A further four teams consist of seven people each to inspect licenses. All collections are done in cash, which is then transported back to headquarters for sorting and storing on premises or in a bank. The digitized tax collection system digitized the record keeping but not the collection of revenue, which would require much wider economic reforms including widespread use of bank accounts.[67]

WASH Service Provision in Juba

Rapid urban expansion has put additional strain on struggling WASH services in Juba. The core JCC area continues to densify, and residents in the peri-urban areas beyond the core JCC blocks increasingly come into the city center to use services. Water, especially privately sold water, remains expensive in Juba. 2021 surveys showed water costing US$1.13–2.27 per large drum, before the spike in inflation (Borgomeo et al. 2023). Evidence also suggests that the further out from the city center, the more expensive water becomes, given the limited range of the SSUWC piped network that would otherwise have enabled competition with water tankers that charge very high fees. In Juba County as a whole, expenditure on water takes up 29 percent of household expenditure on average (Borgomeo et al. 2023).

Outside the JCC blocks, water provision is particularly low. About 80 percent of households in the most peripheral areas, such as Gumbo (across the river from Juba City), are reliant on groundwater

[65] Revenue department interview at JCC, 2024.
[66] Revenue department interview at JCC, 2024.
[67] Revenue department interview at JCC, 2024.

(Borgomeo et al. 2023). The IDP camp to the south of the city has no water provision at all, save the delivery of tanker services. Residents mostly have to walk to groundwater pools outside the camp, exposing women to daily violence.[68]

Water is provided by SSUWC as well as private entities. SSUWC remains the largest provider of water in Juba and the only provider of piped water. The quality of water, as licensed by JCC, is highly variable, with a 2019 test showing only one of three tested water points meeting the World Health Organization (WHO) standard for water fit for human consumption. In addition to SSUWC, further capacity is provided by 11 private companies with smaller-scale treatment plants producing a combined 14,570 m^3. The combined production capacity is sufficient only for 55 percent of the population, suggesting almost a doubling of capacity required to produce sufficient water for current needs, without considering future population growth and urban expansion. However, further constrictions apply: SSUWC is only producing at 18,000 m^3 per day and can only provide water to a section of its pipe network at a time, leading people to fill tanks with water when it flows. Juba's water network nevertheless remains the highest capacity in the country, triple the size of the next largest network in Wau.

MLHUD mandates the directorate of urban sanitation to provide sanitation services in Juba. Additionally, the National Environment Bill also includes a mandate for sanitation, creating an overlapping set of institutional mandates. On a day-to-day basis, SWM and sanitation services are provided through JCC and private companies licensed by JCC, under bylaws passed by the city legislature by classifying sanitation as 'public works', for which they are given responsibility under the LGA (2009). Little solid waste is actually collected. At the last estimate in 2018, only 2.6 percent was collected, even though the Waste Management Plan had planned to increase this to 33 percent by 2023 (JICA 2020). Data on whether this target was reached are unavailable, but observations by multiple teams would suggest that it has not. Part of the difficulty in increasing the waste collection percentage is the lack of community engagement and education that would lead to waste being collected in ways that are not easy for collection services to pick up.

JCC's Environment and Sanitation Department only employs 18 people and operates its own solid waste collection. Additionally, it also manages contracts with private companies to carry out solid waste collection covering each of the three blocks. However, these contracts frequently collapse, and indeed did so in 2024 and 2023, providing uncertainty for private operators. In 2024, JCC has received a new fleet of waste collection trucks from JICA/Japan, this has increased the efficiency of waste collection.[69] There are reported concerns as to the council's ability to operate these trucks given the difficulties in obtaining both fuel and staff to run them.[70]

Similarly, a mix of public and private operators empty septic tanks throughout the city to dump at the Rokwe sludge management facility to the north of Juba. The facility, which was running well in 2015, is now overwhelmed under the strain of the extra waste from an expanded urban area and is in urgent need of repair and expansion (USAID 2015). Piped sanitation is an ambition stated by SSUWC; however, the mandates for piped water and sanitation are separate.

[68] Interview with AFLED officials, Juba IDP camp, 2024.
[69] https://www.radiotamazuj.org/en/news/article/japan-donates-17-garbage-collection-trucks-to-juba-city.
[70] interviews with JCC planning committee, 2024.

VII - Pathways for Urban Development

South Sudan's urban transition must be treated first and foremost as a stabilization, state-building, and jobs agenda. The evidence shows that urban areas will continue to grow regardless of policy; the question is whether that growth is managed in ways that reduce fragility or amplify it and transcend the African urban story of jobless growth. The core objective is to stabilize cities so they can operate as platforms for transition, service restoration, and jobs and livelihood recovery while strengthening government institutions. The following recommendations are designed as a sequenced and pragmatic pathway to achieve this.

Box 4. Key recommendations

1. **Stabilize high-risk and high-reward urban areas first:** Deliver bundled, visible improvements in displacement-affected and underserved neighborhoods to reduce insecurity, reinforce confidence in public institutions, and support local livelihoods.
2. **Leverage urban investment for jobs:** Invest in key economic nodes including markets, transport hubs, and commercial areas, and strengthen urban economic corridors that connect them, considering labor-intensive works that generate rapid local employment.
3. **Address land constraints to enable investment:** Strengthen locally grounded mediation and grievance systems and secure land for priority public infrastructure to reduce conflict risks and enable service delivery, while reducing risks of elite capture and exclusion.
4. **Establish operational urban data systems:** Initiate rapid settlement mapping and a shared urban information platform to guide all decisions, sequencing, and monitoring, supporting city-specific prioritization based on needs, risks, and readiness.
5. **Reduce climate-related disruptions:** Prioritize drainage, flood-prone access routes, and local emergency preparedness so cities remain functional during shocks, particularly in the most exposed urban areas, and strengthen basic DRM systems.
6. **Restore basic service functionality:** Repair and maintain existing water, sanitation, and road systems in priority areas to rapidly improve reliability and economic activity by stimulating private and community-based enterprises and supporting delivery models that progressively strengthen country systems.
7. **Install minimum viable municipal revenue collection and financial management systems:** Focus on improved revenue collection to sustain investments while also deploying standardized toolkits for budgeting, procurement, and asset management and financial controls for improved transparency and accountability.

Guiding Principles and Implementation Model

Implementation feasibility depends on aligning reforms with a clear set of guiding principles. Recommendations should be applied as a flexible menu rather than a fixed sequence, with priorities selected according to city-specific conditions, readiness, and available financing. Investment decisions must be guided by (a) stabilizing impact; (b) urgency of service and infrastructure deficits; (c) feasibility under current institutional and political economy conditions; (d) prospects for fiscal and operational sustainability; and (e) potential to support the private sector, livelihoods, productivity, and employment, with preference for labor-intensive and locally implemented approaches where feasible to maximize short-term job creation and income generation. Allocating resources according to these differentiated roles ensures that limited funds generate the greatest stabilizing impact.

Urban job creation in South Sudan is constrained by a small set of binding factors that cut across cities. These include limited and uncertain land access, weak regulatory and business environments, extremely low access to reliable power, and very limited availability of commercial finance. Addressing these constraints requires coordinated action through urban investments, including securing land for economic activity, improving market and corridor connectivity, expanding access to basic energy services, and enabling small-scale private and community-based financing mechanisms.

Ensuring that urban investments benefit diverse population groups—including women, youth, and the displaced—is essential for both equity and stability. Women face constraints related to safety, mobility, and economic participation, while large youth populations face limited access to employment, contributing to instability. This requires moving beyond simple inclusion to address the specific constraints that limit women's economic participation, land tenure security, and personal safety in urban spaces, as well as barriers to youth employment, skills development, and economic participation. Implementation frameworks should therefore include measurable indicators for women's participation, safety, access to services, and economic outcomes, alongside youth employment and participation outcomes. Urban development strategies should also reflect diverse population needs and integrate culture as a functional component of resilience, identity, and social cohesion, particularly in planning and public space design.

A government-led hybrid implementation model, grounded in lessons from past engagement, is proposed. Drawing on experience from ECRP-II, this model positions the Government of South Sudan in the driver's seat, leading on policy, prioritization, and oversight to reinforce the social contract. To mitigate implementation constraints, delivery may be undertaken in partnership with UN agencies, NGOs, or specialized firms providing execution support and technical assistance (TA). Where country systems are weak, external delivery arrangements should be explicitly designed to transfer skills, strengthen institutions, and create a credible pathway toward progressively greater government implementation responsibility. This is particularly important for local governments, which remain the most visible interface between citizens and the state.

Declining humanitarian assistance presents a growing constraint on urban service delivery and resilience, particularly in a context where external actors have played a central role in supporting vulnerable populations, including IDPs. With only 42 percent of the 2025 Humanitarian Needs and Response Plan funded, reductions in external financing are already placing pressure on basic service provision, urban economies, and the ability to meet essential needs in both formal settlements and displacement-affected

areas. This trend has implications for the continuity of services such as water, sanitation, health, and emergency response while also affecting livelihoods linked to aid flows in urban centers. It further heightens risks in areas such as disaster preparedness and response, where humanitarian systems have often filled critical gaps. This reinforces the need for a government-led approach that prioritizes affordable, high-impact interventions, mobilizes domestic resources more effectively, and actively crowds in private investment where feasible while targeting external finance toward catalytic and higher-risk needs. As these resources contract, this integrated model requires careful sequencing, institutional readiness, and a strengthened role of local governments as primary service providers in increasingly resource-constrained urban environments.

Box 5. Financing urban development in South Sudan

Urban improvements in South Sudan require a combination of public finance, private investment, and targeted external support. The recommendations set out in this chapter are therefore not premised on any single financing source but on aligning different instruments to different types of urban investments.

1. More effective allocation of available public resources toward basic services and local infrastructure. Public resources remain the foundation for core state functions, including local roads, drainage, basic service delivery, municipal management, and operation and maintenance (O&M). Priority should be given to reallocating available government resources toward visible, citizen-facing urban investments and more predictable transfers to subnational governments, consistent with broader public finance reform objectives.

2. Facilitation of private investment where commercial delivery is feasible. Private capital can play an increasing role in sectors such as off-grid energy, water distribution, logistics, market facilities, waste services, housing, and digital connectivity, provided that regulatory risks are reduced and enabling conditions are in place. In the context of South Sudan, this is likely to rely more on small-scale and incremental forms of private engagement, including local and social enterprises, community-based financing mechanisms, and diaspora capital rather than large-scale commercial investment, which is likely to remain limited and concentrated in a few sectors.

3. Targeted external financing for catalytic investments. Concessional finance, grants, and development partner support remain important for institutional strengthening, climate resilience, large infrastructure gaps, and operations in higher-risk or low-capacity environments. However, declining development finance flows require greater selectivity, co-financing, and stronger links to sustainable domestic systems – with government leadership and financing as a prerequisite for development partner support.

In practical terms, lower-cost interventions such as rapid profiling, municipal management systems, drainage maintenance, and light rehabilitation measures are the most suitable entry points in the near term, as they can deliver visible results quickly and help strengthen implementation systems.

Moderate-cost investments, such as neighborhood service packages, secondary roads, and market access improvements, should be pursued selectively in cities with adequate readiness and clear operating arrangements. Capital-intensive investments, including citywide networks, major flood protection works, and intercity corridors, are longer-term priorities that require stronger institutions, detailed preparation, and blended financing partnerships.

Recommendations are therefore prioritized by feasibility, readiness, sustainability, and the most appropriate financing source, additional to needs.

Immediate Priorities for Stabilization and Functionality	Consolidation and Performance-Linked Expansion	Institutional Maturation and Network Development
(0–24 Months)	(Years 3–5)	(Years 6–10)

Immediate Priorities for Stabilization and Functionality (0–24 Months)

The first phase concentrates on a defined set of actions that can be initiated within six months and implemented within two years in selected cities, with sequencing adapted to security conditions, local readiness, and implementation capacity.

