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KRIHS

Transforming Addis Ababa: Integrated Strategic Development
Phase I – Multi-sector Diagnostic

I. Analytical framework: Two phases

II. National Context: Ethiopia is urbanizing rapidly

III. Addis Ababa: The positive trends provide opportunities

IV. Addis Ababa: Growth also comes with challenges

V. Key questions to be answered for strategic city development

VI. Next phase and timeline

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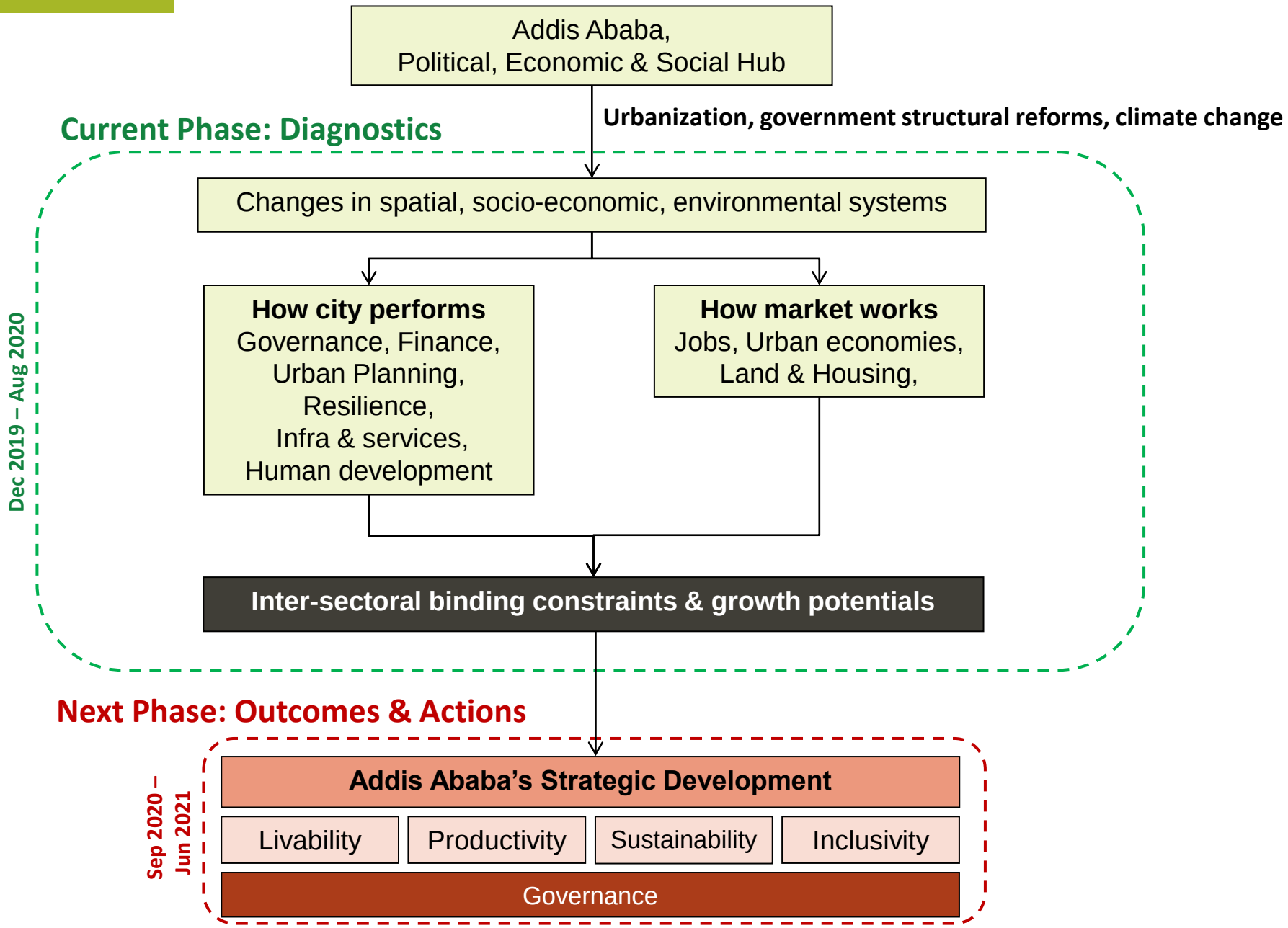
Analytical Framework

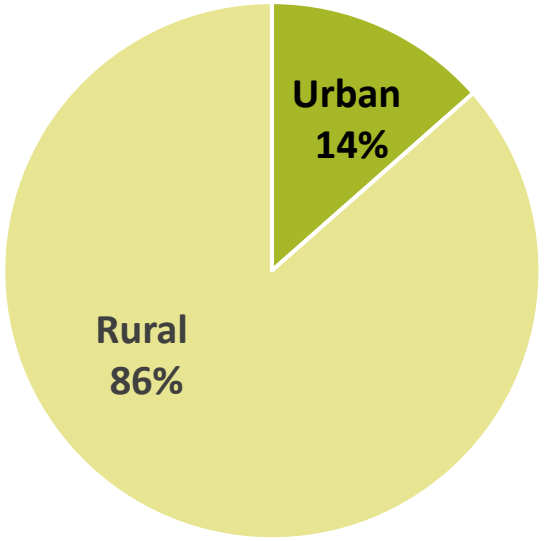


National Context:

Ethiopia is urbanizing rapidly

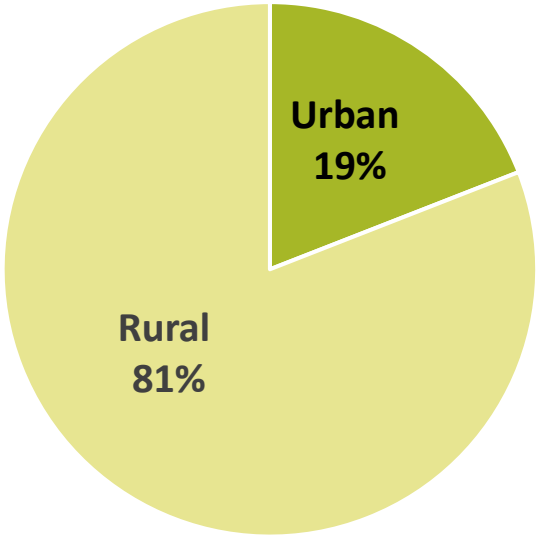
Ethiopia is one of the least urbanized countries in the world but urbanizing rapidly

1999



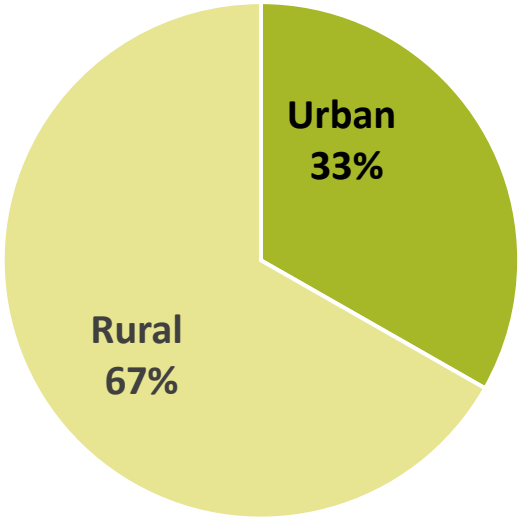
7 million in urban areas

2016



17 million in urban areas

2037

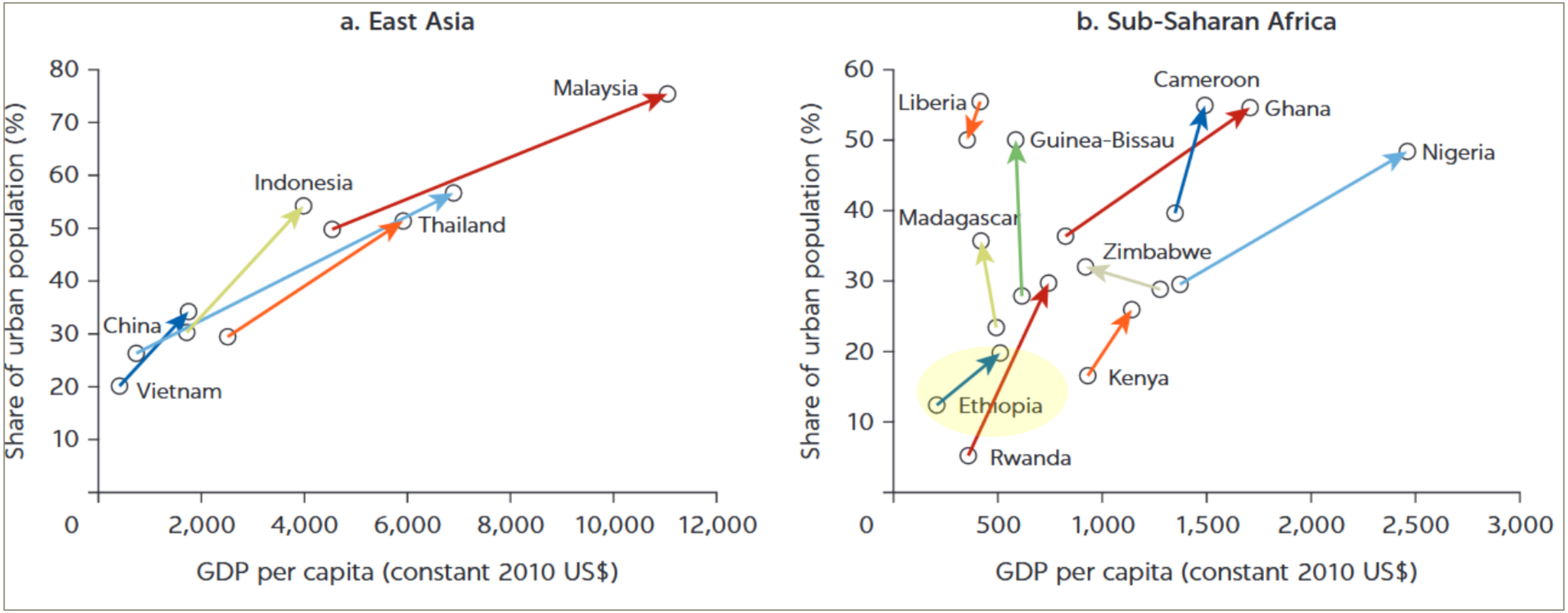


42 million in urban areas

Source: CSA (1999, 2012a, 2016b)

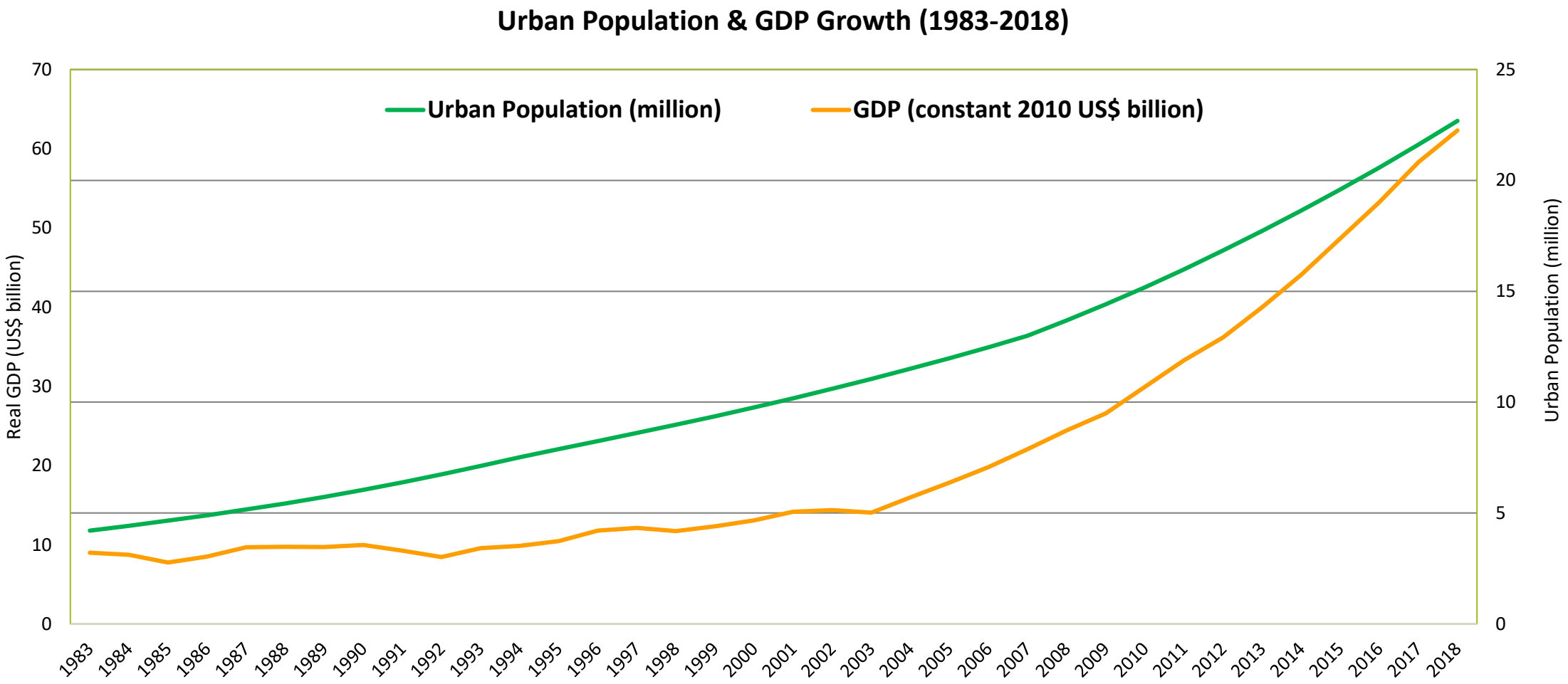
World is becoming more urban, but not all countries are reaping the economic benefits

Diverse Paths of Urban and Economic Growth (1990-2016)



Source: Homman & Lall (2019)

Ethiopia's urbanization shows positive trends towards economic growth



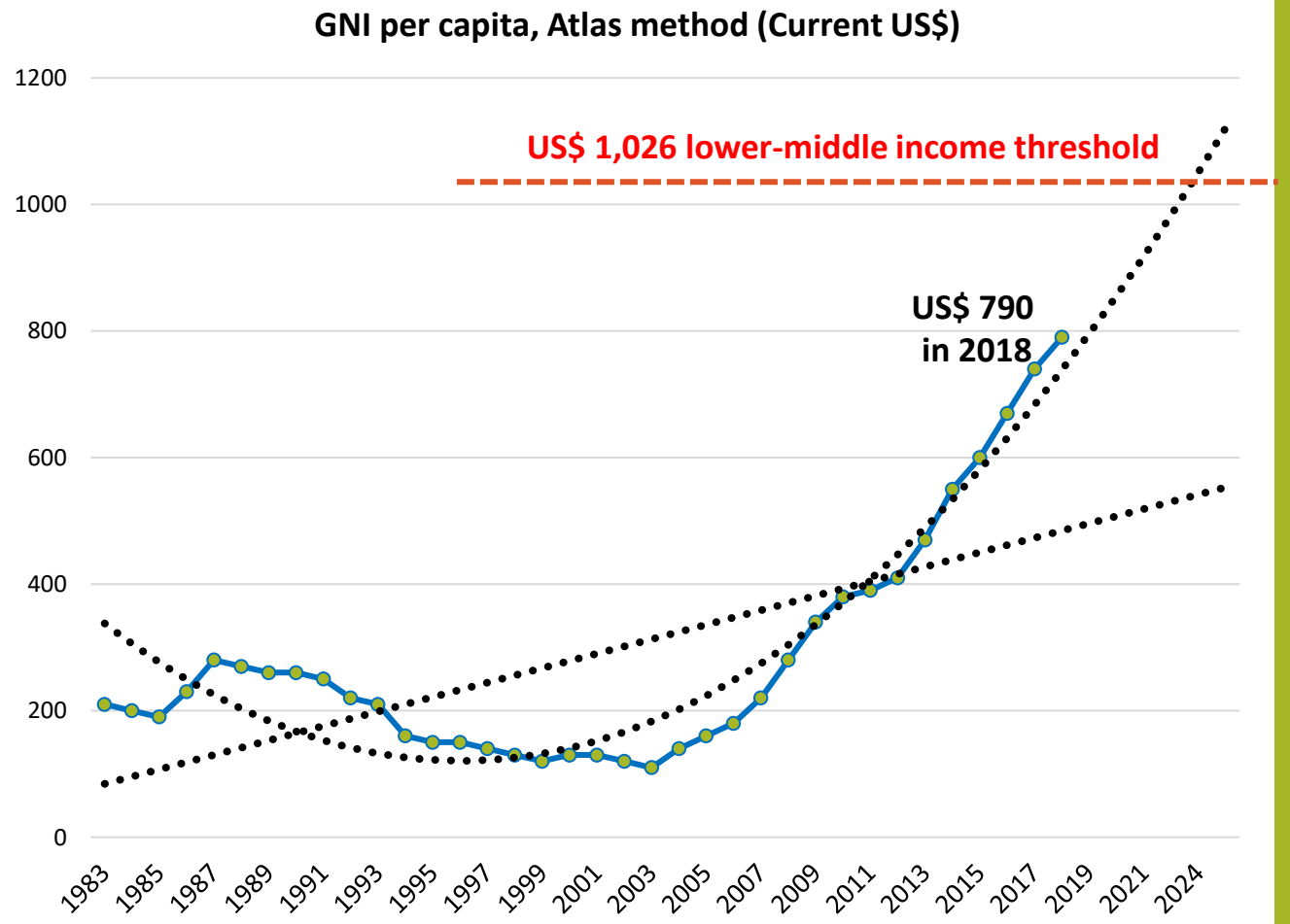
Source: World Bank, World Development Indicators

To maintain the momentum and tighten the link with economic growth, urbanization should be managed proactively

If managed well, the rapid urbanization will:

- ***Connect jobs and workers***
- ***Connect businesses***
- ***Connect urban residents to more extensive markets***
- ***Connect people, housing, services, environment***

Attain lower-middle income country status by 2025



Note: The dotted lines are exponential and linear trendlines.
Source: World Bank, World Development Indicators.

Addis Ababa:
The positive trends provide opportunities

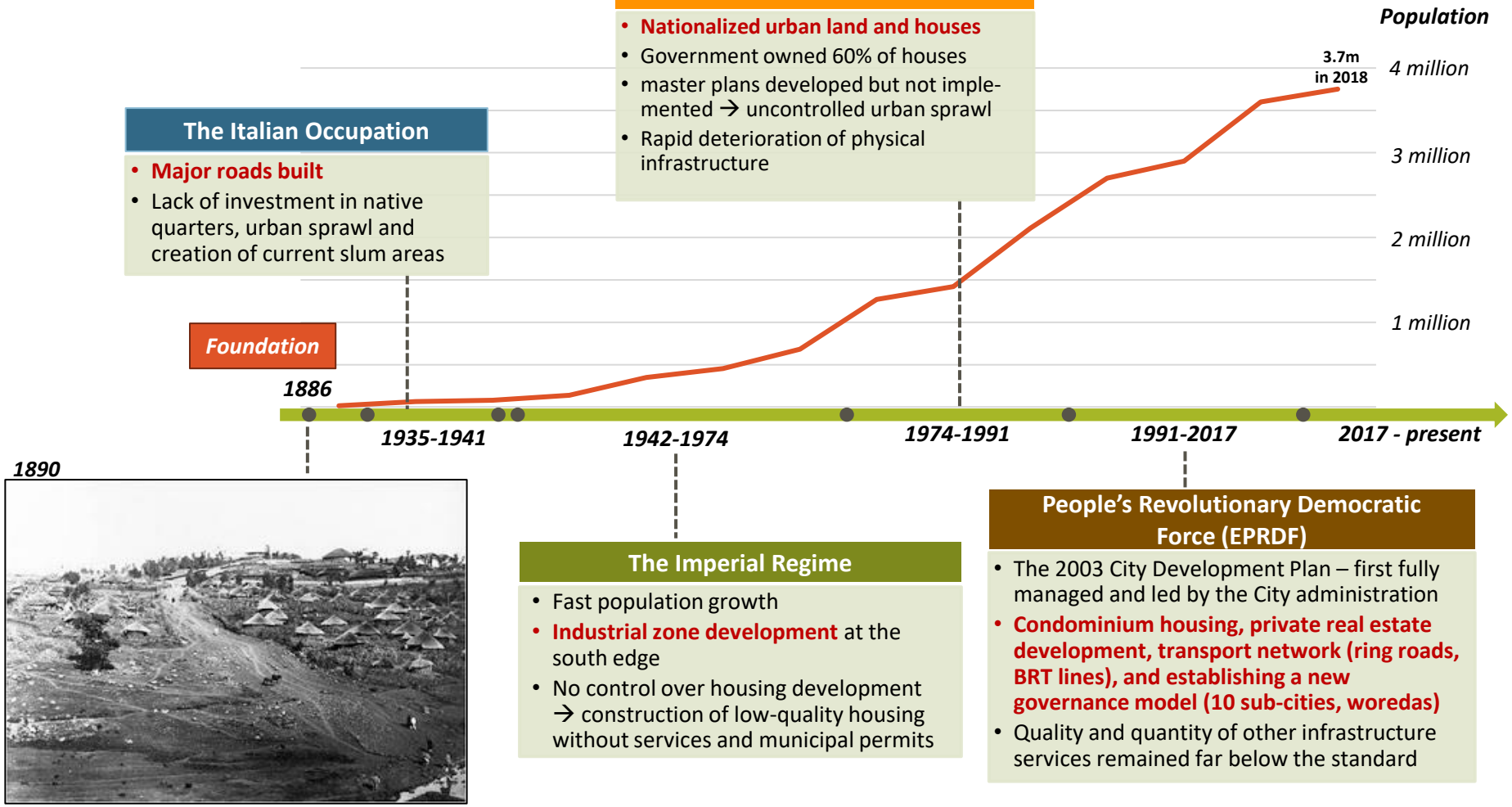
Addis Ababa: “New flower” in a new vase

The Italian Occupation

- **Major roads built**
- Lack of investment in native quarters, urban sprawl and creation of current slum areas

The Dergue Era

- **Nationalized urban land and houses**
- Government owned 60% of houses
- master plans developed but not imple-mented → uncontrolled urban sprawl
- Rapid deterioration of physical infrastructure



The Imperial Regime

- Fast population growth
- **Industrial zone development** at the south edge
- No control over housing development → construction of low-quality housing without services and municipal permits

People’s Revolutionary Democratic Force (EPRDF)

- The 2003 City Development Plan – first fully managed and led by the City administration
- **Condominium housing, private real estate development, transport network (ring roads, BRT lines), and establishing a new governance model (10 sub-cities, woredas)**
- Quality and quantity of other infrastructure services remained far below the standard

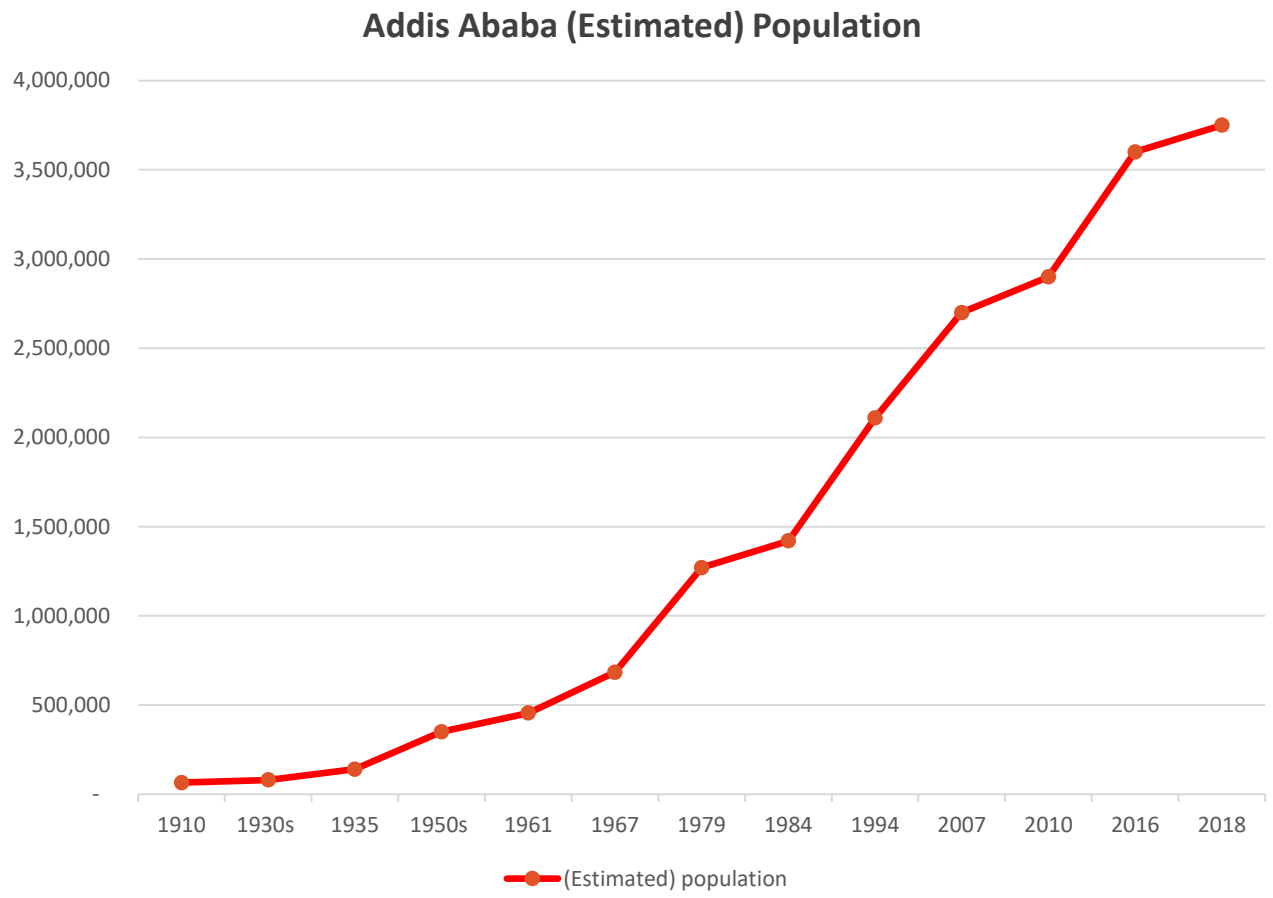
Today

- ✓ **Africa’s leading gateway**
- ✓ **Diplomatic capital of Africa**
- ✓ **Intangible cultural heritage**

Source: Alemayehu & Stark (2018), Woldeamanuel (2020), Tufa (2008), UN Habitat (2017), Burdett et al. (2018), AACPPO (2017)

Note: The title adopted from https://lsecities.net/archives/addis-ababa-new-flower-in-an-old-vase/

Population is growing fast



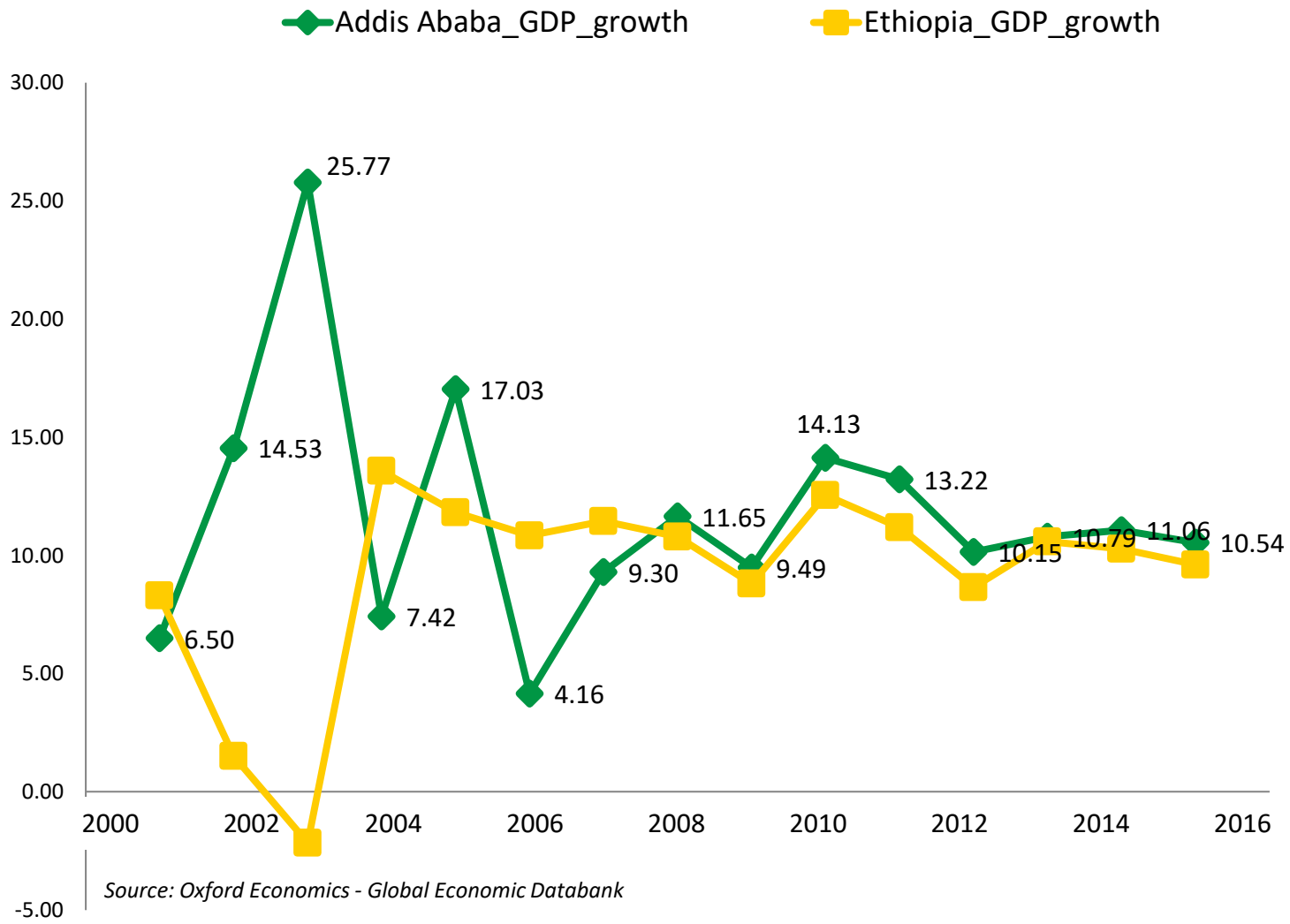
Source: UN Habitat (2017), CSA (2007, 2016a, 2018)

Addis Ababa average population growth at 3.7%[1]p.a.compared to national average population growth 2.3%[2]p.a.; overall average urban population growth 7.6%[3] p.a.