1. **Scale up Rapid Urban Profiling and Targeting System to Guide Investments.**

   Cost: $.[71] Financing: Public.[72] Timeline: launch within 6 months; operational within 12 months. Actors: MLHUD leads; LGB and National Bureau of Statistics support state ministries, municipalities, and development partners.

Use and expand urban profiling systems combining satellite imagery, administrative data, and short field surveys to identify fast-growing settlements, infrastructure gaps, hazard exposure, and population distribution. Outputs will be consolidated into a shared platform across sectors for prioritization and monitoring, resulting in a national urban development framework, while informing a practical national urban development framework and city-specific investment pathways.

2. **Deliver Visible Neighborhood-Level Infrastructure Packages in High-Risk and High-Potential Urban Areas.**

   Cost: $$. Financing: Blended[73]. Timeline: design within 6 months; implementation months 9–24. Actors: Sector ministries provide technical leads; state governments provide oversight; municipalities execution, partners potential co-financing.

Bundled works will combine drainage rehabilitation, access road improvement, lighting installation, and restoration of water points. These packages address multiple structural challenges simultaneously by reducing climate risk, improving safety, and creating short-term employment, especially for the youth, and can be designed to support youth-led and community-based enterprises for service delivery. Particular attention must be paid to features that enhance women's safety and economic activity, such as improved public lighting near markets and water points, which can extend business hours for female traders and reduce risks of assault.

[71] Indicative relative scale only: $ = low-cost / fast start; $$ = moderate and selective; $$$ = major multiyear investment; $$$$ = transformational large-scale investment requiring substantial financing and implementation capacity.
[72] Financing categories: Public = primarily domestic public financing; Blended = combined public and partner financing; External = predominantly concessional or donor financing; Private-enabled = public action to crowd in private investment.
[73] Potential donor financing referenced in the document is subject to leadership and commitment by the Government of South Sudan, inclusive of financing.

3. **Secure Rights-of-Way for Future Infrastructure and Mitigate Land-Related Conflict Risks to Enable Service Delivery.**

   Cost: $. Financing: Public. Timeline: corridor identification within 9 months; interim arrangements within 18 months. Actors: national land agencies, state land offices, traditional authorities, municipal administrations, legal aid providers.

Urban land management will be advanced through transparent institutional arrangements, including joint committees to validate infrastructure layouts and safeguard public corridors. Simple, locally grounded grievance and justice mechanisms should address land contestation and reduce delays to public investment. Standardized procedures, public disclosure, and accessible complaints channels are essential to reduce corruption risks, elite capture, and exclusion. These mechanisms must be explicitly designed to be accessible to women, whose customary land rights are often insecure and who may face significant barriers in seeking formal redress.

4. **Prepare Operational Urban Growth Strategies for Priority Cities.**

   Cost: $. Financing: Public. Timeline: years 1–2. Actors: MLHUD leads in collaboration with sector ministries, state governments, municipalities, and technical partners.

Using data from the profiling system, concise urban growth strategies will be developed for selected cities. These strategies will integrate demographic projections and hazard exposure to guide the sequencing of future investments and prevent unmanaged expansion. At the national and state levels, selected cities will be integrated into the planning of economic corridors along major road trade routes and the Nile.

5. **Upgrade Markets and Small-Scale Economic Infrastructure to Generate Better and More Productive Urban Jobs.**

   Cost: $$. Financing: Blended. Timeline: site selection within 6 months; works months 9–24. Actors: municipalities lead; ministries of commerce and local government support; partners potential co-financing; private sector co-financing subject to enabling environment.

Interventions will prioritize high-intensity economic nodes within targeted cities and towns where upgrading drainage, sanitation, lighting, storage, and access routes can immediately increase earnings, reduce losses, and raise productivity for traders and transporters. Labor-intensive delivery methods can also create rapid employment, including in construction and maintenance activities.

6. **Install and Strengthen Minimum Viable Municipal Revenue Collection and Management Systems to Sustain Investments.**

   Cost: $. Financing: External. Timeline: toolkit deployment within 6 months; operational capacity within 24 months. Actors: LGB and MLHUD co-lead, with state administrations support and municipal implementation.

Practical municipal revenue collection and management systems will be introduced or expanded in participating municipalities, including standardized budgeting templates, procurement checklists, expenditure tracking tools, and reporting formats, accompanied by short training modules and embedded advisers. Given staffing and payroll constraints in many local administrations, systems should be simple, low-maintenance, and focused on a few core delivery functions.

Consolidation and Performance-Linked Expansion (Years 3–5)

The second phase builds on the initial platform to restore core citywide systems, deepen institutional capability, and expand toward locations demonstrating implementation readiness and sustained progress leveraging financing linked to performance.

7. **Restore and Upgrade Core Urban Systems.**

   Cost: $$$. Financing: Blended. Timeline: Years 3–5. Actors: sector ministries (technical standards), municipalities (O&M), state governments (oversight), partners (TA, potential co-financing).

The approach will shift from isolated interventions to systemic improvements. This includes moving from rehabilitating individual water points to restoring entire neighborhood-level water distribution segments and from clearing ditches to rehabilitating secondary drainage networks. Municipal asset registers, maintenance plans, and dedicated operation teams should be established alongside investments so that rehabilitated systems remain functional. Cities entering this phase should demonstrate minimum management capacity and credible maintenance arrangements.

8. **Upgrade High-Priority Urban Economic Corridors Within Cities.**

   Cost: $$$. Financing: Blended. Timeline: Years 3–5. Actors: municipalities (lead), ministries of commerce/transport (support), state governments (oversight), partners (TA, potential co-financing).

Building on neighborhood-level investments in Phase 1, investments will focus on urban economic corridors within cities that connect markets, production areas, and transport hubs. This includes upgrading key arterial and feeder roads, improving drainage and access along these routes, and developing logistics and consolidation nodes where economically justified. These corridors are critical to improving mobility, reducing transport costs, and strengthening linkages between urban and peri-urban economies, particularly for agri-food systems and small-scale trade.

9. **Scale and Differentiate Municipal Revenue and Management Systems.**

   Cost: $$. Financing: Public. Timeline: Years 3–5. Actors: municipalities (lead), LGB, MLHUD, MFP (guidance), partners (TA).

Building on the minimum viable systems introduced in Phase 1, municipal revenue and management systems will be scaled and adapted to different city contexts. In larger cities such as Juba, this includes strengthening and formalizing existing systems, expanding property registration, improving valuation approaches, and increasing collection efficiency. In secondary cities and towns with limited systems in place, the focus will remain on simple, implementable mechanisms, such as business registers, market fees, and basic property-based revenues. Across all contexts, the objective is to demonstrate a clear service–revenue link and progressively strengthen fiscal sustainability.

10. **Strengthen Intergovernmental Financing and Municipal Capability Systems.**

    Cost: $$. Financing: Public. Timeline: Years 3–5. Actors: MFP (lead), LGB, MLHUD, state governments, municipalities.

As implementation responsibilities expand, more predictable financing arrangements should be introduced to support routine service delivery and maintenance. This may include formula-informed transfers, performance-linked grants, and clearer assignment of responsibilities across government levels. Municipal staffing, payroll regularization, procurement capacity, and internal controls should be progressively strengthened. This will be critical for shifting from externally managed delivery toward stronger country systems and sustainable local government performance.

Institutional Maturation and Network Development (Years 6–10)

The third phase leverages proven capacity to undertake transformative, large-scale investments and consolidate national policy.

11. **Implement Citywide Integrated Urban Upgrading Programs in Capable Cities.**

    Cost: $$$$. Financing: Blended. Timeline: Years 6–10. Actors: National ministries (financing frameworks), state governments (coordination), capable municipalities (implementation), development partners (potential co-financing), private sector (PPPs and investment subject to enabling environment).

    For cities with proven capacity from Phase 2, the approach will graduate to citywide, integrated upgrading programs. This represents a major leap in scale, involving the extension of primary infrastructure grids (water, sanitation, and electricity) into previously unserviced areas, the large-scale formalization of land tenure for residents, and the integration of private sector financing for commercial and housing development. Selection of participating cities should be performance-based and contingent on demonstrated implementation capability.

12. **Develop Intercity Economic and Transport Corridors.**

    Cost: $$$$. Financing: External. Timeline: Years 6–10. Actors: National ministry of transport/infrastructure (lead), state governments (support), development partners/international financial institutions (IFIs) (potential co-financing), private sector (PPPs and investments subject to enabling environment).

With individual cities becoming more functional, the focus will expand to the networks that connect them. This phase will support major, transformative investments such as expanding and rehabilitating the primary transport spine between priority cities and developing logistics infrastructure at key regional nodes to build a cohesive national economic network.[74] Investments should be prioritized where economic demand, trade potential, and maintenance feasibility are the strongest.

13. **Consolidate and Enact National Urban Policy Frameworks.**

    Cost: $$. Financing: Public. Timeline: Years 6–10. Actors: National government (lead), Parliament (enactment), state governments (implementation), development partners (technical support).

[74] While considered critical, intercity transport corridors are sequenced from Year 6 onward given their high cost, complexity, and sensitivity to security conditions. Such investments require prior progress in urban functionality, corridor safety, and institutional capacity, as well as detailed preparatory work.

The proven successes and data from the pilots and scaled programs will provide the evidence base to enact durable national policy reforms. This includes legally enshrined national laws for municipal finance, predictable fiscal transfers, and a coherent legal framework for urban land management, solidifying the institutional architecture for a sustainable and equitable urban future for the entire country. Related work on building regulation, planning standards, and institutional mandates can begin earlier through phased technical preparation.

Conclusion: The Way Forward for Urban South Sudan

South Sudan's urban transition is at a critical moment, and decisions taken in the next two years will have disproportionate and lasting effects on stability, livelihoods, and conflict risk. Rapid urbanization, protracted fragility, climate shocks, structural service deficits, and widespread informality are converging in cities that already operate under severe institutional and fiscal constraints. At the same time, cities offer the clearest platform for visible improvements in services, employment, and state legitimacy where progress can be felt directly by citizens. *Without a disciplined focus on what is realistic and stabilizing now*, urban pressures will continue to amplify insecurity, service breakdowns, and spatial inequalities.

This report sets out a long-term vision for urban development but prioritizes government-led near-term actions that can stabilize cities as platforms for humanitarian-to-development transition and conflict risk reduction. The emphasis is on restoring basic service functionality, reducing everyday risks, and enabling livelihoods while laying the minimum data, policy, and governance foundations needed for future urban investments. Longer-term reforms in planning, land administration, municipal finance, and infrastructure systems remain essential but must be sequenced carefully and revisited as capacity and political space evolve. The recommended pathway should be applied flexibly across cities, reflecting differences in readiness, risk, and economic role, rather than as a single uniform sequence.

Government leadership is central to this agenda, particularly in clarifying roles; setting basic policy direction; coordinating across the national, state, and local levels, and co-financing key interventions. Development partners can play a critical supporting role by helping to build institutional capacity, co-finance priority and low-complexity investments where GoSS showcases adequate leadership and commitment, inclusive of financing, and strengthen the use of digital and data systems that improve decision-making and accountability. A gradual transition from externally managed delivery toward stronger country systems, especially at the local government level, will be essential for sustainability. *Effective coordination across actors will be decisive* to ensure that all government-led investments are targeted, sequenced, and aligned with a shared vision of inclusive, resilient, and productive cities.