Addis population: 3.7 million in 2018[4] → Projected 4.53 million by 2025[5] (statistics vary depending on sources)

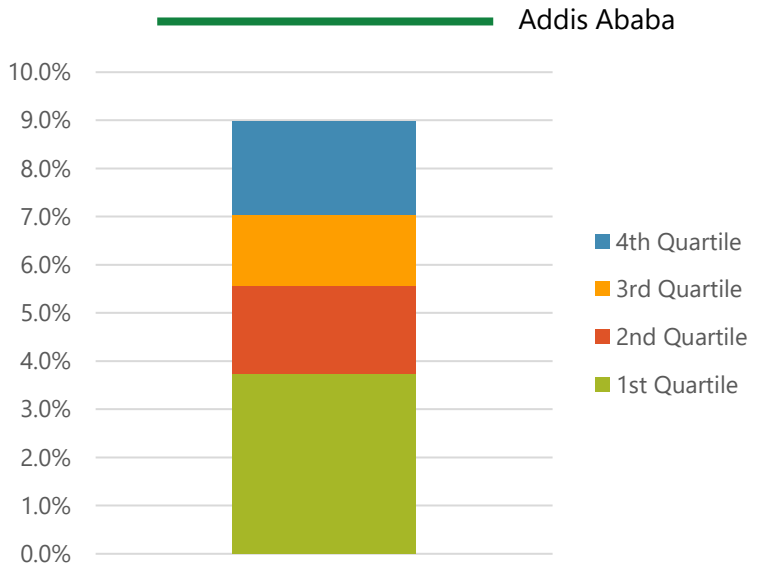
Source: 1. Mahiteme (2007), CSA (2016a); 2. CSA (2007, 2016b); 3. CSA (2006, 2016a); 4. CSA (2018); 5. CSA (2012a)

Economy is booming



Source: Oxford Economics - Global Economic Databank

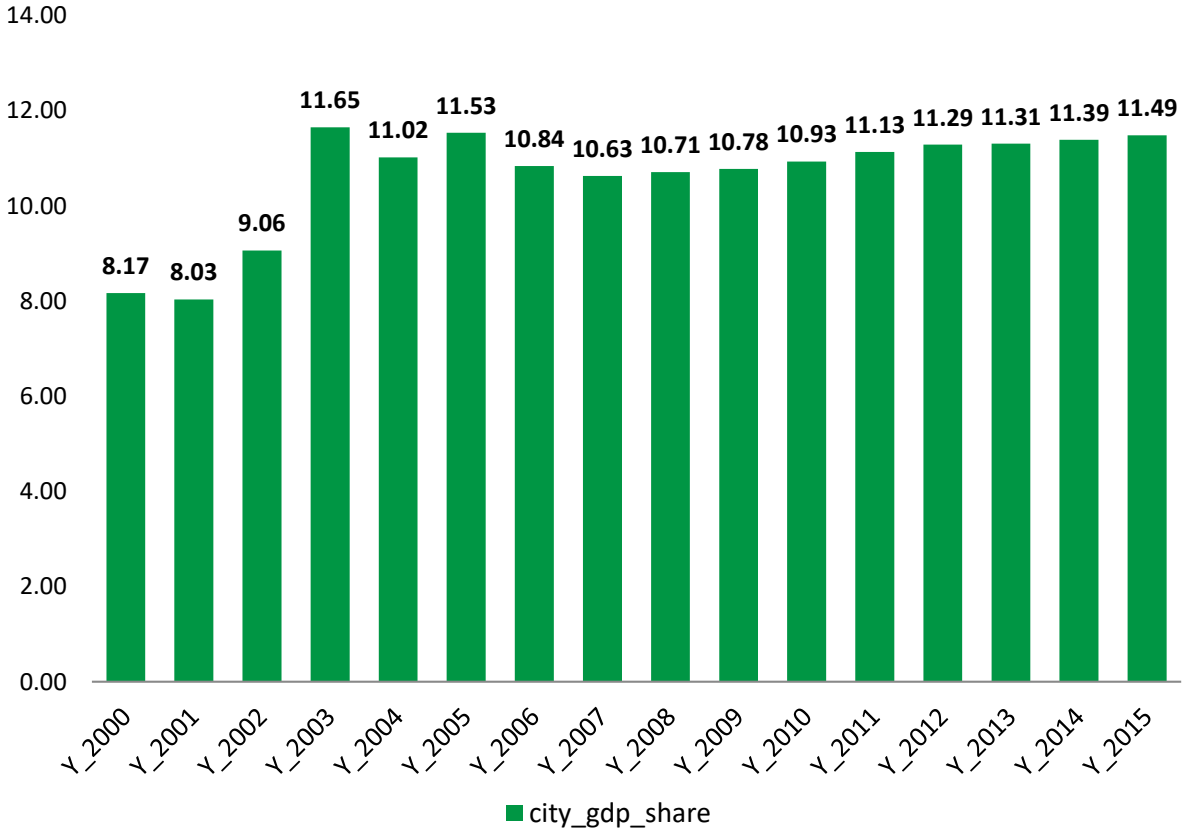
Between 2000-2015 Addis Ababa GDP growth at 11.7% p.a. in average, much higher than other African cities



Benchmark cities: Abidjan, Dakar, Dar es Salaam, Johannesburg, Khartoum, Kinshasa, Lagos, Luanda, Nairobi, Yaounde.

Addis' GDP share of the national economy remains at 10-11% since 2003 serving as a main economic hub

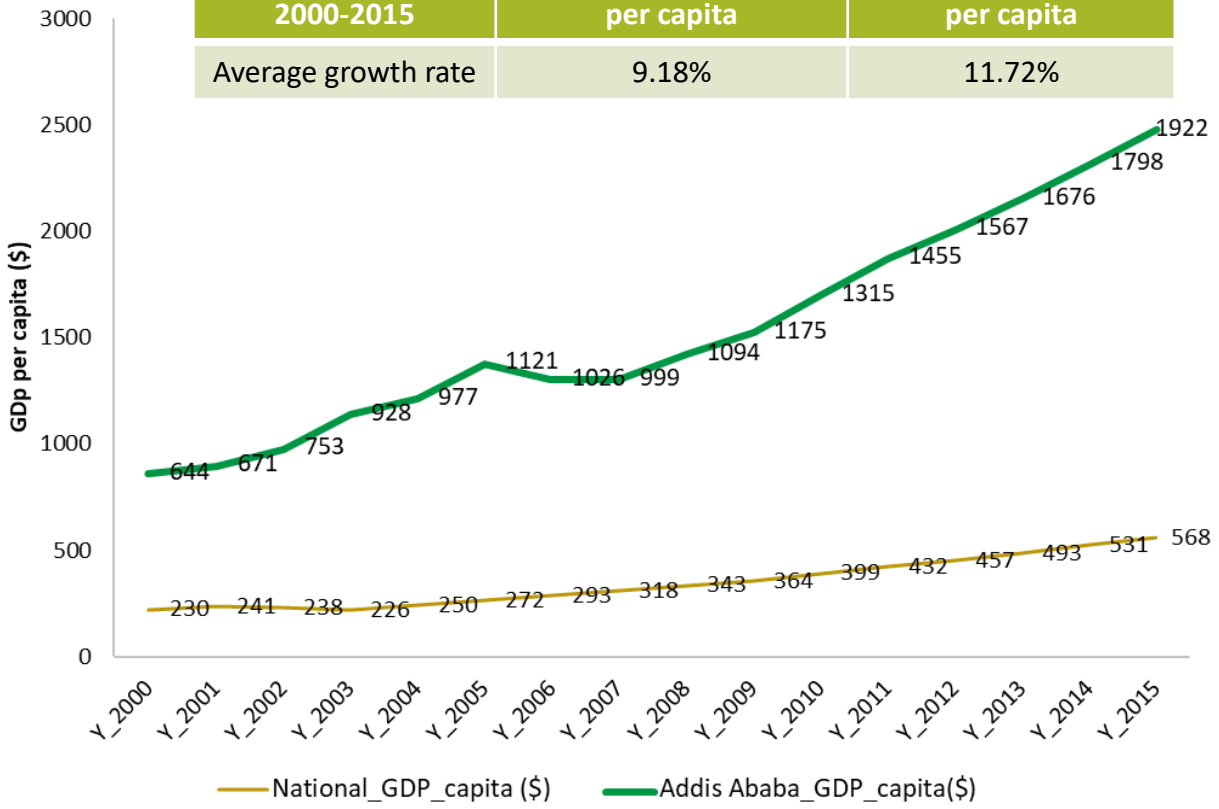
Addis Ababa GDP Share



Source: Oxford Economics - Global Economic Databank based on 2012 prices

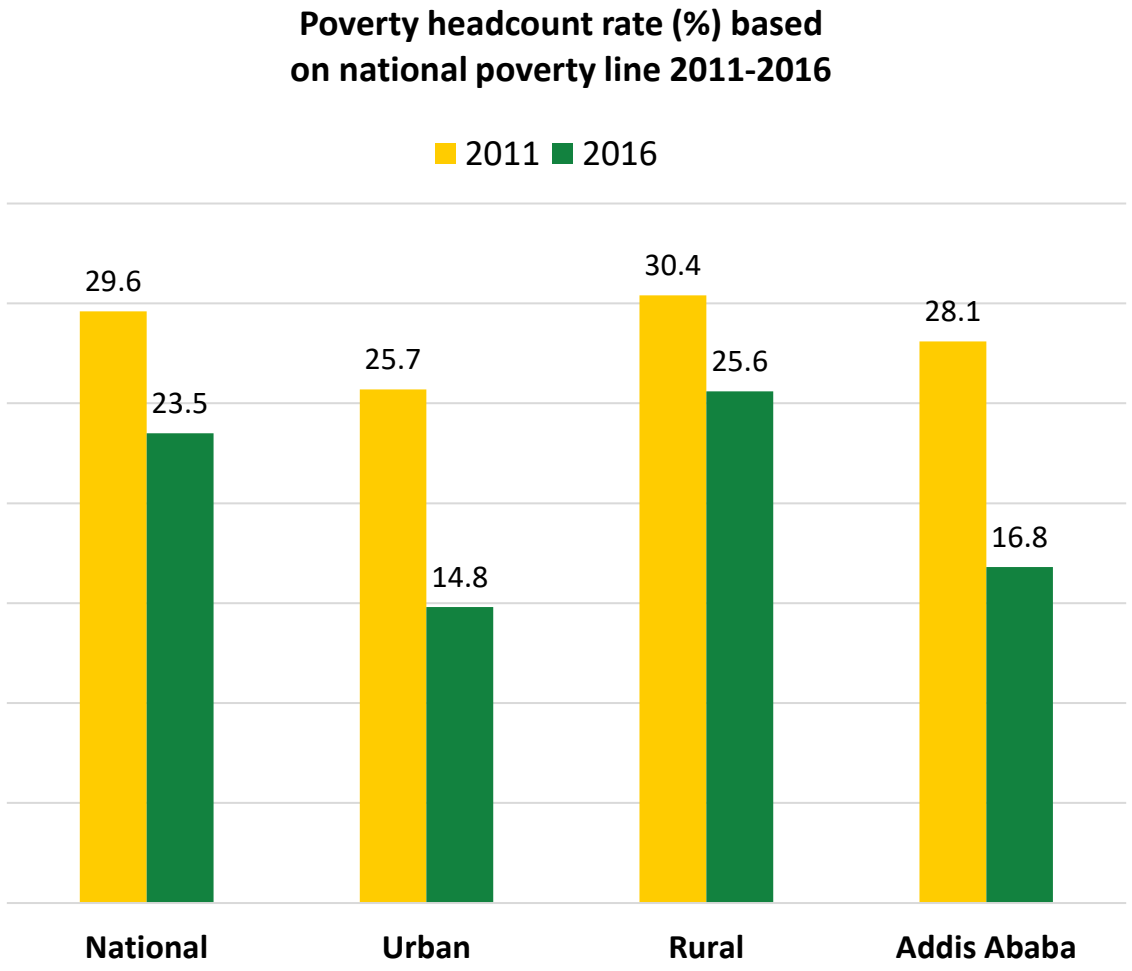
National and Addis Ababa GDP per capita

Between 2000-2015	National GDP per capita	Addis GDP per capita
Average growth rate	9.18%	11.72%

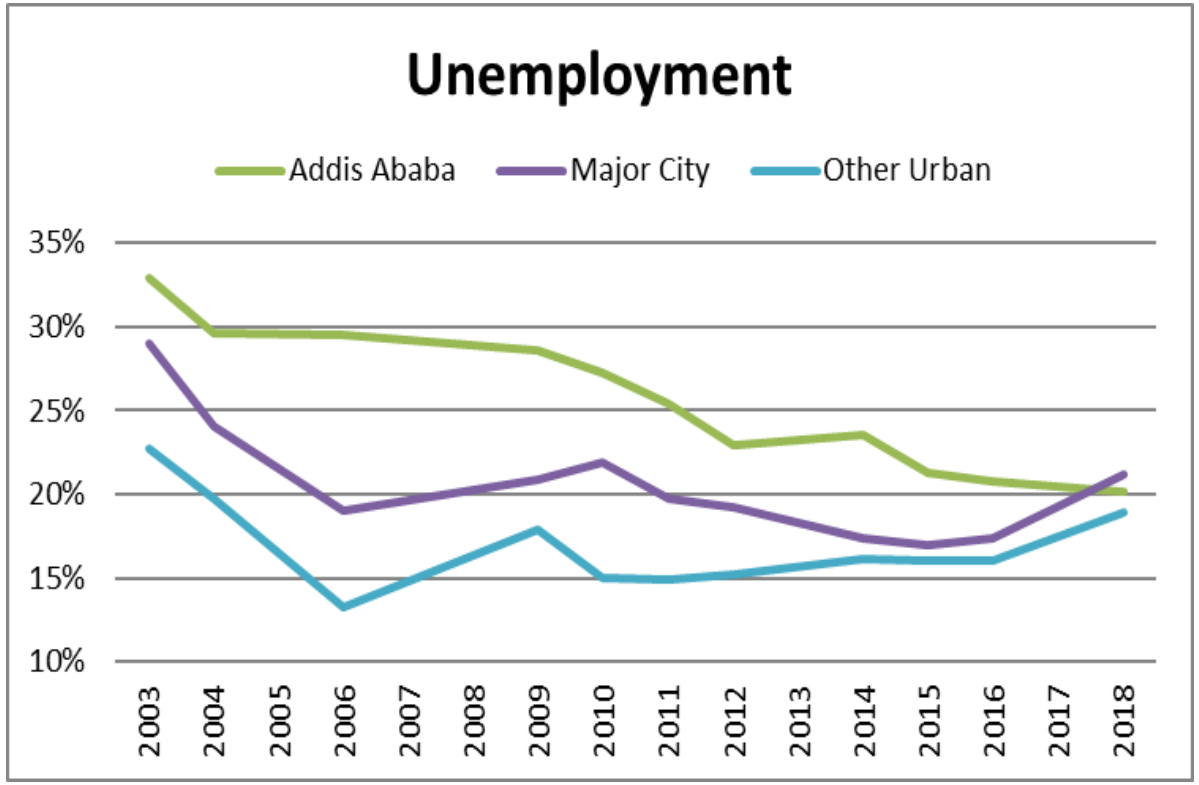


Source: Oxford Economics - Global Economic Databank based on 2012 prices

Poverty and unemployment are decreasing



Source: World Bank (2020)

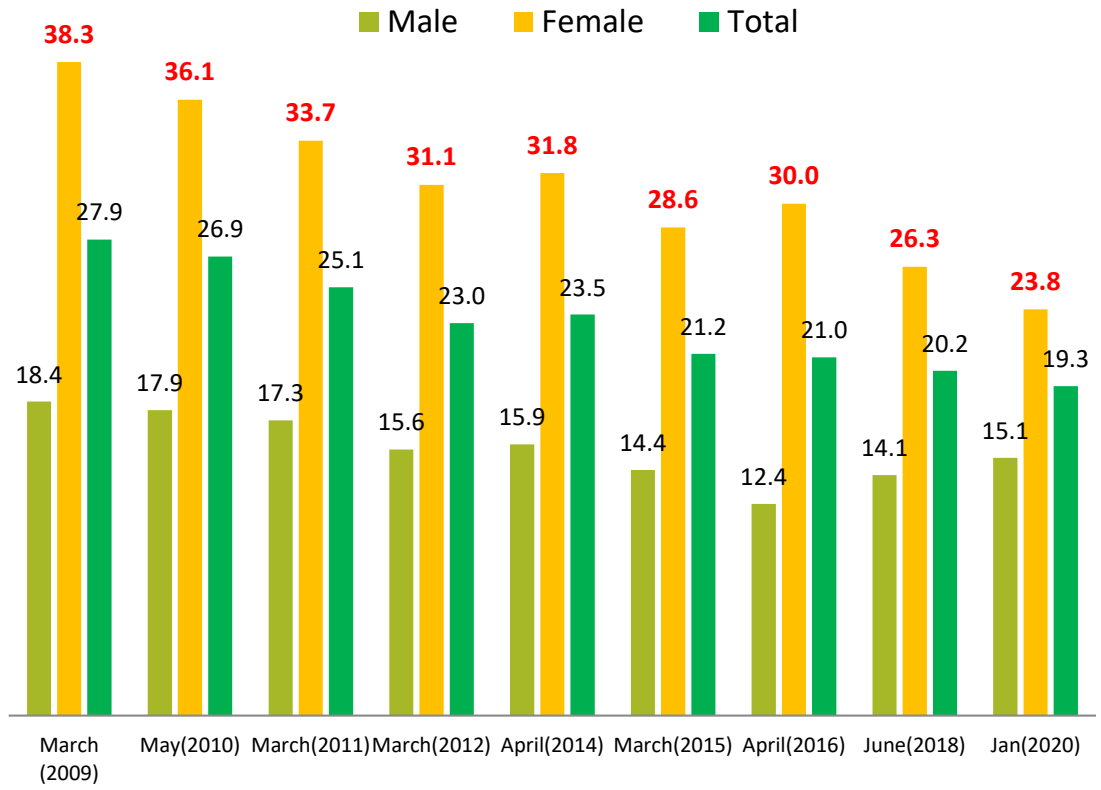


Source: World Bank (2017b)

Addis Ababa:
Growth also comes with challenges

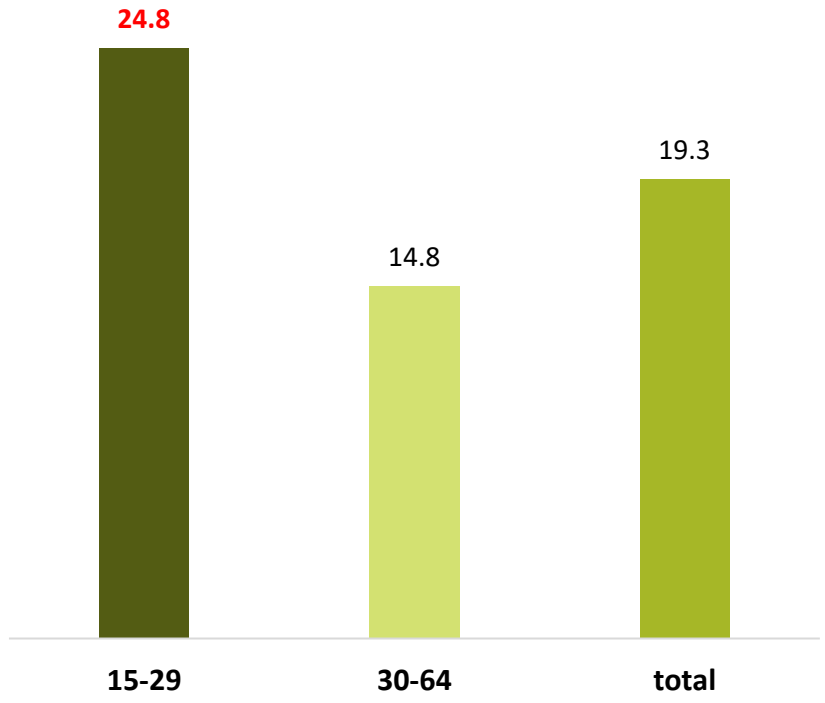
Youth and female unemployment rates are still high

Addis Ababa unemployment rate (%)



Source: CSA (2009, 2010, 2011, 2012b, 2014, 2015, 2016a, 2018, 2020)

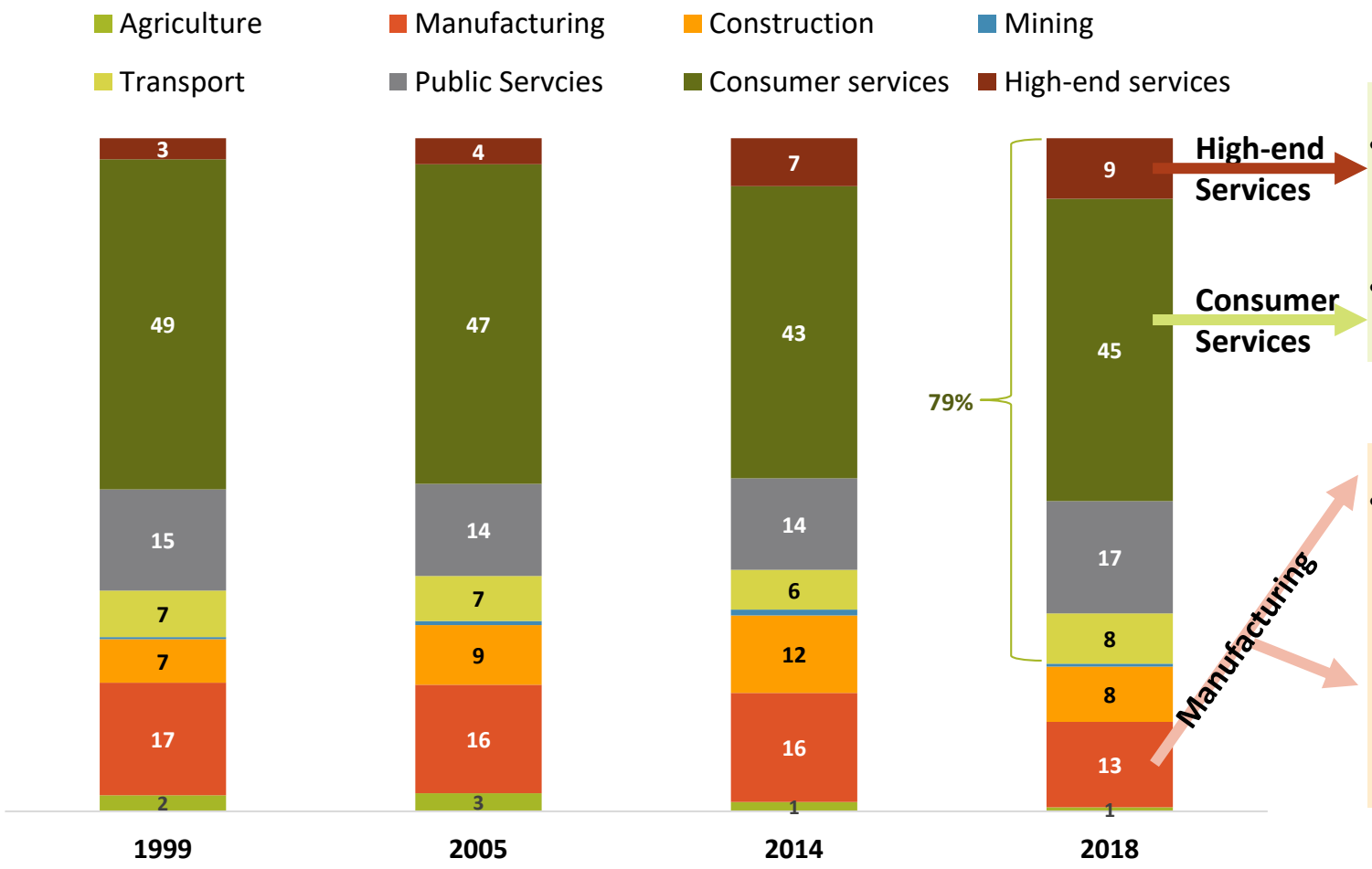
Unemployment rate in Addis, 2020 (youth vs adult)



Source: CSA 2020

Economic transition is slow to the next stages of job creation: Towards high-value-added services and manufacturing

Addis Ababa employment share by sector (1999-2018)



Source: CSA (1999, 2006a, 2014, 2018)

Services: Major employer, 79% in 2018

- Employment in high-value-added services increasing 3% in 1999 → 9% in 2018
- Still high employment share (20%) in wholesale and retail trade

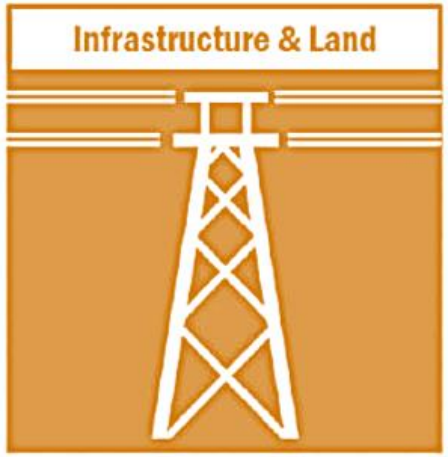
Manufacturing: 13 % in 2018

- Employment in Addis's specialized medium-value-added manufacturing subsectors are decreasing (moving to outside Addis)
- Not ready for high-value-added manufacturing: Still nascent 0.16% of the Addis labor force in 2018

Source: World Bank (2018)

Economic transition is slow to the next stages of job creation: Barriers to enabling business environment for firms

- **168 out of 190** countries in the area of starting business
- **Too many, over specified business licenses** requiring multiple licenses for closely related activities
- **Costly process**: 57.8 of GNI per capita for business start-up