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Annex I: Action Plan

Strengthening Institutions

Recommendations	Priority Interventions
Revise and update legal/regulatory frameworks related to urban planning and governance	- Amend Physical Planning Act, finalize Land Act amendments, develop Survey and Housing Acts, update Local Government Act, adopt resilient building codes.
Strengthen land administration and management	- Pilot dispute resolution - Incremental tenure regularization, and the establishment of basic land databases.
Develop national policy frameworks	- Develop National Urban Development Strategy 2040, National Housing Policy, harmonized state land policies.
Enhance municipal finance	- Digitize revenue collection; train on budgeting; rationalize intergovernmental fiscal transfers.
Build institutional capacity	- Invest in staff training, equipment, and technical assistance for MOLHUD and municipalities.
Improve intergovernmental coordination	- Clarify roles between national, state, and city governments through MOUs and joint taskforces.
Strengthen legal frameworks for E&S Risk Management	- Implement the Environmental Bill - Support capacity building in relevant institutions

Delivering Urban Infrastructure and Services

Recommendations	Priority Interventions
Improve basic service delivery	- Establish one-stop service centers - Digitize registries for land, permits, and utilities
Expand water, sanitation, and hygiene (WASH) services	- Extend piped networks, rehabilitate boreholes, promote off-grid water kiosks. - Regulated water trucking and kiosks
Expand access to energy	- Expand the network in priority areas, scale up off-grid solutions (e.g. solar panels) in informal settlements, prioritize energy access for firms to support productivity and economic diversification, support private sector participation in the energy sector.
Support affordable housing	- Pilot slum upgrading in 1-2 priority neighborhoods in Juba, promote incremental self-build housing schemes, explore non-banking financial solutions for the urban poor, implement National Housing Policy with social housing programs.

Recommendations	Priority Interventions
Strengthen operation & maintenance	- Establish municipal O&M systems for drainage, roads, solid waste, and sanitation.
Leverage public-private partnerships and alternative modes of service delivery	- Encourage PPPs in waste collection, energy, and water trucking to expand coverage. - Social enterprises

Investing in Cities for Jobs and Economic Recovery

Recommendations	Priority Interventions
Integrate informal settlements	- Slum upgrading programs, basic service provision, secure tenure measures.
Support informal livelihoods	- Microfinance, skills training, entrepreneurship support (youth, women). - Promote labor-intensive public works - Establish micro-zones near transport nodes
Formalize informal services	- Regulate and support small-scale providers with licensing, safety standards.
Encourage formalization of SMEs	- Simplify business registration; provide tax incentives and training.
Expand social protection for informal workers	- Introduce cash-for-work and safety nets for vulnerable urban households.

Planning Urban Form

Recommendations	Priority Interventions
Strengthen planning capacity	- Create Urban Planning & Design Lab with GIS and modern surveying tools.
Promote evidence-based planning	- Develop digital land use plans, zoning, and growth monitoring systems.
Partner with academia/civil society	- University partnerships for analytics, internships, participatory planning.
Pilot strategic urban plans	- Prepare/update masterplans for Juba, Wau, Bor, integrating resilience and inclusivity. - Develop 2-3 year structure plans with basic street grids
Improve land use management	- Introduce zoning bylaws, enforce standards, and protect green/public spaces.
Standardize urban data systems	- Develop national geospatial data system for urban monitoring - Conduct rapid land mapping using drones and satellite imagery

Improving Connectivity

Recommendations	Priority Interventions
Upgrade transport corridors	- Rehabilitate Juba–Nimule, Bor–Malakal, and other strategic regional roads.
Improve inter-city links	- Upgrade unpaved secondary roads; address seasonal flooding disruptions.
Strengthen urban mobility	- Introduce affordable bus services, pedestrian walkways, cycle lanes.
Enhance rural–urban linkages	- Develop feeder roads and peri-urban wholesale markets for agriculture.
Reduce trade bottlenecks	- Simplify customs; remove informal roadblocks; improve border posts.
Expand digital connectivity	- Support broadband infrastructure and mobile penetration for urban services.

Addressing Urban Fragility & Enhancing Social Cohesion

Recommendations	Priority Interventions
Invest in inclusive public spaces	- Community centers, sports facilities, safe green parks and community services
Institutionalize participatory planning	- Engage IDPs, returnees, and residents in planning; train leaders in conflict-sensitive approaches.
Address youth vulnerability	- Urban livelihood and apprenticeship programs targeting at-risk youth.
Strengthen urban safety and security	- Support community policing, mediation committees, and urban crime prevention.
Promote gender-sensitive urban policies	- Address GBV risks through safe spaces, lighting, and women's leadership programs.
Enhance social cohesion initiatives	- Support cultural, inter-communal events and dialogue platforms.

Enhancing Urban Resilience

Recommendations	Priority Interventions
Reduce disaster risk	- Invest in flood protection solutions (grey-green) to hotspot areas - prepare drainage masterplans for Juba and selected secondary cities
Strengthen emergency preparedness	- Create National Emergency Coordination Center - Train local response units - Establish Minimum DRM Capability Packages (e.g. DRM focal points, Emergency SOPs, rapid disaster risk mapping)
Build resilient infrastructure	- Adopt resilient construction codes - Firefighting and rescue equipment

Recommendations	Priority Interventions
Improve early warning systems	- Develop climate data platforms - Install flood/heat risk monitoring systems.
Scale nature-based solutions	- Urban greening - wetlands protection for flood control.
Mainstream resilience into planning	- Mandate climate risk screening for all major urban investments.

South Sudan as Multi-scalar Urban System

Recommendations	Priority Interventions
Prioritize stabilization in secondary cities	- Deliver neighborhood service packages - Establish land dispute resolution mechanisms
Strengthen economic role of regional hubs	- Upgrade market and corridor infrastructure - Restore core urban systems (water, drainage)
Leverage Juba's capacity to pilot large-scale integrated upgrading and sustainable revenue systems	- Implement city-wide integrated upgrading - Establish and scale municipal revenue systems
Anchor the national urban network by developing inter-city corridors and consolidating policy frameworks from Juba	- Develop inter-city transport corridors - Consolidate national urban policy frameworks

Annex II: Government Priorities

This section documents a set of government priorities from the Ministry of Land, Housing and Urban Development (MLHUD), the Central Equatoria State Ministry for Land, Housing, and Public Utilities (SMLHPU) and Juba City Council (JCC). The respective priorities were reviewed and consolidated by the Inter-Ministerial Technical Committee (IMTC) and submitted to the World Bank team on Sep 1, 2025, covering four domains: (i) training and capacity building, (ii) policy and regulatory development assistance, (iii) equipment, and (iv) knowledge gaps.

Training & Capacity Building

Training and capacity Building aims at strengthening institutions for urban services delivery for state and local governments. Provision of ad-hoc short (Both hardware and soft-ware packages) medium and long -term training and technical assistance programme (TA) and capacity building support in key selected areas of land administration and management in collaboration with national universities and other specialized institutions at regional and global levels for tailored training programme delivery through Technical Assistance programme to the government of the Republic of Sout Sudan as part of development of the land sector economy. Training need assessment will inform the best strategy for capacity building, leading to a balanced opportunity for urban development based on the priority of locations selected for the Urban PASA Initiative.

Ministry of Land, Housing and Urban Development (MLHUD)

Name of priority	Term (Short, Medium, Long)	Further Information
Urban Planning Workshops	Short (6 months to 1 year):	**Objective**: Equip urban planners with modern techniques and best practices for sustainable city development through workshops and professional trainings focusing on land use planning, zoning regulations, and sustainable infrastructure. Invite experts from international urban planning organizations to share insights and case studies contributing to immediate enhancement of planners' skills, leading to better-managed urban growth. Planners will be able to apply new techniques to current projects, improving efficiency and sustainability

Name of priority	Term (Short, Medium, Long)	Further Information
Disaster Risk Management Training	Short (6 months to 1 year):	**Objective:** Build capacity in disaster preparedness and response among town planners and city council officials and emergency responders through organizing training sessions on risk assessment, emergency planning, and response coordination. Include practical drills and simulations to ensure hands-on experience of selected urban centers as pilot., anticipating readiness and resilience to natural disasters, reducing potential loss of life and property and enhance coordination among different agencies dealing in emergencies.
Environmental Management Courses etc....	Medium (1-3 years):	**Objective:** Develop tailored comprehensive courses on environmental management for city council officials, surveyors and town planners through partnership with local universities to create curricula covering waste management, pollution control, and biodiversity conservation. Offer certification programs to ensure participants gain recognized qualifications. These will contribute enhanced ability to manage urban environmental challenges, leading to healthier and more sustainable cities. Officials will be better equipped to implement and enforce environmental regulations. Approached from the angle of tangible investment and tools employed for hands on experience
Community Engagement Programs	Medium (1-3 years):	**Objective:** Train local leaders on effective community engagement and participatory planning methods through workshops on communication strategies, conflict resolution, and inclusive planning. Develop community engagement toolkits and guidelines aimed at increased community involvement in urban planning, ensuring that development projects meet the needs of all residents. Improved trust and cooperation between local authorities and communities/local government
Advanced Urban Infrastructure Training	Long term (more than 3 years):	**Objective:** Provide advanced training on the development and maintenance of urban infrastructure. Through offering specialized courses on smart city technologies, sustainable transportation, and resilient infrastructure design. The government of the Republic of South Sudan through the Ministry of Higher Education can collaborate with international learning institutions for knowledge exchange and best practices. Long-term sustainability and resilience of urban infrastructure, supporting economic growth and quality of life. Cities will be better prepared to handle future challenges and technological advancements as a result of rapid expansions and urbanization.

Central Equatoria State Ministry of Housing, Land, and Public Utilities (SMHLPU)

Name of priority	Term (Short, Medium, Long)	Further Information
Digital Land Registration training	Medium	Digital Land Registry Training: Training will equip staff with the necessary skills to effectively use and manage the digital system, thus improving their capacity and efficiency. Furthermore, training may promote the adoption of new technology within the ministry, enhancing its overall efficiency and effectiveness. This is crucial for several reasons: Improved Efficiency and Transparency: - Reduced Paperwork: a digital system minimizes paperwork, streamlining processes and reducing processing time for land transactions. The will eventual help to reduce the land cases currently in the courts. - Enhance Transparency: Digital records are more transparent, reducing opportunities for corruption and land grabbing. - Improved Data Management: Digital systems allow for better organization and management of land records, facilitating easier access and retrieval of information Enhanced Service Delivery: - Faster Service: Digital systems can significantly speed up land registration and other land-related services, improving service delivery to citizens. - Improving Accuracy: Digital systems can reduce errors and inconsistencies in land records, ensuring accuracy and reliability.
GIS and Remote Sensing Training for surveyors and town planners	Medium	Skills Development: Currently the State Ministry has an inadequate number of staff with the necessary skills set. Therefore, access to engineering software and hardware empowers local engineers and technicians, fostering a skilled workforce capable o driving urban development in Juba and other areas within the State and Country in general.

Name of priority	Term (Short, Medium, Long)	Further Information
WASH program and other related engineering training.		Training and Capacity Building on Water, Sanitation, and Hygiene (WASH) for the technical personnel at the State Ministry of Housing, Lands and Public utilities is essential for promoting sustainable urban development , improving public health and enhancing the overall quality of life for urban residents. By integrating WASH considerations into land use planning and development decisions, the ministry can play a crucial role in creating healthy and resilient urban environments.
Urban planning and urban design lab	Long Term	Currently, the technical staff at the ministry have minimal skills in modern Urban Planning and Design. Therefore providing further training and capacity building on urban planning, and decision making in urban design is of paramount importance for several reasons. Improved Urban Planning and Design: - Enhanced Skills: Training will equip staff with the necessary skills and knowledge in urban planning principles, design techniques and best practices. This enables them to develop more comprehensive urban plans. - Data-Driven Decision Making: Training will incorporate the use of GIS, and other data analysis tools, allowing staff to make data driven decisions and better understand the complexities of urban growth. - Integration of Stakeholder Perspectives: Training can emphasize the importance of public participation and stakeholder engagement in the urban planning process, ensuring that the needs and aspirations of the community are reflected in urban development plans. Capacity Building and Professional Development - Skills Enhancement: Continuous training and capacity building opportunities enhance skills and knowledge of the ministry staff, improving their professional development and career prospects. - Knowledge Transfer: Training will facilitate the transfer of knowledge and expertise within the ministry, ensuring that institutional knowledge is preserved and shared among staff.