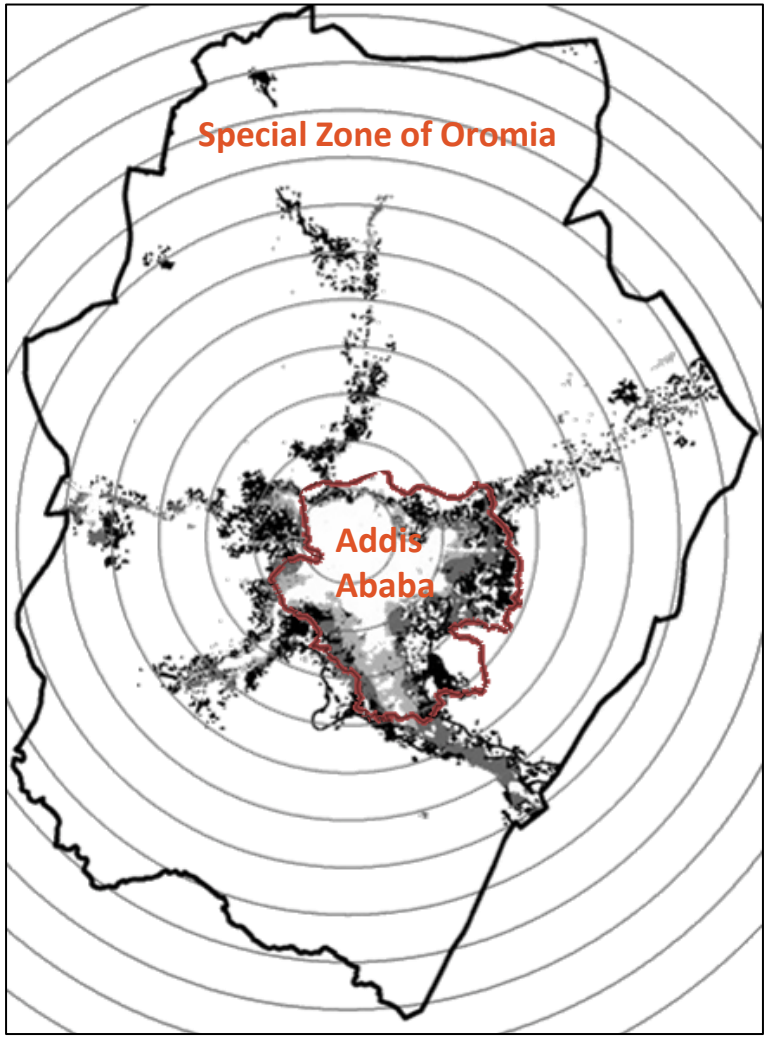
- **Lack of formal land supply**
- **Low reliability of land administration system**
- **Frequent power outage:** In average, 8.2 times in a month in 2015

- **Low availability of credit**: only 3% of small business and 23% of medium businesses
- **Short-term loans and long and delayed process of loan approval**

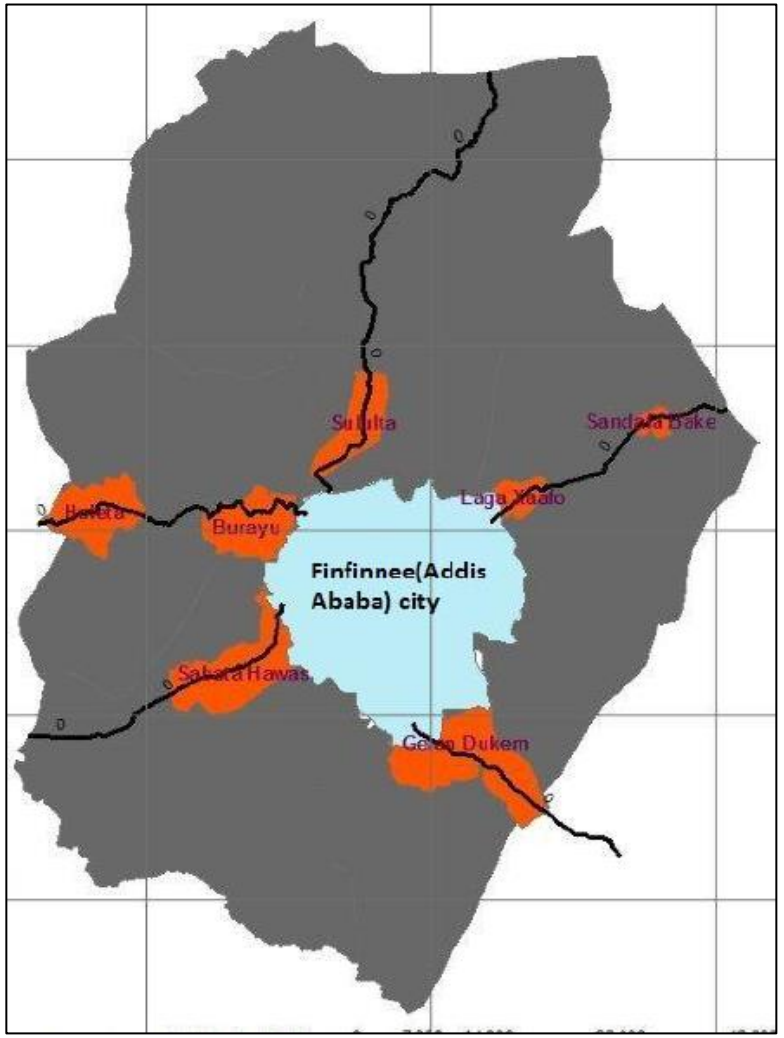
Note: the data mentioned is representing Ethiopia, not necessarily specific to Addis Ababa;
Source: World Bank (2015c, 2019a, 2019b); Figures: World Bank (2015b, pp.9-10)

Lack of coordination between administrations misses opportunities for synergistic growth for Addis Ababa and neighboring towns

- 5 towns sharing the administrative border with Addis Ababa have expanded towards Addis Ababa, along the main road
- Pulling factor: advantage of access to trained labor, infrastructure, and financial services (proximity to Addis Ababa), government policies, lower land price
- **Need of fostering dynamic and synergistic relationship between Addis and neighboring towns**



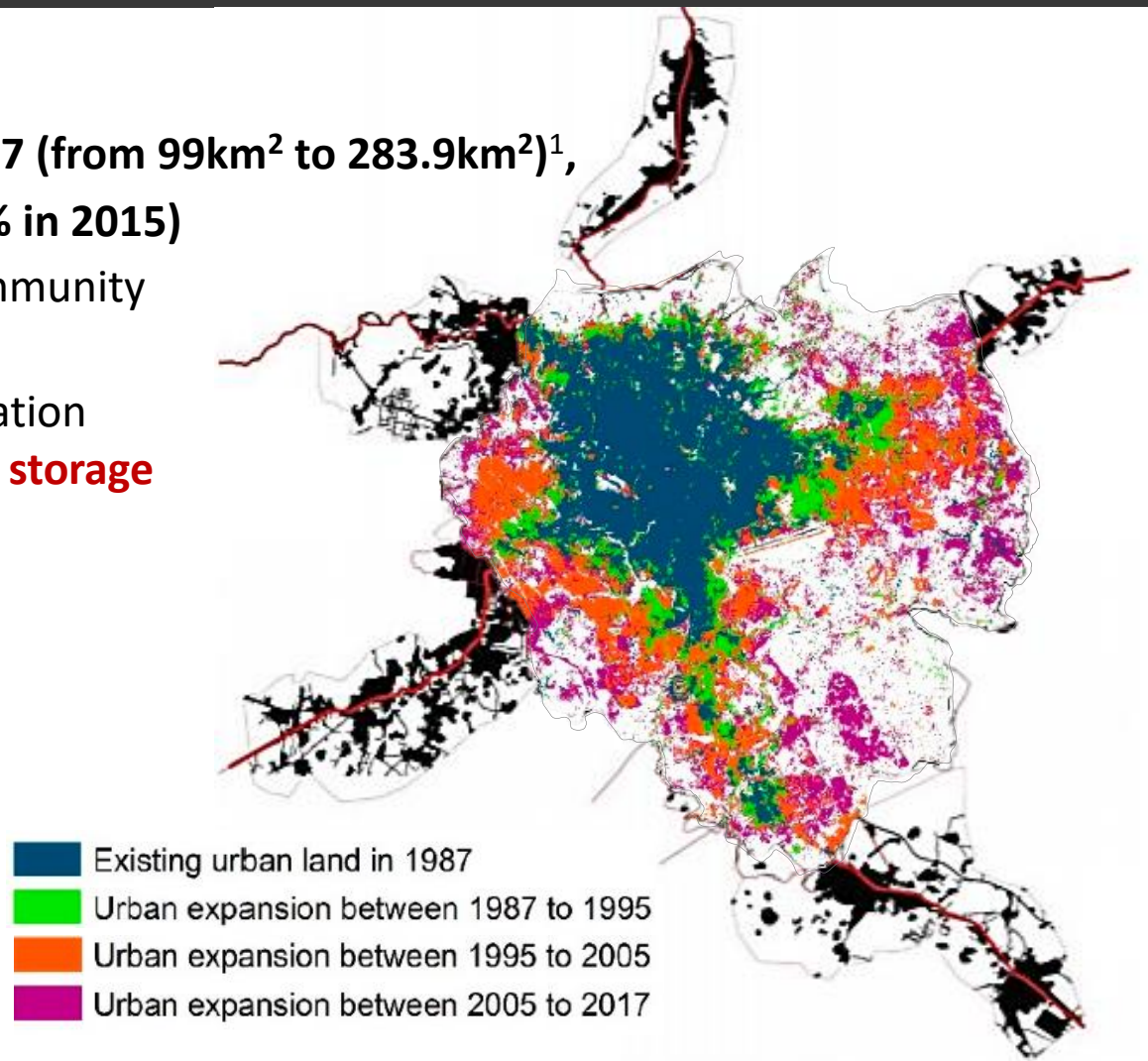
Source: Mohamed & Worku (2019)



Source: Tabor (2019)

Addis is growing; Built-up areas increase faster than the population growth and the land use patterns are changing

- **Three-fold increment in urban land between 1987 and 2017 (from 99km^2 to 283.9km^2)[1], corresponding reduction of forest (from 21% in 1986 to 5% in 2015)**
- **In central 4 sub-cities:** Land for residential housing and community services converted to **retail and business operation**
- **In surrounding 6 sub-cities:** Land for agricultural and vegetation areas converted to **residential housing, manufacturing and storage**



Note: 1. Population in Addis has increased from 1.42 million in 1984 to 3,75 million in 2018 (2.6 times). The density (people/built-up area km2) has decreased from 17,000 in 1987 to 13,000 in 2017, calculated using the estimated population figures. For estimated population figures, see slide #11. Source: Overlapping the maps from the World Bank (2015a) and Terfa, Chen, Liu, Zhang, & Niyogi (2019)

Addis Ababa is expanding: Services are not keeping pace with the growing needs

Electricity

- **Frequent power outage**: In average, 8.2 times in a month, 4.6 % annual sales losses due to outages in 2014
- Aging electricity network
- Need for urgent maintenance and expansion to keep up with the current load
- 614 MW demand in 2014 (42% of the country's interconnected system peak load)
- System loss: 20 - 22.7% in 2014

Water supply

- **Water insecurity**: Produced 486,000 m^3/day (**Not meeting the need** of 972,000m^3/day)
- **Unreliable services**: only 21 out of 116 woredas in Addis access to water every day
- **Power instability affect the amount of water production**
- High non-revenue water (NRW): 39.4% primarily due to technical loss
- Low cost recovery ratio: 0.93 (below O&M cost)

Sewerage & Sanitation

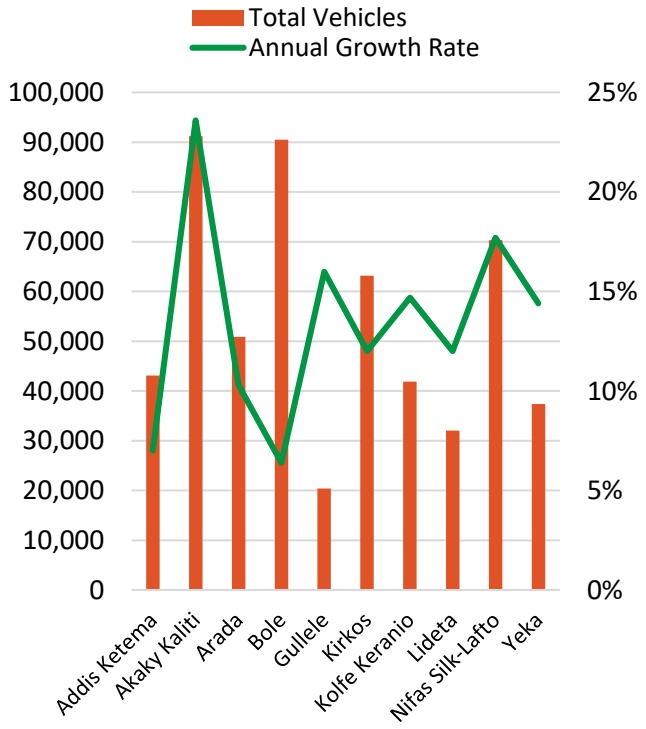
- **Lowest coverage**: 29%sewerage connection coverage → Limited resources for investment
- Recently upgraded 26 wastewater treatment facilities – **Not meeting the 2020 demand estimate**
- Sludge collection 18%
- Not implementing wastewater tariff (a one-time connection fee & sludge emptying charge)
- Resulted in high water contamination

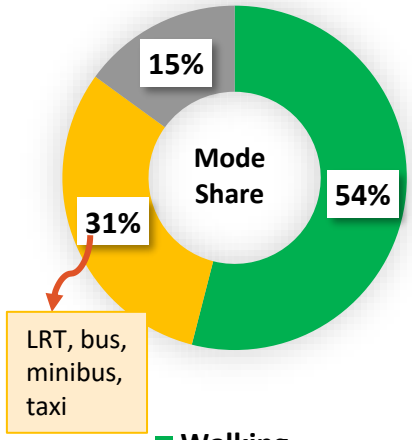
Solid Waste Collection

- **Limited services**: 80% collection rate (lack of reliable data)
- Uncollected and dumped wastes in unauthorized areas such as ditches, sewers, and streets contribute **to pollution, flood and health risks**
- Fee collection: through water bill (USD 0.33 –0.56 for bi-weekly collection in 2012)
- **Weak implementation capacity and cross-city coordination**