Juba City Council (JCC)

Priority	Short, Medium, Long Term	Description
Strengthening the institutional capacity in the area of revenue collection and management	Short term (6 months - 1 year)	This priority focuses on enhancing the technical support available to the Juba City Council (JCC) to ensure it becomes a financially sound institution that provides high-value services.
Computer training (Electronic accessories) support for the planning, budget, and training departments	Short term (6 months - 1 year)	Training on electronic accessories and related technology aims to equip staff with the necessary knowledge to improve operational efficiency in planning, budgeting, and training.
Training in electronic revenue collection devices	Short term (6 months - 1 year)	This priority seeks to introduce electronic revenue collection devices to streamline financial management and boost revenue collection capacity.
Juba City Legislative Council (JCLC) members' technical support	Short term (6 months - 1 year)	Technical support will empower JCLC members to provide effective oversight, draft and enact effective laws, strengthening the legal framework and ensuring better governance.
Consultants for institutional technical support to ensure an efficient and effective running of the institution	Short term (6 months - 1 year)	Hiring consultants will provide targeted technical support and capacity development for JCC staff, leading to improved institutional performance.

Policy and Regulatory Development Assistance

MLHUD

Name of priority	Term (Short, Medium, Long)	Further Information
Review of Existing Policies	Short Term (6 months to 1 year)	**Objective**: Identify gaps and areas for improvement in current urban development policies through conducting comprehensive review and analysis of existing policies, involving stakeholders through consultations and workshops, aimed at identification of policy gaps, leading to more coordinated efforts towards effective and relevant urban development regulations. Ensures policies are aligned with current urban challenges and opportunities.
Regulatory Framework for Green Building	Long Term (6 months to 1 year)	**Objective:** Promote sustainable construction practices through regulatory measures. By developing and implementing regulations that mandate energy-efficient building designs, use of sustainable materials, and green certifications. Provide incentives for compliance and encouragement of green building practices, reducing the environmental footprint of urban development, benefits of energy savings and healthier living environments.
Urban Land Use Policy	Medium Term (1-3 years)	**Objective**: Formulate Policy and Regulatory Frameworks for efficient and sustainable urban land use: By engaging land use planning experts, conduct public consultations, and perform impact assessments. Develop a policy that balances development needs with environmental conservation for optimal utilization of urban land, reducing conflicts and promoting balanced development. Ensures land use decisions support long-term sustainability.
Environmental Protection Regulations	Medium (1-3 years)	**Objective**: Development of Policies and Regulatory Frameworks to protect urban environments from degradation. By draft and enforce regulations on pollution control, green space preservation, and sustainable resource use. Implement monitoring and enforcement mechanisms to achieve improved urban environmental health, contributing to the well-being of residents and ecosystems. Reduces pollution and conserves natural resources.
Comprehensive Urban Development Policy	Long Term (more than 3 years):	**Objective:** Develop a strategic framework for long-term sustainable urban growth: By conducting extensive research, engage stakeholders, and draft a comprehensive urban development policy. Include provisions for periodic review and updates. A clear and strategic direction for urban development, ensuring sustainable growth and resilience to future challenges. Provides a roadmap for coordinated and effective urban planning.

SMHLPU

Name of priority	Term (Short, Medium, Long)	Further Information
State Land Policy Framework	Medium Term	Technical assistance (TA) for policy and regulatory development with the State Ministry of Housing, Land and Public Utilities/ CES, is crucial for several reasons: Expertise and Knowledge: - Specialized Skills: Technical experts bring in-depth knowledge of best practice, legal frameworks, urban planning principles, and specific industry insights related to apartment development and master plan creation. - Global Perspective: They can offer comparative analysis of successful policies and plans from other regions, adapting them to the local context. - Data-Driven Approach: Experts can conduct research, analyze data, and provide evidence-based recommendations for policy and plan formulation. Capacity Building: - Skill Transfer: TA will involve training local officials and stakeholders, enhancing their capacity to implement and manage the new policies and plans effectively. - Institutional Strengthening: TA will help build stronger institutions by improving organizational structures, processes, and human resource Creating a Solid Foundation: - State Land Policy: TA will help develop a comprehensive State Land Policy framework that clearly defines land ownership, usage rights, and management principles. This policy will guide land administration, reduce disputes and promote sustainable land use. - Building Construction Law: TA will assist in drafting a modern Building Construction Law that sets standards for building design, construction and safety. This law will ensure quality, regulate the industry, and enhance the safety of buildings. - Housing Policy: TA would support the development of a National Housing Policy that addresses the housing crisis in Juba. This policy would promote affordable housing, guide slum upgrading,, and improve access to basic services. By providing technical assistance, governments and organizations can develop sound policies and plans that lead to sustainable and inclusive development in the housing sector and beyond.
State Land Act	Medium Term	
Development of Apartment policy framework	Medium Term	
Building construction law	Medium Term	
Development of Housing policy	Medium Term	
Development of Integrated Master Plan	Long Term	

JCC

Name of priority	Term (Short, Medium, Long)	Further Information
Juba City Council strategic plan	Long term (3-5 years)	This strategic plan will guide sustainable service delivery, environmental protection, cleanliness, resilience, and inclusivity, promoting safety and well-being for all community members.
Juba City Council fiscal year budget	Short term (6 months - 1 year)	Preparing an annual fiscal year budget will ensure JCC's financial stability and improve service delivery to the community.
Juba City Master Plan	Medium term (1-3 years)	This plan includes spatial development, land-use planning, urban growth management, urban transportation, environmental protection, and social service development. It serves as a roadmap for sustainable urban development.
Juba City Council by-laws	Medium term (1-3 years)	The development and enforcement of by-laws will strengthen the legal framework, promote order, and enhance law enforcement capabilities in the city.

Equipment

MLHUD

Name of priority	Term (Short, Medium, Long)	Further Information
Surveying Equipment	Short Term (6 months to 1 year):	**Objective:** Enhance the accuracy and efficiency of urban planning processes: By procurement and deployment of modern surveying equipment such as GPS devices, drones, and GIS software. Train staff on their use and maintenance. Anticipating improved precision in urban planning, leading to better-designed and managed urban spaces. Reduces errors and increases efficiency in planning processes.
Disaster Response Tools	Short Term (6 months to 1 year):	**Objective:** Improve readiness and response capabilities for emergencies: By acquiring essential tools and equipment for disaster response, including communication devices, rescue equipment and conduct training on their use for enhanced ability to respond to and manage disasters, reducing the impact on communities. Ensures quick and effective emergency response.

Name of priority	Term (Short, Medium, Long)	Further Information
Environmental Monitoring Devices	Medium term (1-3 years):	**Objective:** Support data-driven environmental management through continuous monitoring: By Installation of devices to monitor air quality, water quality, and other environmental parameters. Set up data collection and analysis systems. Availability of real-time environmental data, enabling informed decision-making and effective management. Helps identify and address environmental issues promptly
Public Transport Vehicles	Medium term (1-3 years):	**Objective:** Reduce urban traffic congestion and pollution through eco-friendly transportation options: By Investing in road networks and cross over bridges infrastructures , promote public transport use and awareness campaigns to realize improvement in public transport systems, leading to reduced emissions and better urban mobility. Encourages a shift from private to public transport, easing traffic congestion
Renewable Energy Infrastructure	Long Term (more than 3 years):	**Objective**: Promote sustainable energy use in urban areas: By developing infrastructure for renewable energy sources such as solar panels, wind turbines, and energy storage systems. Integrate renewable energy into the urban grid promoting increase in the use of renewable energy, reducing reliance on fossil fuels and contributing to environmental sustainability. Supports the transition to a low-carbon economy.

SMHLPU

Name of priority	Term (Short, Medium, Long)	Further Information
Soil Testing Machines	6month (short - term)	Currently the State Ministry lack Soil testing equipment. Soil Testing equipment plays a crucial role in infrastructure development by providing crucial information about soil properties. This information is essential for engineers and contractors to make informed decisions regarding foundation design, construction methods and material selection. By understanding the soil's characteristics, shear strength, and moisture content, engineers can design structures that are safe stable and durable. Soil testing equipment helps: 1. Foundation Design, 2. Construction Methods, 3. Material Selection 4. Cost Optimization 5. Risk Mitigation

Name of priority	Term (Short, Medium, Long)	Further Information
Water Testing Equipment	6month (short-term)	Water testing Equipment plays a crucial role in urban development in Central Equatoria State and South Sudan in general, by ensuring the safety and quality of the water supply. This is particularly important due to the challenges urban centers such as Juba faces, such as rapid urbanization, limited infrastructure and potential contamination sources. Here's a breakdown of the importance of water testing equipment in Jubba's urban development: 1. Public Health and Safety; - Disease prevention - Safe Drinking Water 2. Infrastructure Development - Treatment Plant Efficiency - Infrastructure Planning 3. Environmental compliance and protection - Pollution Monitoring - Wastewater Monitoring 4. Economic Development: - Tourism - Industry, Investing in water testing infrastructure and capacity building is essential for the State's sustainable development.
	Medium term	
GIS Remote sensing machine	6month	The State Ministry is lacking GIS and remote sensing equipment which are invaluable tools for urban development in Juba and other cities within Central Equatoria State. This equipment is important for: 1. Urban Planning and Development - Land Use Mapping: Accurately mapping land use (residential, commercial, industrial, green spaces) is crucial for informed urban planning. Remote sensing data from satellites and drones provides high-resolution imagery for detailed land cover analysis - Infrastructure Planning: GIS helps plan and design infrastructure like roads, water supply, sanitation and power grids. By overlaying data on population density, topography, and existing infrastructure, planners can optimize network layouts and minimize disruptions

Name of priority	Term (Short, Medium, Long)	Further Information
		- Urban Growth Monitoring: tracking urban expansion over time helps identify areas of rapid growth, potential infrastructure bottlenecks, and the impact of urbanization on the environment 2. Environmental Monitoring and Management - Flood Risk Assessment: Juba is prone to flooding. Remote sensing and GIS can map flood-prone areas, assess risks and inform early warning systems. - Environmental Degradation: Monitoring deforestation, soil erosion, and water pollution is essential for sustainable urban development. Remote sensing data provides valuable insights into environmental changes. - Natural Resource Management 3. Disaster Management: - Emergency Response: during emergencies like floods or fires, GIS can be used to ma affected areas, track the movement of people and coordinate relief efforts. - Risk Assessment: By analyzing historical data and the current conditions, GIS can help assess the vulnerability of urban areas to natural disasters and plan for mitigation measures 4. Social and Economic Development - Population Mapping: Accurate population mapping data is crucial for urban planning and service delivery. - Economic Development: GIS can help identify suitable location for businesses and industries, assess market potential, and analyze transportation networks for efficient logistics

Name of priority	Term (Short, Medium, Long)	Further Information
Computers (hardware and software for Autocad, Engineering programs, structural design, surveying software)	6 months (short-term)	The State ministry is struggling to provide engineering, design and surveying equipment to its technical staff. AutoCAD and other engineering software and hardware are essential tools for urban design development in Juba. The reason why: 1. Precise Design and Planning: - Detailed Drawings: AutoCAD allows the creation of precise 2D and 3D drawings of infrastructure projects, including roads, buildings, bridges and water systems. This ensures accuracy and minimizes errors during construction - Complex Modeling 2. Efficient Project Management - Collaboration - Cost Estimation - Construction Planning: 3. Infrastructure Development - Road design - Building Design - Water and Sanitation 4. Environmental Impact Assessment: - Environmental Modeling
Provision of Internet Equipment (Star-link)	Short- Term	Internet facilities are essential for the Ministry of Housing, Land, and Public Utilities (MHL&PU) to improve efficiency, enhance service delivery, modernize operations , and support capacity building. By leveraging the power of the internet, the ministry can play a more effective role in shaping the sustainable and equitable development of Juba and other areas in Central Equatoria State.