Addis Ababa is expanding;
Mobility is limited, 54% walk to work

Total vehicles and annual growth rate in 10 sub-cities



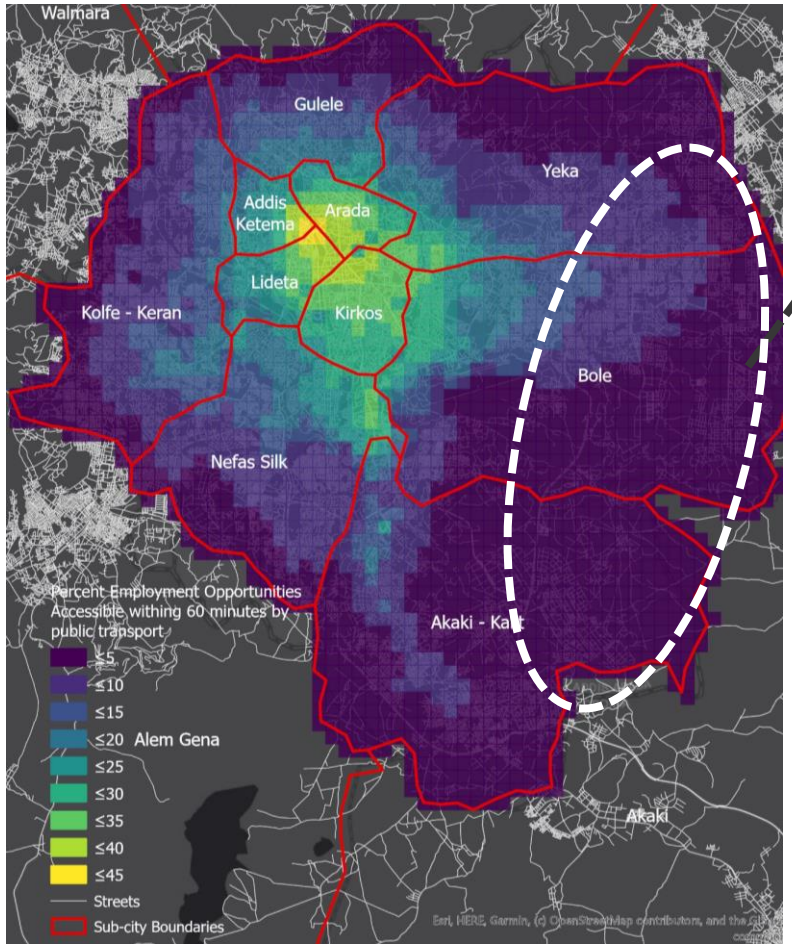


- **Urban roads disproportionately clustered near the CBD**
- **Lack of land allocated to roads:** In 2016, 8% in central sub-cities, 4% in surrounding sub-cities
- **Serious shortage of intermediate roads**

Limited connectivity & access to jobs

- **Increasing registered vehicles**
- **High traffic congestion:** Due to spatial mismatches between jobs & housing, lack of regulation, enforcement and parking supply and inadequate traffic management system
- **Public transportation: need of expanding the mass transit system and TOD**
- **Lack of pedestrian roads:** only 12% roads with pedestrian path; 53% of city core without any pedestrian facilities

Addis Ababa is expanding; High traffic congestion, low urban mobility and accessibility



- **Transit services** operate at **low speeds and frequencies**
- **New, densely populated areas in the East** have the **poorest accessibility**

Transport Accessibility KPI	
Public transport - average % of all jobs accessible 60 mins – Peak/Off-peak	**17.1% /15.2%**
Walking only – average % of all jobs accessible, 60 mins	**14.9%**
Driving – average % of all jobs accessible, 60 mins	**89.6%**
CBD Access –% of city population within 60 minutes travel via public transport	**49%**

Pedestrian share of Road Fatalities

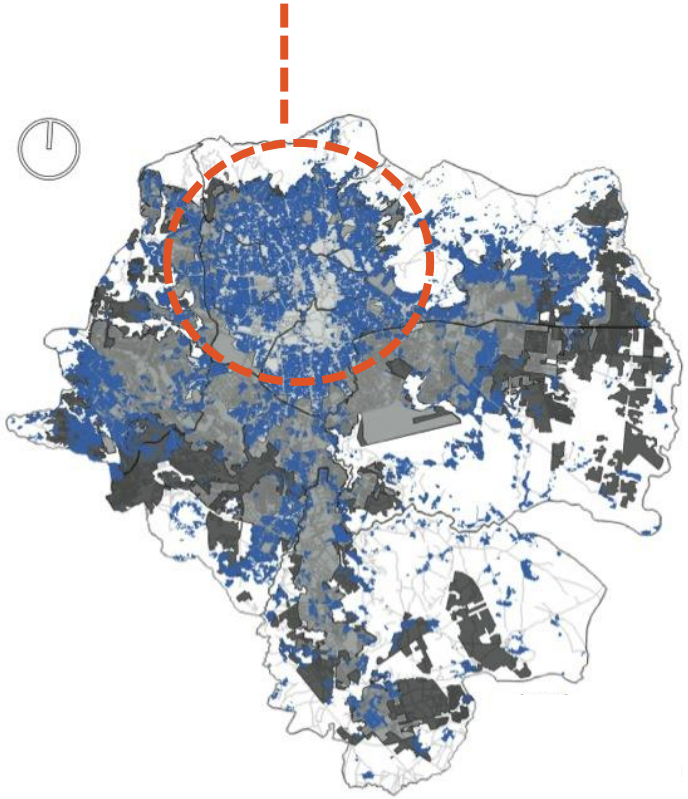
	Road fatality rate by population	Road fatality rate by vehicle	Pedestrian share on road fatalities
World	18.2· deaths/100,000 people	64· deaths/100,000 vehicles	23%·
AFRICA	26.6· deaths/100,000 people	574· deaths/100,000 vehicles	40%·
Ethiopia	26.7·· deaths/100,000 people	429·· deaths/100,000 vehicles	55%·
Addis Ababa	14.7·· deaths/100,000 people	88·· deaths/100,000 vehicles	76%··

*WHO ** TRANSIP

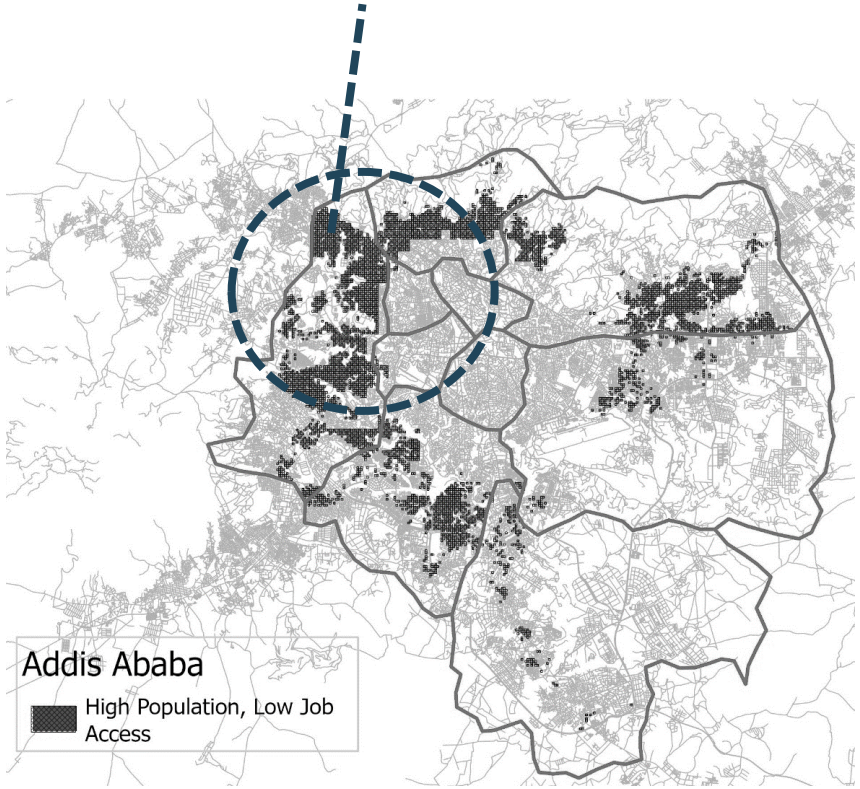
Source: WHO, AACATB, WB Transport Accessibility Study conducted as part of the ASA by the Transport sector after 1st phase diagnostics
Notes: Walking accessibility assumed a walking speed of 5kmph. At 3kmph which is typical in urban setting, walking accessibility would be lowered to 10-11%. Driving is assumed at 20kmph

Addis Ababa is expanding: Low livability with dysconnectivity, inaccessibility and low quality housing

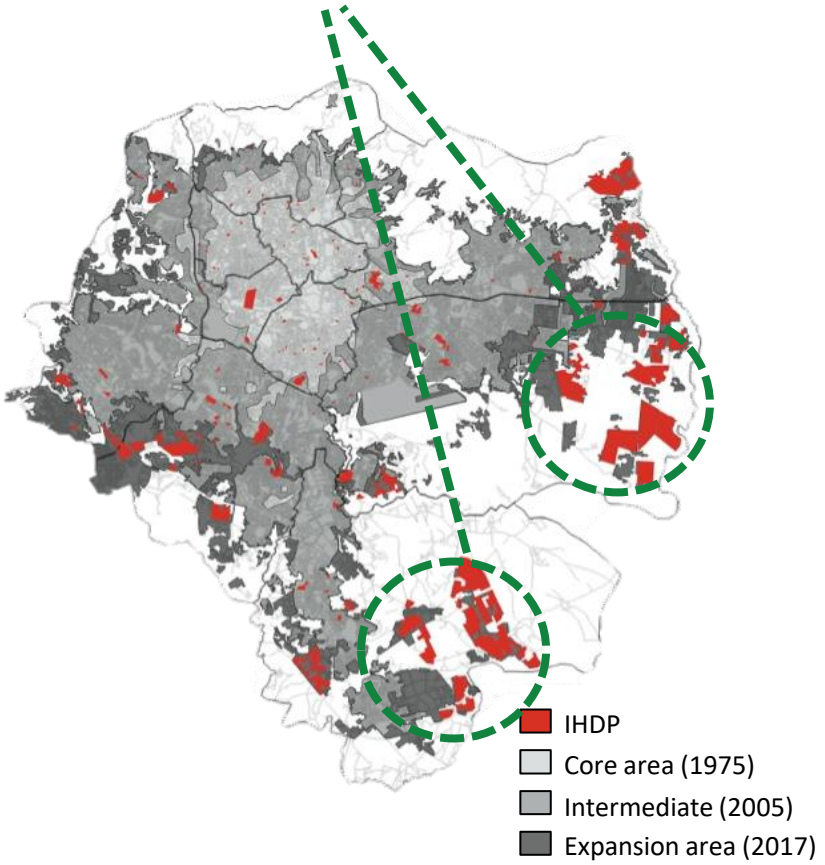
Informal settlements, often trade-off housing quality for access to job



Crowded neighborhoods near CBD without adequate transportation system



IHDPs in recent expansion areas on the edge of the city have limited connectivity and services



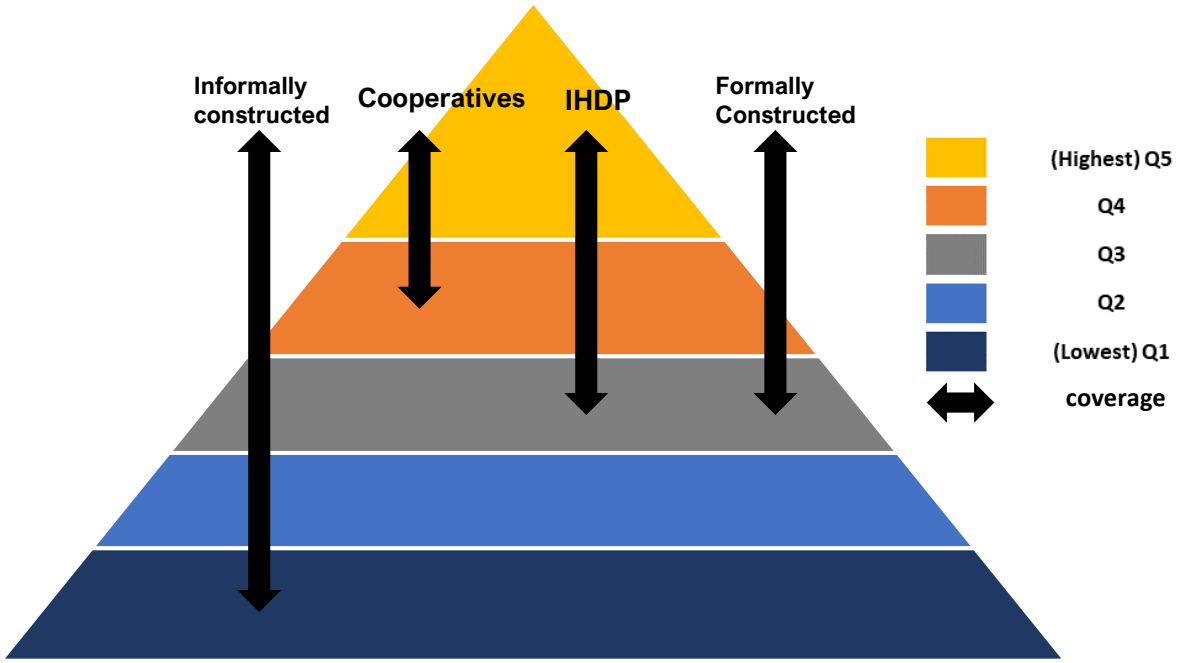
Source: (Left/Right) Spatial urban land supply annex to the World Bank (2019d); (Middle) WB Transport Accessibility Study conducted as part of the ASA by the Transport sector after 1st phase diagnostics

Addis Ababa is expanding:
Housing has serious supply, quality, affordability, service gaps

- **Supply**[1]**:**
  - ✓ **Government**: supply of formal housing through IHDP (207,000 units during 2004-2019), unable to meet demands
  - ✓ **Private sector supply**: limited to high-end market
  - ✓ **Self-built and informally built housing** still dominates the housing stock
  - ✓ The **rental housing market** is large, with many secondary dwellings or extensions on existing plots filling the supply gap
- **Quality**:
  - ✓ The majority of new housing units in Addis are low-quality rentals
  - ✓ 78% of housing stocks are built with not durable materials
- **Affordability**:
  - ✓ Formal market is unaffordable for the bottom 40%
- **Services**:
  - ✓ The majority of IHDP are not connected nor serviced
  - ✓ Inadequate infra and services in informal housing