JCC

Name of priority	Term (Short, Medium, Long)	Further Information
New court facilities	Medium term (1-3 years)	Establishing new court facilities will improve access to justice and promote resilience within the community, ensuring conflict resolution and legal recourse.

Name of priority	Term (Short, Medium, Long)	Further Information
Construction and maintenance of roads	Medium term (1-3 years)	This priority focuses on building and maintaining essential road infrastructure to improve connectivity, support economic activity, and promote access to services in Juba City.
Development and renovation of health centers	Medium term (1-3 years)	Renovating and constructing new health centers will improve healthcare delivery and enhance the well-being of JCC residents.
Development of city parks and gardens in JCC	Medium term (1-3 years)	Establishing parks will provide green recreational spaces, promote environmental conservation, and support community well-being.
Development of a drainage system	Medium term (1-3 years)	The drainage system development will address flooding issues, protect infrastructure, and improve public health by controlling waterborne diseases.
Development of a new dumping site/garbage management site	Medium term (1-3 years)	Establishing a new waste management site will support proper waste disposal, promote cleanliness, and contribute to environmental health.
Development of a city hall	Long term (more than 3 years)	Constructing a city hall will serve as a central administrative hub, providing space for official meetings, conferences, and stakeholder engagement.
Provision of solar energy panels	Medium term (1-3 years)	Installing solar panels will enhance access to renewable energy, reduce reliance on fossil fuels, and support green energy initiatives.
Extension and fulfilment of the city power network	Long term (more than 3 years)	Expanding the city's power network will ensure wider access to electricity, support development, and improve living standards for residents.
Development of new dams (e.g., Fulla Power Station)	Long term (more than 3 years)	Building new dams will generate electricity, support water supply systems, and promote green environmental initiatives.
Provision of a water network for access to clean water	Long term (more than 3 years)	Expanding the water supply network will provide access to clean drinking water for residents, improve hygiene, and reduce waterborne diseases.
Technical support for developing a comprehensive city master plan	Medium term (1-3 years)	This initiative involves technical support to review and create a comprehensive master plan for sustainable urban development, addressing issues like informal settlements and urban fragility.
Designing lab for urban development	Medium term (1-3 years)	Establishing a design lab will support urban planning, facilitate evidence-based decision-making, and promote inclusive development.

Knowledge Gaps

MLHUD

Name of knowledge gap	Further Information
Lack of Trained Personnel	Current Situation: South Sudan faces a significant shortage of trained Engineers, urban planners, environmental managers, and disaster management experts. This gap hinders the effective planning and management of urban areas, leading to unplanned growth and increased vulnerability to disasters. Solution: - Training Programs: Implement targeted training programs to build capacity in urban planning, environmental management, and disaster risk reduction. These programs should be designed to provide both theoretical knowledge and practical skills. - Workshops and Seminars: Conduct regular workshops and seminars to update existing personnel on the latest practices and technologies in urban development and disaster management. - Partnerships with Educational Institutions: Collaborate with local and international universities to develop specialized courses and certifications in urban planning and disaster management.
Inadequate implementation of Policy and legal Framework	Current Situation: The existing policies and regulations governing urban development in South Sudan are outdated and do not adequately address the current challenges of rapid urbanization, environmental degradation, and climate change. Solution: - Policy Review and Development: Conduct a comprehensive review of existing policies to identify gaps and areas for improvement. Develop new policies that promote sustainable urban development, environmental protection, and resilience to climate change. - Stakeholder Engagement: Involve a wide range of stakeholders, including government agencies, local communities, and private sector representatives, in the policy development process to ensure that the policies are inclusive and address the needs of all urban residents. - Regulatory Frameworks: Establish regulatory frameworks that enforce the implementation of these policies, including penalties for non-compliance and incentives for sustainable practices.

Name of knowledge gap	Further Information
Insufficient Equipment	Current Situation: The equipment currently available for urban planning, environmental monitoring, and disaster response is outdated and inadequate. This limits the ability of urban planners and disaster management teams to effectively carry out their duties. Solution: - Modern Surveying Equipment: Procure modern surveying equipment to enhance the accuracy and efficiency of urban planning processes. - Environmental Monitoring Devices: Install advanced environmental monitoring devices to collect data on air quality, water quality, and other environmental parameters. This data is crucial for informed decision-making and effective environmental management. - Disaster Response Tools: Acquire state-of-the-art tools and equipment for disaster response, including communication devices, rescue equipment, and medical supplies.
Limited Community Engagement	Current Situation: There is a lack of effective community engagement in the urban planning process. This leads to a disconnect between the needs and priorities of local communities and the plans developed by urban planners. Solution: - Community Engagement Programs: Develop and implement programs that actively involve local communities in the urban planning process. This can include public consultations, participatory planning workshops, and community-led initiatives. - Training for Local Leaders: Provide training for local leaders on community engagement techniques and participatory planning methods. This will empower them to effectively represent their communities and contribute to the planning process. - Feedback Mechanisms: Establish feedback mechanisms that allow community members to provide input and feedback on urban development plans and projects.
5.Connecting the dots between Environmental Degradation and socioeconomic drivers	Current Situation: Rapid urbanization and inadequate environmental management practices have led to significant environmental degradation in urban areas. This includes deforestation, pollution, and loss of biodiversity. Solution: - Environmental Protection Regulations: Develop and enforce regulations that protect urban environments from degradation. This can include restrictions on deforestation, pollution control measures, and requirements for green spaces in urban areas. - Sustainable Urban Development Practices: Promote sustainable urban development practices that minimize environmental impact. This can include green building standards, sustainable transportation options, and the use of renewable energy sources. - Public Awareness Campaigns: Conduct public awareness campaigns to educate urban residents on the importance of environmental protection and sustainable living practices.

SMLHPU

Name of knowledge gap	Further Information
Building Codes regulations	Building codes in Juba face several knowledge gaps. - Limited understanding of existing codes - Lack of awareness of code enforcement - Inadequate training and capacity building - Limited access to information - Traditional building practices: These knowledge gaps can lead to unsafe and substandard buildings, posing risks to the community and hindering sustainable urban development.
Town zoning regulations	Juba and other towns in Central Equatoria do not currently operate under a comprehensive system of land-use zoning. While the city and other urban areas has systems in place for city planning and management, these systems are still undergoing a transformation from the post-colonial and pre-independence era. Key points to consider: - Absence of formal zoning; juba lacks a detailed and enforced zoning system, leading to ad-hoc construction and development based on immediate needs rather than long-term urban planning - Master Plan needed; there is a recognized need for a Comprehensive Master Plan to guide land use, regulate building placement and types, and identify areas for commercial, public, and residential development. - Legal framework; currently, the Land Act of 2009 [the amended Land Act is yet to be passed], the Physical Planning Act of 2012, and municipal bye-laws provide the legal basis for land use and development. However, implementation and enforcement is facing challenges. - Customary Law Influence; traditional customary law also plays a role in land use, particularly in areas outside the city center, adding complexity to the situation. - Capacity and resources; The State Ministry authorities often face understaffing, lack of training and limited resources, which is hindering effective planning and enforcement of regulations. Without a well-defined and implemented zoning system, Juba faces challenges such as: - Unplanned development: leading to inefficient land use, inadequate infrastructure, and potential environmental problems, as witnessed in areas near Juba airport and Gudele area. - Land Disputes: The lack of clear regulations is creating conflicts over land ownership and usage. Currently there is a backlog of land dispute cases in the courts, and this is a potential area of conflict in the near future. - Inconsistent development: The absence of zoning has resulted in incompatible land uses in close proximity, affecting the quality of life for residents. While the situation may be complex, the need for a comprehensive zoning system in Juba is evident to guide sustainable development and address the challenges associated with rapid growth and urbanization.

Name of knowledge gap	Further Information
Town planning Act	While Juba has legal frameworks in place for Town Planning, the current state of Town Planning Act faces challenges in implementation and enforcement. Juba is experiencing rapid urbanization and population growth, which puts pressure on existing infrastructure and resources. Below is breakdown of the knowledge gaps: Legal Framework: - The Physical Planning Act of 2012: This Act provides the legal foundation for physical planning and development in South Sudan, including Juba. It outlines the principles and procedures for planning, development control, and urban management. - Local Government Act, 2009: This Act provides for the establishment of local governments, their powers, functions and duties, structures, composition, finances and any other matters related thereto. Challenges: - Implementation: Despite the existence of the Physical Planning Act, its implementation has been slow and inconsistent. Factors contributing to this include limited capacity within government institutions, lack of awareness among the public and competing priorities. - Enforcement: enforcement of planning regulations is weak, leading to uncontrolled development and disregard for approved plans. This has resulted to haphazard construction, encroachment on public land, and inadequate infrastructure. - Capacity Gaps: The state Ministry lacks the necessary human and financial resources to effectively carry out their planning and enforcement responsibilities. This includes shortage of qualifies town planners, surveyor, and other technical staff. Currently there is a moratorium on the employment of new staff, therefore the new batch of university graduates cannot be absorbed into the workforce. - Customary Law: - Lack of a Comprehensive Master Plan: Moving Forward - Develop a Comprehensive Master Plan - Strengthen Institutional Capacity: - Improve enforcement - Engage Communities - Integrate Customary Law

Name of knowledge gap	Further Information
Survey Act	Legal Framework: - The Land Act of 2009: This Act provides a foundation for land administration and management in South Sudan, including surveying. It outlines the principles and procedures for land surveys, registration and dispute resolution. - Survey Regulations: The State Ministry is utilizing specific regulations or guidelines inherited from the former Sudan times that complement the Land Act, detailing technical standards, procedures, and qualifications for surveyors. - Challenges: Non-existence, implementation and enforcement of the Survey Act: Currently, there is no Survey Act in place and like many legal frameworks in South Sudan the Survey Act may face challenges in implementation and enforcement due to limited capacity, resources, and awareness. - Capacity Gaps: There is limited or shortage of qualified and licensed surveyors in Juba and across the Sudan. This is hindering the accurate and efficient executions of land surveys. - Technology and Equipment: access to modern technology and equipment is limited, affecting the quality and timeliness of surveys. Moving Forward: - Develop a Survey Act: It is crucial to develop a new Survey Act and its related regulations to address current challenges and incorporate best practice. - Invest in Capacity Building: - Modernize surveying Technology: Investing in modern surveying equipment and technology will improve the accuracy and efficiency of surveys. - Strengthen land administration - Engage Communities

Name of knowledge gap	Further Information
Housing Act	Challenges and Current situation - Housing Crisis: Juba faces a significant housing crisis characterized by rapid urbanization, limited affordable housing options, and informal settlements. This is exacerbated by displacement due to conflicts and natural disasters - Lack of a Dedicated Housing Act: The absence of a comprehensive and specific Housing Act has contributed to the challenges in addressing the housing crisis effectively. Such ab Act could provide a framework for affordable housing development, regulate housing standards, and address issues like eviction and slum upgrading. - Capacity Constraints: Government institutions responsible for housing and urban development face capacity constraints in terms of staffing, expertise and financial resources. Moving Forward: - Develop a Dedicated Housing Act: Developing a comprehensive Housing Act could provide a stronger legal and regulatory framework for addressing the housing crisis in Juba. - Strengthen implementation: Existing legislation needs to be implemented and enforced more effectively to ensure orderly and sustainable housing development. - Promote Affordable Housing: Initiatives to promote affordable housing options are crucial in addressing the needs of low-income households or communities. - Improve Infrastructure: Investing in basic infrastructure, such as water supply, sanitation, and transportation, is essential to support housing development and improve living conditions.

JCC

Name of knowledge gap	Further Information
Capacity building	Capacity building efforts aim to strengthen technical skills, promote financial literacy, and support the efficient delivery of city services.
Reduction of unemployment	Initiatives to reduce unemployment will focus on creating jobs, supporting vocational training, and fostering sustainable economic growth.
Resettlement of refugees and internally displaced persons (IDPs)	Addressing the needs of refugees and IDPs through resettlement initiatives. The aim is to promote social cohesion, reduce ethnic tensions, and provide housing solutions.

Annex III: Deep Dives

Inputs from IMTC

CONFLICT				
Issues	**Thematic areas**	**Existing Policies/Legal Frameworks**	**Needs and Gaps**	**Geographical scope/Level of Government**
C1.1 Conflict-related drivers of urbanization	- **Displacement and Urban Expansion** (Rapid urban growth and Unplanned expansion) - **Socio-Economic Challenges** (Poverty, illiteracy, insecurity and unemployment) - **Urban Issues** (illegal settlements and natural hazards) - **Political and Institutional Factors** (the political system and land revenue collection arrangement) - **Borders issue** intra border issue between the city and sub urban areas	- South Sudan Land Act 2009 - Local Government Act 2009 - Financial Act	- National Housing Policy - Job Creation - Land Survey Act - Physical Planning Act - Political and economic stability - Devolution of powers - Clear demarcation of mandate - National Land Policy - Labor policy - Urban farming policy - Youth policy	- National and State line Ministries - National Revenue Authority - Local government council (urban council)

CONFLICT				
Issues	**Thematic areas**	**Existing Policies/Legal Frameworks**	**Needs and Gaps**	**Geographical scope/Level of Government**
C1.2 Impact of urbanization on conflict dynamics	- Population Influx (Rural-urban migration, influx of refugees and IDPs) - Unorganized Urban Growth (Unplanned peripheral expansion and lack of infrastructure) - Competition over Resources (lack of jobs opportunities, Land grabbing - High Crime Rates (Insecurity) - Environmental Stress (flooding, heat waves, landslides).	- Criminal law - Jobs and education - Social policies including environmental health - Water and Sanitation Policy WASH - Environmental Policy - Health Policy - Economic policy - Peace and stability	- Urban Planning policies (code of conduct) - Need for a harmonized policy for addressing un organized settlement - Survey and demarcation. - Develop a comprehensive environmental law - Need for institutional and HR capacity enhancement including technical assistance and financing - Improving staff welfare and conditions of service. - Develop comprehensive City Master Plan - Spatial planning - Land appropriation - Environment act - Smart city policy.	- National level - Local government council (urban council) - Local Government
C1.3 Their Inter-related effects on the provision of basic infrastructures and services	- Education - Urban Planning - Health - Wash - Infrastructure (roads, bridges, drainages, water and sewerage system. - Poor Liquid and solid waste management system - Traffic lights - Electricity - Hyperinflation - Insufficient Land access.	- Infrastructure development - Land Use Planning - Economic policy - Basic services delivery	- Spatial planning - Integrated Urban Development Planning - Creation of jobs - Social protection for vulnerable groups - Urban Centre Development Plan - Urban Transportation Development - Living Environment Improvement. - Environmental Protection and Green Network Development.	- National and state government - City Councils - Municipalities - County and - Payam Administration

CLIMATE				
Issues	**Thematic areas**	**Policies/Legal Frameworks**	**Needs and Gaps**	**Geographical scope/ Level of Government**
C2.1 To Understand climate and disaster related drivers of urbanization and the changing disaster risk landscape of urban areas	- Flood Areas and Drainage (Ineffective drainage systems and Loss of natural drainage systems) - Climate and Weather Extremes (Adverse weather conditions, Flooding) - Biodiversity and Ecosystem Loss (Urban development and illegal settlements) - Waste Management Issues (Poor solid and liquid waste management) - Health Risks (Increased risk of disease outbreaks/ pandemics) - Civil Defense (Inadequate firefighting resources) - Overlapping Mandates (Complicated governance structures) - Urban resilient management - planning and conservation of urban heritage	- GIS and Remote Sensing (Experts) - Building Codes - Land use measure by Land cover change measure - Sustainable service delivery initiatives. - Environmental protection - Cleanliness, build resilience, foster inclusivity - Safety for all Community Members - Design and construct drainage network in Juba - Conservation of flora and fauna	- Building Codes - Environmental Policy - Housing policy - Ecological - Urban Design - Designing with Nature - Civil defense Firefighting legislations, rules and regulations - Emergency preparedness response guidelines - Disaster management policy Disease Control Act	- JCC - National and State land related Institutions - National and State Revenue Authority -

CLIMATE				
Issues	**Thematic areas**	**Policies/Legal Frameworks**	**Needs and Gaps**	**Geographical scope/ Level of Government**
C2.2 Identify opportunities to increase resilience of urban areas to shocks	- Environmental Challenges (Land Degradation, Loss of Biodiversity, Air Pollution) - Water Resource Management (Rainwater Harvesting) - Regulatory and Governance Issues (Lack of Regulatory Framework) - Lack of Employment Opportunities (Spatial Surveys, Demarcation and Re-allocation) - Mitigation and adaptation to climate	- Urban Sustainable/ urban rejuvenation - Environmental Policy - Land Survey Policy - Physical Planning Policy - Climate Change Act	- Climate Action - Social Surveys - Land use planning - Urban Development - Aerial Survey - Improved roads with - Drainage system - Technical support to develop design of modern markets in three blocks of JCC including Juba County - Financial resources and human resource capacity - Taxation system reform and demarcation of tax collection structures	- National and State government - JCC - Juba County

COMPETITIVENESS				
Issues	**Thematic areas**	**Policies/Legal Frameworks**	**Needs and Gaps**	**Geographical scope/Level of Government**
C3.1 Analysis of an overview of business environment, including constraints linked to lack of basic services and infrastructure (e.g. water and electricity).	- Poor Urban Planning - Corruption and Fiscal Indiscipline - Roads - Water - Land Access - Influx - Refugees/IDPs - Macro/Micro Finance Support - Electricity - Governance - Tourist infrastructure - Business conducive environment	- Job creation - Investment - Public finance reforms policy - Infrastructure development - Building Codes - Economic Policy - Local government council Strategic Plans	- Promote Free Trade Zones - Industrialization - Political instability - Misuse of resources - Attraction of FDI - Infrastructures Development - Good Governance - Creating Business Environment - Urban development policy and act - Strategic plan - Fiscal Policies/ Discipline	- National and State level - JCC
C3.2 Private sector development opportunities in South Sudan to create jobs in specific value chains, particularly those that support the economic inclusion of women, youth and IDPs will also be assessed.	- Infrastructure Development (Housing, Market and roads infrastructure) - Supportive Facilities (Exhibition Hall, Urban Planning and Design Lab) - Financial and Economic (Support Macro Finance Support, Economic Recovery Initiatives) - Social Development (Social Cohesion) - Economic Development Initiatives (Establishment of Modern Markets, Livelihood Ventures and Agricultural Schemes)	- Policy to promote MSMEs - Labor Policy - Public Service Policy - Public Private Partnerships Policy - Urban Agenda - Privatizations , - PPP - Focusing on Jobs Creation.	- Unconducive business environment - Infrastructure projects for the construction of feeder roads and bridges, dikes - Cash for asset schemes - Cash for work initiatives	- National and state Level - JCC - Juba County

CAPACITY				
Issues	**Thematic areas**	**Existing Policies/Legal Frameworks**	**Needs and Gaps**	**Geographical scope/ Level of Government**
C4.1.Institutional structures/ arrangements and capacity to support management of urban areas.	- Capacity Assessment (Assess capacity of land administration system and urban development) - Cadaster system - Revenue Generation and Collection (Enhancing mechanisms for collecting) - Governance Challenges (mandate overlapping, Structural Overlap)	- Division of power based on federal System or Decentralization - National Land Policy - Land Regulations - Building Codes - Urbanization Policy - Land Survey Act - Town Planning Act - Improvement of Revenue Collection - Proper execution of Fiscal year Budget	- Effectiveness and efficiency of land administration system - Securing legally recognized land titles/Cadasters - Risk Management and Compliance - Procurement and Contract Management - Support from the Legal Expertise - Establishment of cadaster system	- National level and state level government - Urban council.
C4.2 Improvements that can be made in key areas like Access to basic services, land and housing, urban resilience to conflict and disasters economic inclusion and supporting local Economic Development	- Capacity of Employee - Effective land administration - Urban planning and Design Lab. - Invest in Real Estate - Insecurity and Political Instability - Natural Disaster	- Urban Planning act	- Experts - Financing for infrastructures and design lab - Poverty Alleviation - Fight Illiteracy - Jobs creation - Squatters free - Urban development - Public Finance Reform Mechanism	- National and state government - Juba City - Juba County
C4.3 Institutional Mandates, roles and responsibilities at the national , state and Juba City/secondary cities levels should also be assessed and proposed appropriate coordination mechanisms to improve urban governance and service delivery.	- Demarcation of mandates - One stop Shop as a central urban Development Issues.	- Decentralization - Rectify Local government act - Improve land Act - Land Fees Structure - Housing and Housing Infrastructure Policy.	- Improved Land Act - Rectify Local government act - Town Planning Mechanism.	- National government

CAPACITY				
C4.4 Special attention will be paid to the issue of municipal finance in terms of; i- Overall public/municipal Financial Management (PFM) ii- The allocation, availability, and predictability of intergovernmental fiscal transfers to urban council. Iii- the Current make up of and potential for improving own source revenue generation and iv- Expenditure profile of Urban Councils.	- Capacity of Employee - Effective land administration - Urban planning and Design Lab. - Invest in Real Estate - Insecurity and Political Instability - Natural Disaster	- Proper Urban Planning act - Digitalized System of Revenue collection - Jobs creation - Squatters free - Urban development - Public Finance Reform Mechanism	- Experts - Infrastructures - Poverty Alleviation - Education - Diversify and revenue management system	- National and state government - Juba City - Juba County
C4.5 For the WASH Sector , the Policy, Institutions and Regulations framework will be assessed with focus on the Strengthening Service delivery and climate resilience in the urban water sector. Efforts will be made to identified ways to improving urban councils ' capacity at creating social, spatial , and economic inclusion through participatory planning and citizen engagement.	- Environmental and Urban Planning (Environmental Protection, Urban Transportation Development Plan) - Water and Infrastructure (Inadequate Water Network) - Economic Engagement and Skills Development Skills Development (Agric value chain and coop development	- Decentralization - Rectify Local government act - Improve land Act - Land Fees Structure - Housing and Housing Infrastructure Policy.	- Improved Land Act - Rectify Local government act - Town Planning Mechanism - Urban council fiscal transfer.	- National government

Recommendations

Addressing Urban Fragility

Recommendation	Timeline	Lead Institution
POLICIES		
Strengthen policy and regulatory frameworks related to urban security provision - Examine feasibility of and pilot community policing mechanisms. - Enact policies to ensure greater gender equity in the security sector, especially police. - Analyze the bottlenecks in salary payments and develop policies to address those.	Medium (3-5 yrs)	MHADM LGB Ministry of Interior
Develop an urban displacement policy - Develop a policy on urban displacement to complement the "South Sudan Durable Solutions Strategy and Plan of Action for Refugees, Internally Displaced Persons, Returnees and Host Communities (October 2024)" which does not include specific provisions for urban areas. - The policy on urban displacement should also complement the draft DRM policy.	Short (1-3 yrs)	MHADM Commission of Refugee Affairs Relief and Rehabilitation Commission LGB
INVESTMENTS		
Reduce spatial exclusion and improve service delivery especially in informal areas - Identify underserved areas within towns - Explore small-scale, community-based service delivery approaches to deliver basic services (including health (through community health workers), water, and education) for people in IDP settlements, and other urban poor residing in peri-urban areas out of the reach of network infrastructure, where non-state/private sector actors do not have immediate incentives or means to expand.	Medium (3-5 yrs)	MHADM MoWE MLHUD LGB
Implement community-based planning for service delivery to reduce existing patterns of social and spatial exclusion in cities - Identify mechanisms to give communities a voice in project planning, budgeting, and supervision, while boosting capacity for self-governance. - Explore possibility of community-based service delivery sustained through user fee collection. - Explore the possibility of integrated service delivery mechanisms based on bottom-up planning (with bundled government services available from the same or connected providers) - Create bottom-up planning mechanisms including through participatory planning, budgeting, supervision, and operation and maintenance plans (including policy support), community scorecards, and participatory monitoring of expenditures.	Medium (3-5 yrs)	MHADM MoWE MLHUD LGB