[1] *No data available for the supply of housing*

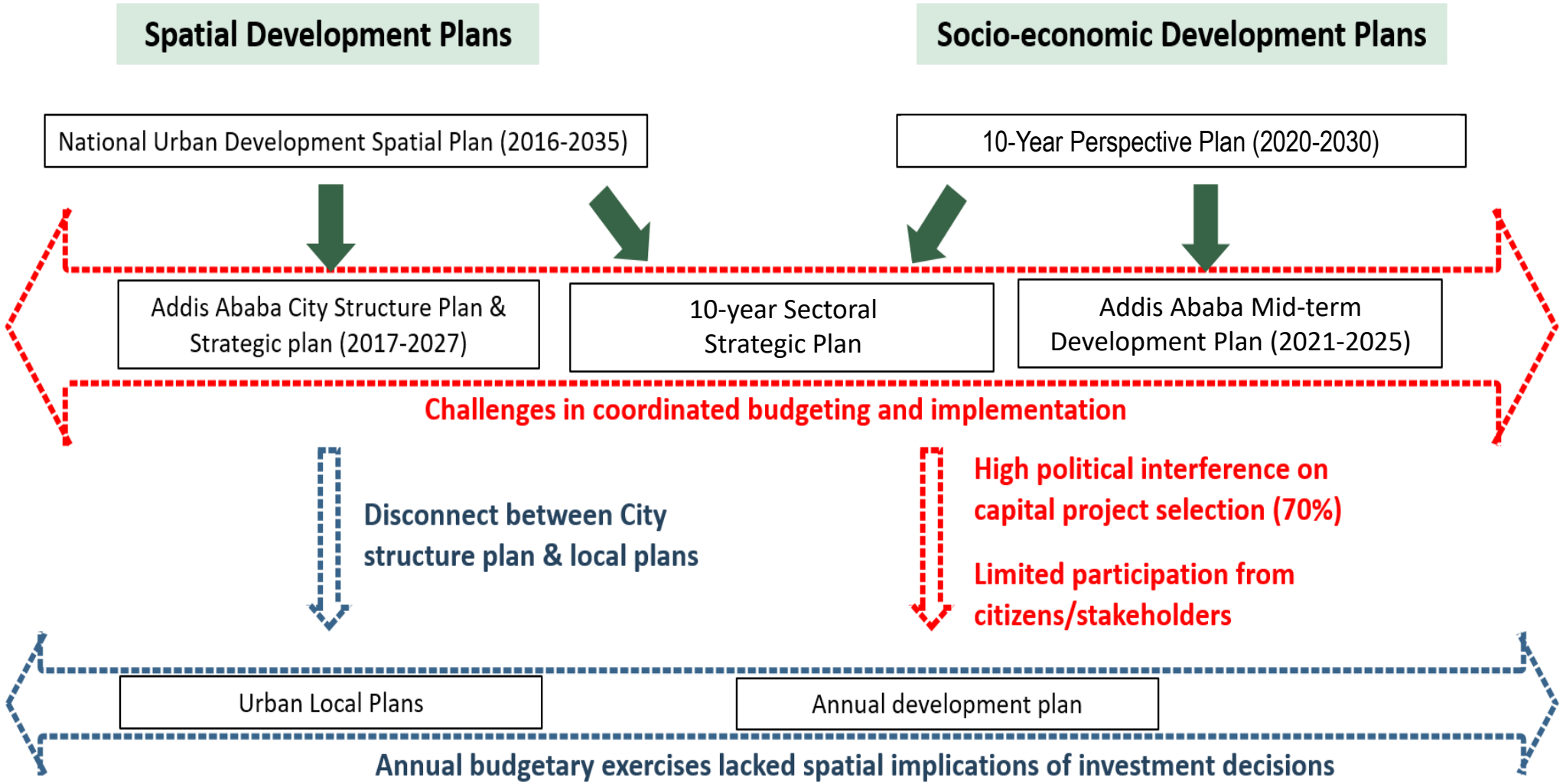
Housing Typology by household consumption quintile (Illustrative)



*Size of each pyramid section represents an equal proportion of households
**Arrows extend to the point where the proportion of households by housing typology per quintile exceeds 15%

Source: World Bank (2019d)

Government development efforts are ongoing with strategic plans, but coordinated implementation is a challenge



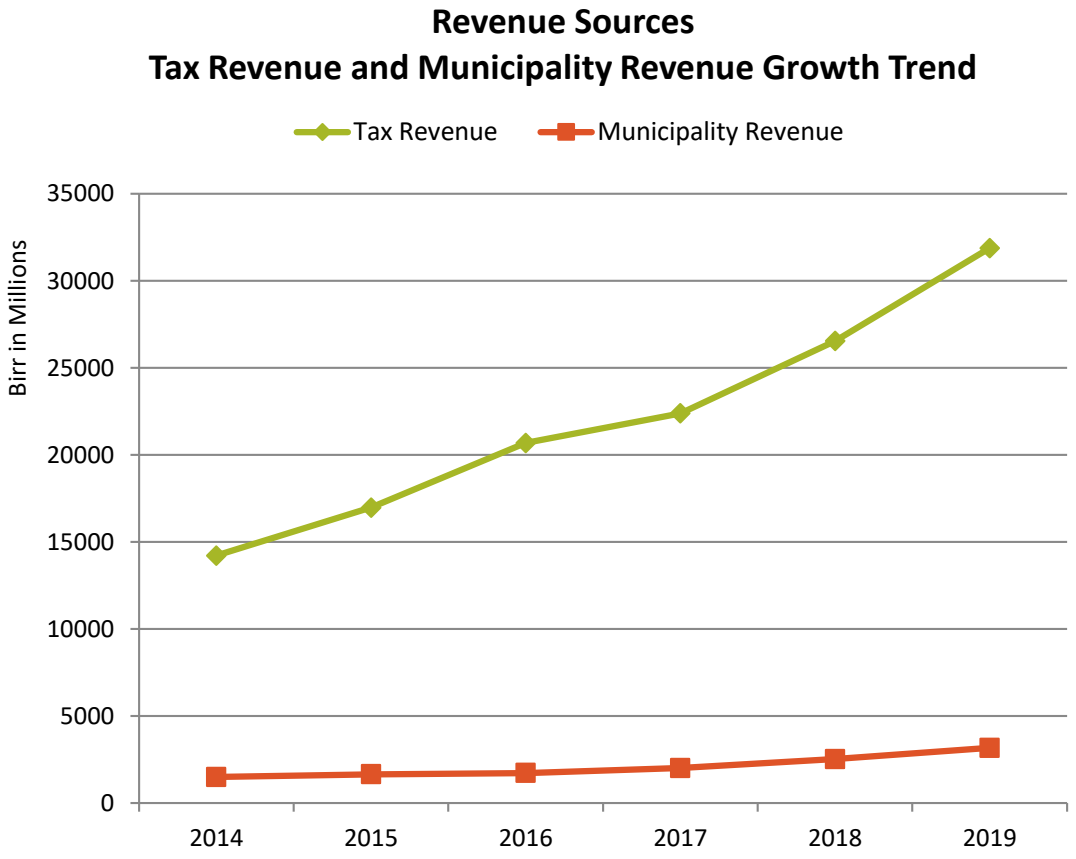
More challenges in coordination and resource management also inhibit the performance of city government

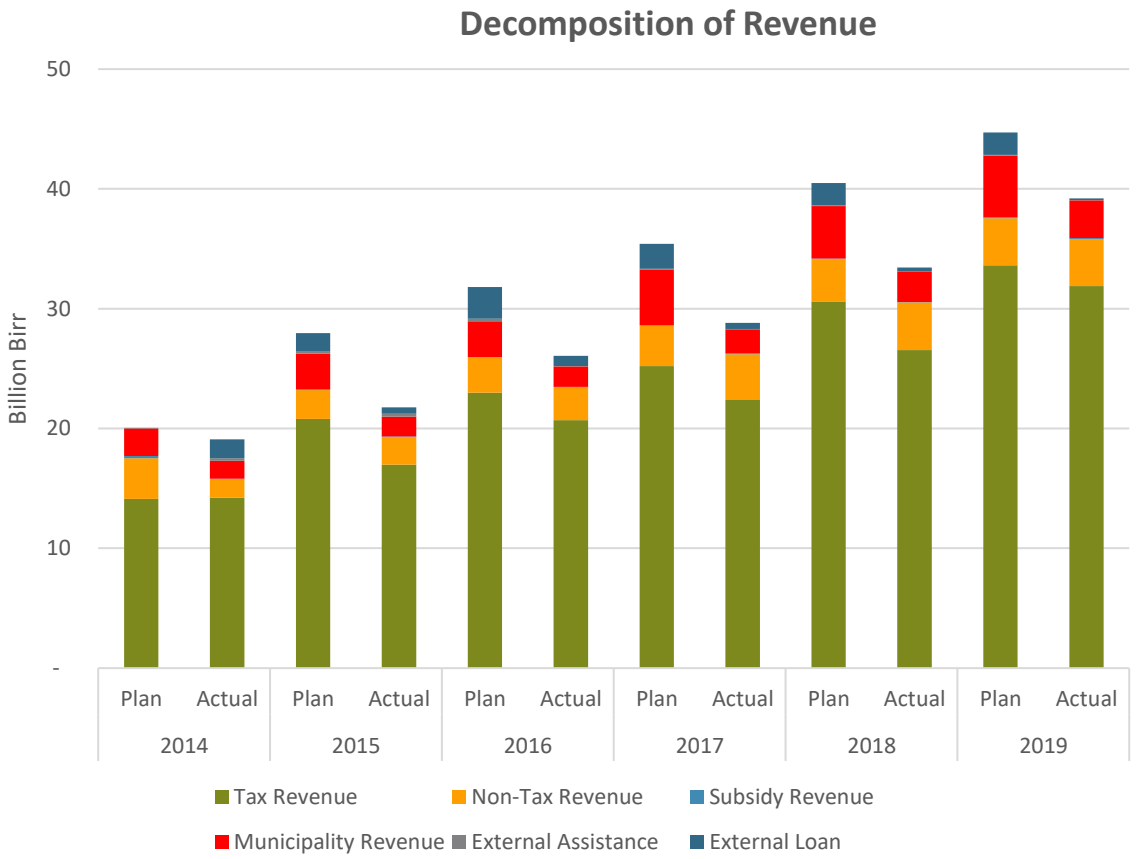
- **Need of separation of government branches**: Lack of decision making structures and mandates that separate the corporate and political body of the City Government; and lack of check and balances for oversight and holding the executive branch accountable
- **Lack of vertical coordination among different levels of government:** Lack of coordination between Federal entities and the City Government; and lack of coordination among the centre, sub-city and Woreda level administrations
- **Lack of horizontal coordination among different sectors**: Lack of coordination between (sectoral and spatial) planning entities; lack of coordination between planning and implementing entities; and lack of coordination among infrastructure/utility agencies
- **Deficit of Institutional memory and inefficiency:** Lack of institutional memory through high turnover of managerial manpower and professionals; predominantly manual or/and paper-based records system; lack of coordination of spatial and non-spatial data; lack of modern equipment
- **Resource base:** Lack of appropriate tax policy, structure, collection and administration; and lack of modern and integrated tax information system
- **Data management and supporting ICT capacity**: non-existent of integrated information management system; lack of ICT equipment and technical capacity
- **Stakeholder involvement:** Lack of sustainable public participation with regards to project planning and implementation; lack of trust and relational ties with stakeholders, hence loss of potential development partners

Source: Addis-Ababa City Planning Project Office (AACPPO) (2017)

City's revenue increase is largely driven by tax revenue while municipality revenue base and rates are too low

- **Performance of municipality revenue collection is low at 43-58%**
- **The share of municipality revenue remains at 8% while tax revenue contribution increased from 74% to 81% of total revenue**



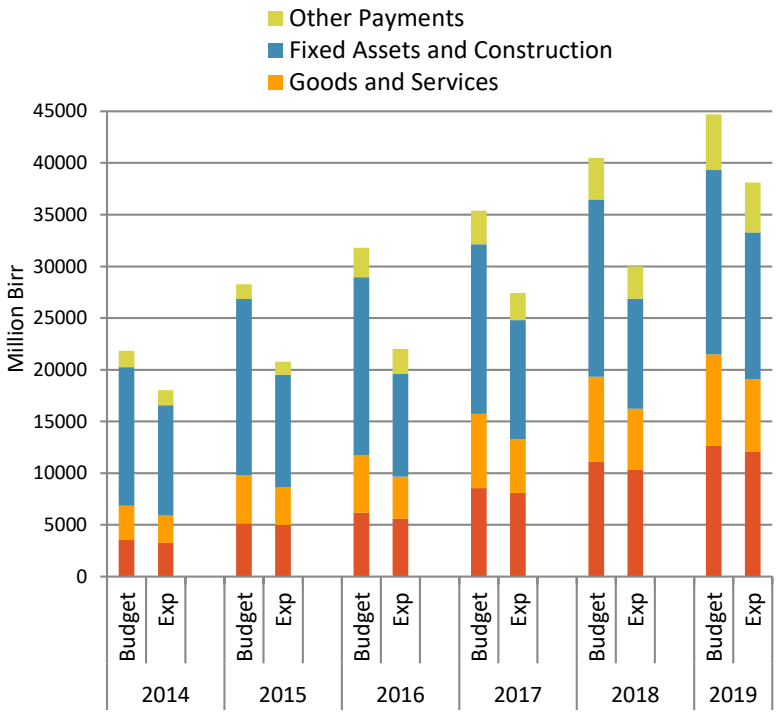


Source: Addis Ababa City Administration

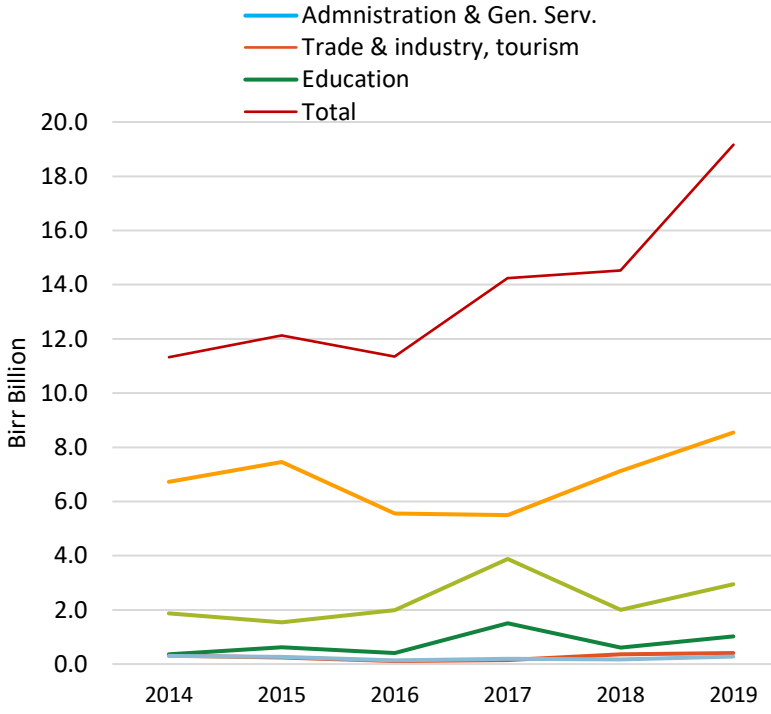
City's expenditure has equally increased, but budgets are not strategically allocated, underutilized and subject to significant variations

- **69-78% actual expenditure outturn** against budget due to delays in procurement, implementation capacity, and shortage of foreign currency
- Large **variations** in expenditure composition at **17-30%** indicating an inability to spend resources according to plans
- **Increasing recurrent expenditure**, faster than the capital expenditure
- Key capital expenditure (60%): Construction, transport and water