Recommendation	Timeline	Lead Institution
Develop infrastructure to promote economic activity and social cohesion – in particular, markets, sports facilities, and recreation centers. - Since markets in many South Sudanese cities are spatially concentrated, identify areas within cities which are underserved by markets. - Identify and construct social infrastructure to promote social cohesion based on community consultations.	Medium (3-5 yrs)	MLHUD LGB
Job creation programs for youth and the urban poor - Move beyond supply side initiatives focused on job-training and entrepreneurship - Improve employment governance through social dialogue, developing labor market information systems, and addressing the need for skills and professional training for both men and women In the medium-term, - Promote the development of micro, small, and medium enterprises, through developing entrepreneurship capacity, easing access to capital, and regulatory change - Identify key sectors for job creation and provide governmental support. - It is likely that skilled jobs will take longer to create, so in the short term, the government could place greater emphasis on unskilled jobs, such as in construction. - Support the informal sector by articulating the minimum standards to be adhered to and investing in infrastructure that protects informal enterprises' access to customers, such as vending stations near transport hubs, public markets, and serviced working premises, while improving the working environment and decongesting the city. - Explore a limited work-for-food program including labor-intensive public works program could be created to address challenges of food security. - Explore creation of labor-intensive construction programs could be explored to generate more jobs as part of infrastructure reconstruction/building.	Medium (3-5 yrs)	MOF MLHUD LGB MOLSA
INSTITUTIONS		
Technical assistance programs - Technical assistance programs for LGBs, MULHD, and MOP on planning and implementing community-based service delivery. - Training on durable solutions and support on developing an urban displacement policy. - Support to LGBs on conducting community consultations and building social cohesion.	Short (1-3 yrs)	MULHD LGB MOP

Enhancing Climate and Disaster Resilience

Recommendation	Timeline	Lead Institution
POLICIES		
Strengthen policy and regulatory frameworks for DRM and climate adaptation - Approve DRM Policy (2021) - Finalize and pass DRM Bill - Reinforce Building Codes and Construction Standards and ensure they include disaster resistant design and urban heat mitigation measures where applicable - Risk-sensitive land use planning (development controls etc.) [see also capacity land use planning/ urban planning], including establishment of flood zones in key cities to ensure construction does not impede flood prevention - Environmental conservation policies, to also be integrated into building regulations to prevent building on wetland or natural drainage sensitive areas\ - Ensuring EP&R policies are also formulated at the state level, with special significance given to enhancing coordination between the national and state levels	Short (1-3/2 yrs)	MHADM RRC MoWE MoE
Establish Contingency Funds for Disaster Response and Recovery - Contingency funds established in such a way that urban areas are structurally included in distribution of funds – potentially held at state level. Potentially tied with DRM governance structures - Development of insurance market for disaster to aid recovery - Development of streamlined mechanism to ensure timely release of funds when needed in an emergency - Establishment of ringfences EP&R funds with terms that include funding for emergency preparedness and not only response - State ministers or Urban authorities capable of raising own source revenue should consider maintenance of their own emergency funds for release during an emergency.	Medium (3-7/5 yrs)	MoFP MHADM LGB
INVESTMENTS		
Assess and map disaster risks for all major urban areas - Identify exposure and vulnerability hotspots - Aweil: Drainage master plan to address run off during pluvial flooding to peripheral low-lying urban areas, including hydrological mapping and identification of points for stormwater flow control, small dugouts, wadis and dams	Short (1-3 yrs)	MHADM MoWE

Recommendation	Timeline	Lead Institution
POLICIES		
Invest in urban disaster risk reduction - Investment Planning, - Green/cool roof construction to mitigate urban heat - Drainage and levee investment to prevent flooding - Reforestation and wetland restoration to improve floodwater absorption - Establishment of urban green spaces projects to reduce heat stress - Upgrade in software, and hardware including monitoring stations, for South Sudan Meteorological Services to improve weather prediction and monitoring capability - Juba: Protection of Juba airport from flooding- raising key infrastructure, improving drainage, installation of retention basins - Juba, Wau: Desilting and cleaning of natural drainage channels, establishment of drainage in flood prone areas, green buffer zones along key waterways and stabilization of banks to reduce runoff velocity - Wau: Assessment of strengthening as needed of road crossings over streams against seasonal fluvial flooding - Aweil: Drainage under critical roads and optimization of road profiles to direct runoff, to conserve access to critical infrastructure during fluvial flooding season - Aweil: Consideration of drainage system that allows for beneficial water for urban agriculture in specific, low-lying peripheral urban zones	Medium (3-5 yrs)	
INSTITUTIONS		
Establish DRM Governance Mechanisms - Establishment of State, County, Payam, Boma-level DRM Committees - Amendment of DRM governance mechanisms to include city and block level specific committees to sit alongside payam and boma level committees to ensure urban input in DRM	Short (1-3 yrs)	
Enhance Capacities for Emergency Preparedness and Response - Review and develop disaster preparedness plans, with specific urban needs in mind - Emergency response training at city, block levels - Establishment of communications systems (SMS alerts, sirens, radio, apps) to ensure rapid evacuation and activation of response measures - Establishment of data sharing protocols and systems between relevant agencies for disaster response - Community awareness campaigns	Short (1-3 years)	MHADM Fire Brigades

Recommendation	Timeline	Lead Institution(s)
POLICIES		
Review and harmonize policies and legislation linked to urban planning, land use planning, and land administration/ management at the national, state, and local levels while assigning appropriate roles and responsibilities - Harmonize policies across national, state, and local levels for optimal management of land resources - Revisit official city limits to see if the formal urban area needs to be revised to account for urban growth so the plans can be updated to reflect the situation on the ground - Ensure clear policies for land access for infrastructure projects within city limits and industrial areas (e.g. SEZs, with a priority on those that are linked to urban economies) - Identify vacant land with potential land uses; consider tax scheme for vacant land to discourage land speculation and generate additional revenues	Short (1-2 years)	MOLHUD with input from city administrations
Invest in specific policies that improve job creation, job access, and competitiveness - Improve access to land and building permitting process - Incentivize formalization of businesses by lowering the licensing fees, simplifying the tax structure, adding grace periods for compliance, considering training programs - Develop policy and implementation plan for youth socioeconomic empowerment, including IDPs	Short to Medium term (1-5 years)	MOLHUD in partnership with Ministry of Youth and Sports and City Administrations
Promote the ongoing development of Lapsett Corridor as a top policy priority - Assess the expected impact of the corridor on Juba and other small towns along the route to plan appropriate investments - Engage local authorities (e.g. JCC) to identify economic nodes along the highway for possible future investments and land value capture	Short (1-2 years) for identification and Medium/ Long (3 years+) for priority investments	Ministry of Transport in collaboration with MOLHUD, JCC, and other town councils
INVESTMENTS		
Apply Investment Prioritization Framework (based on location, population catchment, economic intensity, and climate risk) to invest in priority economic nodes and clusters - Juba: Gumbo Market and Warehousing Cluster, Rejaf Beverage Cluster, Konyo Konyo Market, Airport Logistics Cluster, Northern Logistics Area - Nimule: Nimule-Elegu Border Post, Nimule Dry Port, Grand Fula Hydroelectric Plant - Wau: Wau Airport, East Logistics Site I, Wau Wetlands	Short (1-2 years) for prioritization within cities and Medium/ Long (3 years+) for priority investments in each city	JCC, Nimule, and Wau Councils

Recommendation	Timeline	Lead Institution(s)
Invest in basic infrastructure and services linked to priority economic nodes and clusters - Prioritize energy access, a major bottleneck, in all major markets and manufacturing clusters - Ensure sufficient water access in manufacturing, beverage, and agro-processing clusters - Invest in solid waste management, particularly around markets, and explore opportunities for job creation in the circular economy	Medium-term (3-5 years)	MOLHUD and city administrations in collaboration with Ministry of Energy and Dams, Ministry of Water Resources and Irrigation
Upgrade markets with small-scale infrastructure (e.g. paths, ramps, streetlights). Prioritize the following economic nodes in select cities covered under the Competitiveness Deep Dive: - Juba: Custom Market, Konyo Konyo Market, Suk Libya. - Nimule: Malakia Market, Nimule Fish Market - Wau: Wau Market, Hajar Market, Jau Souk, Nazareth Market	Short term (1-2 years)	JCC, Nimule, and Wau Councils
Invest in transport and logistics to deepen the ties of cities with the South Sudanese hinterland and with neighboring countries - Support infrastructure updates near important transport nodes e.g. Juba Bus Station, Juba Airport, Nimule Dry Port, Nimule-Elegu Border Post, Wau Airport and Train Station - Invest in cold storage and logistics to support the local fishing clusters e.g. Konyo Konyo market, Nimule Fish Market	Short term (1-2 years)	Ministry of Transport, MOLHUD, JCC, Nimule, and Wau Councils
Support urban agriculture to improve food security, reliance on basic food imports, and create jobs - Invest in areas with potential for agriculture e.g. Gurei IDP camp (Juba), Wau Wetlands, agriculture clusters in Nimule	Short term (1-2 years)	JCC, Nimule, and Wau Councils with input from Ministry of Agriculture
Improve urban mobility - Upgrade main arterial roads that connect informal settlements to markets and more formal parts of the cities - Invest in drainage and flood defenses to prevent the flooding of key roads during rainy season	Medium term (3-5 years)	Ministry of Transport, MOLHUD, JCC, Nimule, and Wau Councils

Recommendation	Timeline	Lead Institution(s)
Invest in job creation for youth to improve their socioeconomic inclusion - Prioritize vocational training opportunities linked to promising economic clusters in the cities - Invest in digital skills and education - Create opportunities in construction linked to urban infrastructure development - Identify specific clusters/economic nodes near camps where IDPs, particularly young men and women, could find jobs e.g. urban agriculture in Gumbo and Gurei camps in Juba	Short term (1-2 years)	Ministry of Labor, JCC, Nimule, and Wau Councils
INSTITUTIONS		
Build city-level capacity for better planning of economic activities and increased private sector participation - Develop systematic mapping of economic nodes - Invest in urban planning and land use tools to create dedicated spaces for informal vendors to move to formal spaces with an eye towards increasing economic density while also reducing congestion pressures on the city centers - Align budget allocations to ensure sufficient maintenance of economic assets - Train city officials in engaging private sector, procurement, financial management	Short to Medium term (1-3 years)	MOLHUD and city administrations

Urban Governance and Institutional Capacities

Recommendation	Timeline	Lead Institution(s)
POLICIES		
Enhancement and rationalization of own source revenue generation (cross cutting issue- competitiveness) - Digitization of tax collection records- more easily accessible and comprehensive (technical assistance) - Ensuring digital cross referencing of land and property records at both the state and city levels to ensure the right taxes and collected by the correct authorities (technical assistance) - Rationalization and coordination of tax collection capacity between state and local authorities – to share collection costs and increase capacity and to reduce total number of visits to taxpayers (capacity building) - Training for local officials in own source revenue generation, record keeping ,accounting, best practices (capacity building) - Introduction of rate collector ID to ensure that only authorized people collect taxes (capacity building) - Improvement of business environment to generate more economic activity and thus raise tax receipts (see competitiveness chapter)	Medium (3-5 yrs) Medium (3-5 yrs) Medium (3-5 yrs) Medium(3-5 yrs) Medium(3-5 yrs) Short (1-2 yrs)	Selected City Councils, Selected State MHLPUs, selected state MFs

Recommendation	Timeline	Lead Institution(s)
POLICIES		
Moving to a digitized financial system (cross cutting issue- competitiveness) - Investigate ending ring fencing of collected funds for certain purposes in urban council budgeting to more efficiently deploy revenue (technical assistance) - Encouraging more people and businesses to get bank accounts to allow for digital collection of taxes, working to establish greater banking capacity, and associated financial regulations and training (technical assistance and capacity building)	Medium (3-5 yrs) Long (5+ years)	National Ministry of Finance, selected City Councils, selected state Ministries of Finance
Establishment of model for urban areas expanding into neighboring county - Rationalization of institutional ownership of SSUWC between MLHUD and MWRI - Rationalization of institutional ownership between water provision and sanitation - Establishment of urban planning and service expansion cooperation mechanisms, through relevant state ministries, between city/municipal councils and county administrations/governments where urban areas have expanded past municipal boundaries, including mechanisms for planning permissions for service expansion, infrastructure construction and maintenance (particularly for Juba) (capacity building)	Short (1-2 yrs) Short (1-2 yrs) Medium (3-5 yrs)	MLHUD, MWRI, LBG, SSUWC, selected state ministries LG, HLPU, selected city councils, selected county governments
Establishment of urban community engagement and education programs, and behavioral modification policies - Education and engagement to encourage different behaviors including on solid waste management, - understanding the dangers of waste dumping and littering, open defecation, not adhering to building codes and regulations, encroachment on wetlands - Establishment of community structures at the block and quarter council levels to champion development activities in local neighborhoods, including encouraging of placing waste in designated collection points, - Study into how fines for activities such as illegal dumping of waste, and not following building codes can help to change behaviors en masse	Medium (3-5 yrs) (Short 1-2 yrs) Medium (3-5 yrs)	LGB, MLHUD, State MLG, MHLPU, City Councils
INVESTMENTS		
Expansion of sanitation capacity for Juba - Repair and potential capacity expansion of sludge management facility at Rokwe (capital expenditure) - Establishment of additional sludge management facility to the west or south of Juba City, also equipped to peri-urban and informal areas as they formalize, in addition to core Juba city (capital expenditure)	Medium (3-5 yrs) Long (5+ yrs)	JCC. Juba County government, MLHUD, MWRI, MH

Recommendation	Timeline	Lead Institution(s)
POLICIES		
Repair of sanitation facilities outside Juba - Repair of identified latrines in Wau, Malakal (capital expenditure) - Survey of latrine facilities in other urban areas, followed by repair (technical assistance, capital expenditure) - Establishment of new latrines in areas identified as being deficient, to reduce or eliminate open defecation in urban areas.		Wau Municipal Council, Malakal Council, WBEG MHLPU, Unity MHLPU
Expansion of water capacity for Juba, including peri-urban areas beyond town boundaries (cross cutting issue- competitiveness) - Expansion of water treatment capacity establishing new plants (capital expenditure) - Expansion of water pipe and kiosk network as capacity is expanded within city boundaries (capital expenditure) - Expansion of water pipe and kiosk network as capacity is expanded for peri urban areas outside city boundaries (capital expenditure)	Long (5+ yrs) Long (5+ yrs) Long (5+ yrs)	SSUWC, MWRI, MLHUD, JCC, Juba County Govt
Repair of water infrastructure (cross cutting issue- competitiveness) - Fixing of identified non-functional water points in Wau, Malakal (capital expenditure) - Survey of water points in other urban areas, followed by repair (technical assistance, capital expenditure) - Expansion of SSUWC administrative capacity across urban areas in South Sudan (offices, hardware, software, etc) is cities with fewer connections (capital expenditure)	Short (1-2 yrs)	SSUWC, MWRI, MLHUD
Improving solid waste management capacity - Provision of solar chargeable battery powered solid waste collection trucks to urban councils (capital expenditure) - Expansion and improvement of waste dump sites (capital expenditure)	Short (1-2 yrs) Medium (3-5 yrs)	JCC
Improving drainage capacity (cross cutting issue- climate) - Development of key drainage plan based on detailed analysis for selected cities (technical assistance) - Provision of new drainage capacity in key urban neighborhoods to prevent flooding, and link to solid waste management to ensure they do not get clogged (capital expenditure) - Upgrading and repairing existing public drains in priority urban neighborhoods	Short (1-2 yrs) Medium (3-5 yrs)	Selected city councils
INSTITUTIONS		

Recommendation	Timeline	Lead Institution(s)
POLICIES		
Institutional mandate rationalization - Establishment of regular dialogue at highest political levels to ensure political buy-in for institutional mandate changes and all technical recommendations to achieve green, resilient and inclusive cities. Formation of a Green, Resilient and Inclusive Cities National Management Committee, to meet twice a year. To include, VP Infrastructure, VP Economy, VP Service provision, cabinet ministers of MLHUD, MWRI, MEF, MH, MF, Transport, Roads and Bridges, MHADM, LGB and others as necessary. Similar Green, Resilient and Inclusive State Management Committees to also be set up to include Governor, Mayors of cities and relevant County Commissioners, as well as state minister for MF, MHLPU, LG and others as necessary. (technical assistance) - Development of service mandate rationalization plan, including in depth exercise to understand all overlapping mandates and gaps, to help rationalize mandates and prevent institutional paralysis based on conflicting and overlapping mandates (technical assistance) - Establishment of standardized procedures for urban service expansion, including agreement on definition of urban area (Land Act gives a level of density to define an area as urban, while town councils use boundaries). (technical assistance)	Short (1-2yrs) Short (1-2 yrs) Medium (3-5 yrs)	National MF, MLHUD, MHADM, MH, MEF, MWRI, SSUWC, SSEC, State MF, MHLPU, selected city councils and county governments
Land management improvement (cross cutting issue- competitiveness, conflict) - Building digital cadasters for class 3 and 4 plots in urban areas without them, especially towns of: (technical assistance) - Building digital cadasters for class 1 and 2 plots in urban areas without them, especially towns of … … … - Completion of transfer for land records from the judiciary to relevant authorities, followed by prohibition of judiciary from issuing any more documentation or certification with respect to land rights (capacity building) - Building land rights enforcement capacity- courts (capital expenditure), as well as building political buy in with high level official management committees (see above) (technical assistance)	Medium (3-5 yrs) Medium (3-5 yrs) Long (5+ yrs) Medium (3-5 yrs)	Selected city councils Selected State MHLPU MLHUD

Recommendation	Timeline	Lead Institution(s)
POLICIES		
Improve Urban planning at the state level and local level (cross cutting issue- competitiveness) - Urban planning training at national and state level (capacity building) - Urban planning software, hardware for national and state level (capital expenditure) - Establishment of urban planning framework, guidelines, regulations and policies, include climate smart and disaster risk management policies, at the state and urban level	Short (1-2 years) Short (1-2 years) Medium (3-5 years)	MLHUD, State MHLPU
Improve urban council administrative capacity - Training for procurement and management of solid waste management contracts (capacity building) - Training for procurement and management of digital tax collection and records system (capacity building) - Training for land and cadaster management including for digitized systems (capacity building) - Training for urban planning to complement main urban planning investment at the state level (capacity building) - Provision of vehicles for tax collection (solar rechargeable battery) (capital expenditure) - Training for engineers at the state and urban level (capacity building)	Short (1-2 yrs) Short (1-2 yrs) Short (1-2 yrs) Medium (3-5 yrs) Short (1-2 yrs) Medium (3-5 yrs)	Selected city councils, selected state MHLPUs

Annex IV: Background Reports and Diagnostics

South Sudan Competitive Cities Study - Assessing the potential drivers of urban growth and job creation in South Sudan

- **Objective**: The objective of this consultancy assignment is to assess the lack of economic opportunities in South Sudan to better understand how investing in cities can support the country's economic recovery. The analysis ties in closely with the need to create economic inclusion for the different groups in urban areas, invest in economic and financial resilience of urban areas to climate and non-climate shocks.
- **Consultancy Firm**: Pegasys
- **Methodology**: Analysis of geospatial data and in situ data collection through stakeholder engagement
- **Output**: National-level analysis, City-level Analysis for Juba, Wau, and Nimule and MCA-based investment prioritization framework

Assessing Urban Disaster Risks and Investment Options for Urban Disaster Risk Reduction in South Sudan

- **Objective**: To strengthen the knowledge base for evidence-informed and government-led disaster risk reduction investments in urban areas in South Sudan. The consultancy comprises a country-wide urban disaster risk screening, city-level disaster risk assessments (Juba, Wau, Aweil), and the prioritization of policy and investment options for urban DRR.
- **Consultancy Firm**: Triple Line and HKV
- **Methodology:** geodata informed disaster risk assessment
- **Output**: Urban Disaster Risk Screening; City Level Disaster Risk Assessment for Juba, Wau, and Aweil; Investment Priorities; Story Map

Secondary Cities Analytics Deep Dive - Malakal and Wau

- **Objective**: To understand the broad dynamics of urbanization in Wau and Malakal, with a particular focus on conflict trends, socio-economic conditions, governance, and climate vulnerability, in order to create data-informed urban profiles that support donor programming focused on green, resilient and inclusive urban development. Preparation of data-informed profiles for two strategic secondary cities: (i) Malakal (Upper Nile) focusing on conflict-related analysis, and (ii) Wau (Western Bahr el Ghazal) covering Conflict, Climate and Capacity Pillars.
- **Consultancy Firm**: REACH/IMPACT
- **Methodology:** literature review, geospatial analysis, KIIs, FGDs, facilities assessment
- **Output**: City Profiles for Wau and Malakal (Report)

City Scans – Juba, Wau, Bor and Malakal (IDP-Analysis: Bor and Bentiu)

- **Objective**: City Scans are a rapid geospatial assessment of the critical resilience challenges that cities face using the best publicly available global datasets and open source tools. City Scans intend to build dialogue around a city's most pressing resilience challenges, to develop risk informed investment proposals, identify opportunities and barriers to unlocking private capital, and prioritize and coordinate future investments.
- **Consultancy Firm**: Global Facility for Disaster Reduction and Recovery (GFDRR), City Resilience Program
- **Methodology**: Geospatial analysis
- **Output**: Standard City Scan for Juba, Wau, and Malakal; focused IDP analysis for Bor and Bentiu

Nature based Solutions Opportunity Scan – Juba

- **Objective**: NBSOS support the identification and mapping of opportunities for investments in specific Nature-based Solutions (NBS) through spatial analyses, indicating where NBS can most effectively reduce impact of hazards and build resilience. NBSOS rely on globally available geospatial data to ensure widespread applicability across most cities and inform engagements upstream or early in project preparation.
- **Consultancy Firm**: Global Facility for Disaster Reduction and Recovery (GFDRR), Global Program on Nature Based Solutions
- **Methodology**: Geospatial analysis
- **Output**: Nature based Solutions Opportunity Scan

Assessing Emergency Preparedness and Response Capacities at National and State Level and Developing an Investment Plan

- **Objective**: To inform of existing strengths in South Sudan's EP&R system, which have been built over the years through various government and partner initiatives at both the national, state and county level, and identify key challenges and areas of improvement. The envisioned outcome of this study is to provide a better
understanding of priority actions and indicative investments for strengthening of the EP&R systems and capacities.
- **Consultancy Firm**: JBA and consortium (South Sudan Red Cross; International Federation of the Red Cross and Red Crescent Societies; Bournemouth University Disaster Management Centre; Doctors with Africa.
- **Methodology:** literature review, Ready2Respond Methodology (questionnaires, interviews, field data collection); stakeholder workshops
- **Output**: R2R Diagnostic and Investment Options Report