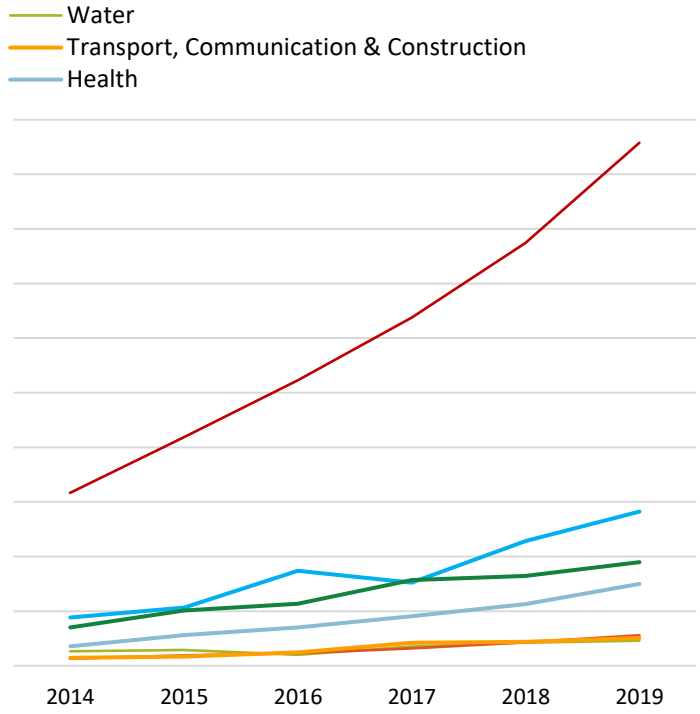
Expenditure Trend



Capital Expenditure



Recurrent Expenditure



Source: Addis Ababa City Administration

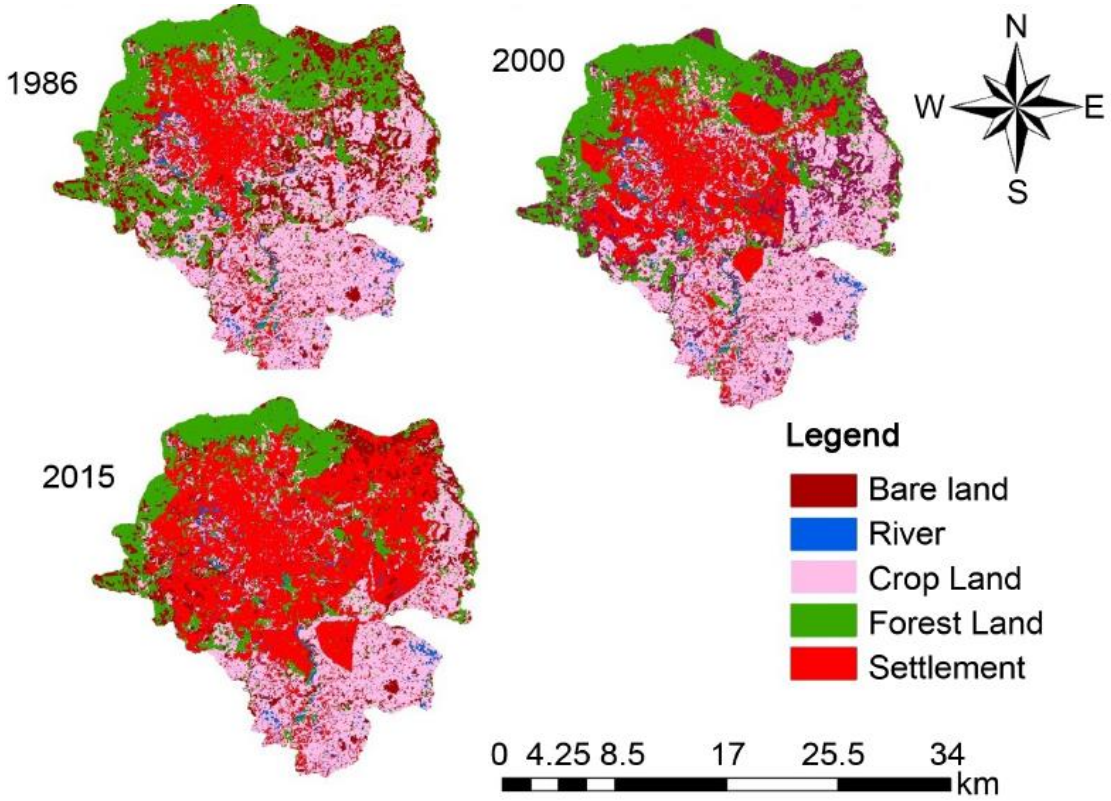
Much more public and private investment is needed to close the infrastructure, service and housing gaps

- Development needs under the structure plan amount to 881 billion birr for 10 years with the following financing options:
  - ✓ Federal: 49 Billion birr (6%)
  - ✓ City: 453 Billion birr (51%) – **Average 45 Billion birr per annum**, relying heavily on external assistance and local loan
  - ✓ Private Sector: 379 Billion birr (43%)
- Capital expenditure amounts to **15.5 Billion birr** in 2018, representing 9% of the city's GDP. While higher than other Ethiopian cities, it's far from meeting the city's development needs
- Own source municipality revenue represents only 1.5% of the city's GDP. This strengthens the argument that the city needs to strengthen its own municipality revenue generation and engagement of private sectors for municipal services.

Indicators	2016	2017	2018
	%of GDP	%of GDP	%of GDP
Total Revenue	18.49	18.35	20.30
Domestic Revenue	17.86	18.01	20.07
Municipal Revenue	1.22	1.29	1.53
Grant from Road fund	0.03	0.04	0.01
External Grants	0.02	0.01	0.01
External Loans	0.60	0.33	0.22
Total Expenditure	15.46	17.19	18.22
Recurrent Expenditure	7.42	8.12	9.40
Capital Expenditure	8.04	9.07	8.81
Aggregate Surplus (Inc. Grants)	3.03	1.16	2.08
GDP (ETB billion)	141.01	157.03	164.77

Source: Addis Ababa City Administration

Addis Ababa is expanding:
Green space has decreased, disaster risk increased



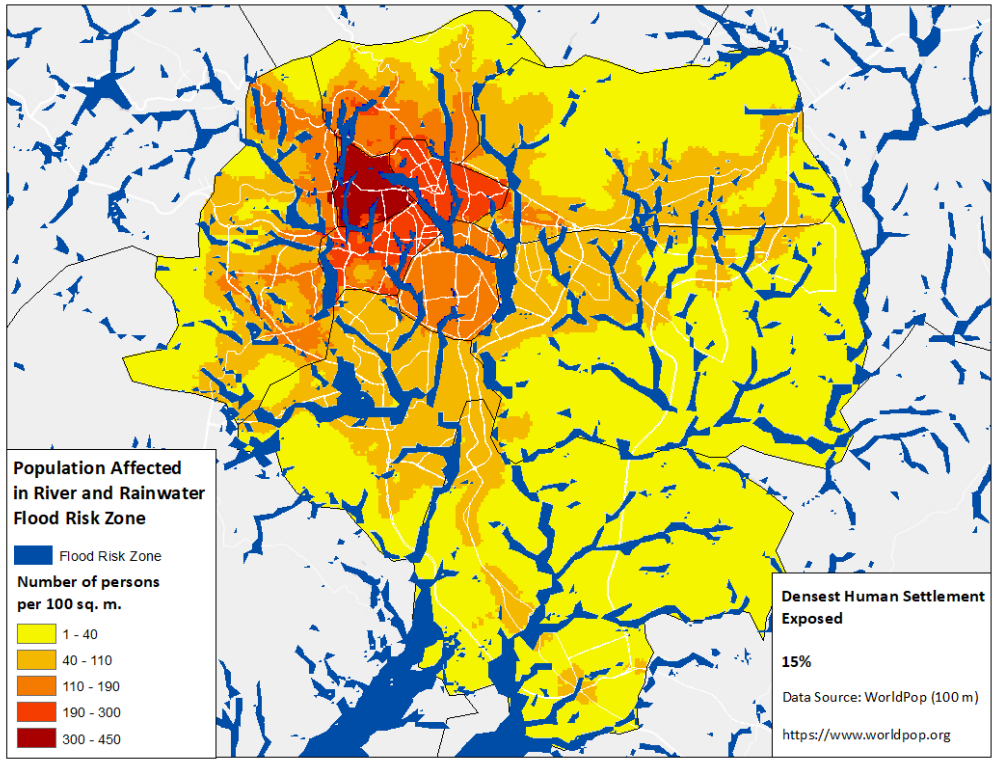
Source: Roza Assaye et al.(2017)

- Forest change 21% in 1986 → 5% in 2015[1]
- Lacked green spaces: 00.4 – 0.9 m^2/capita (WHO recommended minimum: 9m^2/capita)[2]

[1] Assaye, Suryabhagavan, Balakrishnan, & Hameed (2017) 2. UN Habitat (2017)

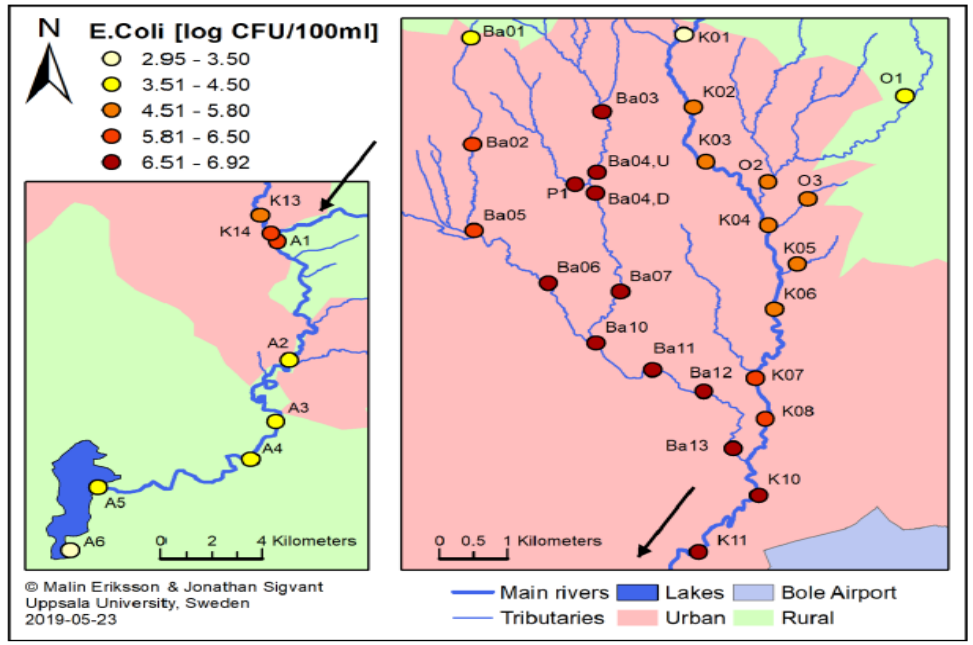
Climate Change increases risks in urban flash flooding and landslides

- Localized flash flooding frequently occurs due to inadequate drainage, poor road design, inappropriate SWM, encroachment
- Disappearance of green space is estimated to be responsible for 40% of the flooding and landslides in the city [2]

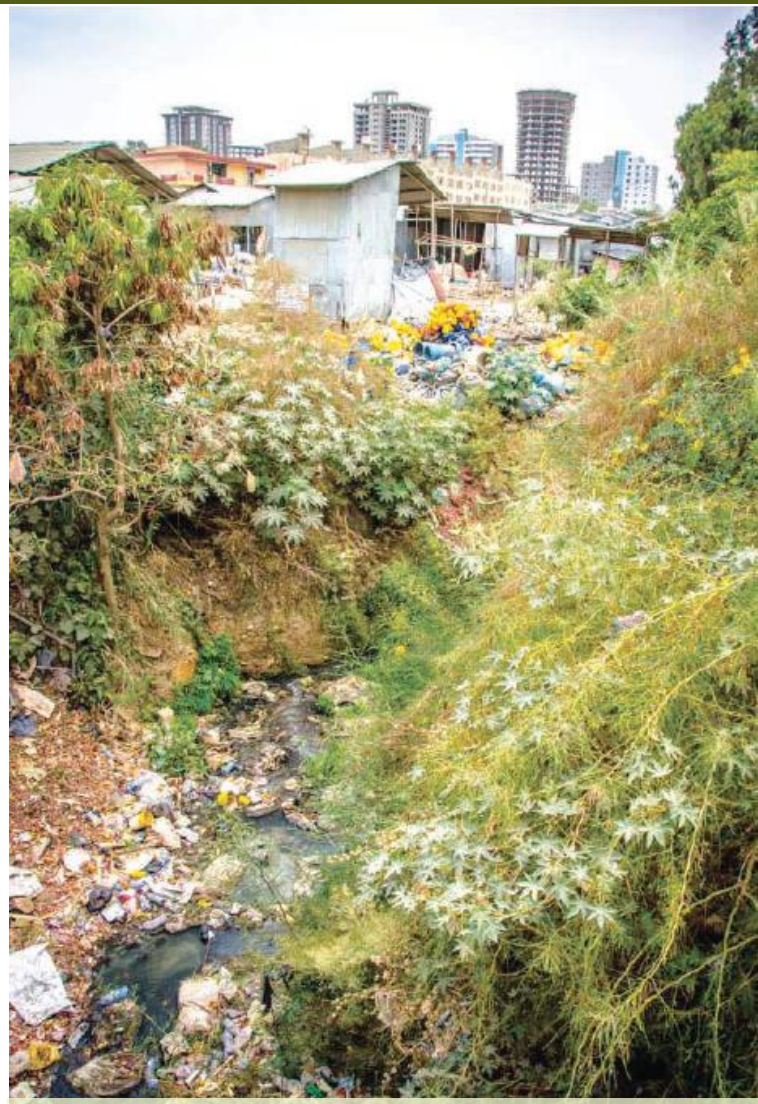


Water pollution poses risks to sustainability of the city environment

- **High surface water contamination** in both Kebena and Akaki river, throughout the city, **mostly from domestic, municipality and industrial wastewater and solid waste** – due to the lack of sewerage and sludge collection and treatment
- Rivers in Addis Ababa are simply used as a **receptacle of all kinds of solid and liquid wastes**
- **Fecal contamination**. With only 29% of the city connected to the sewage system, human feces end up in the river - the average *E. coli* concentration found is about the same as the concentration found in wastewater before treatment
  (5.2 to 8.7 log10 CFU per 100 ml)



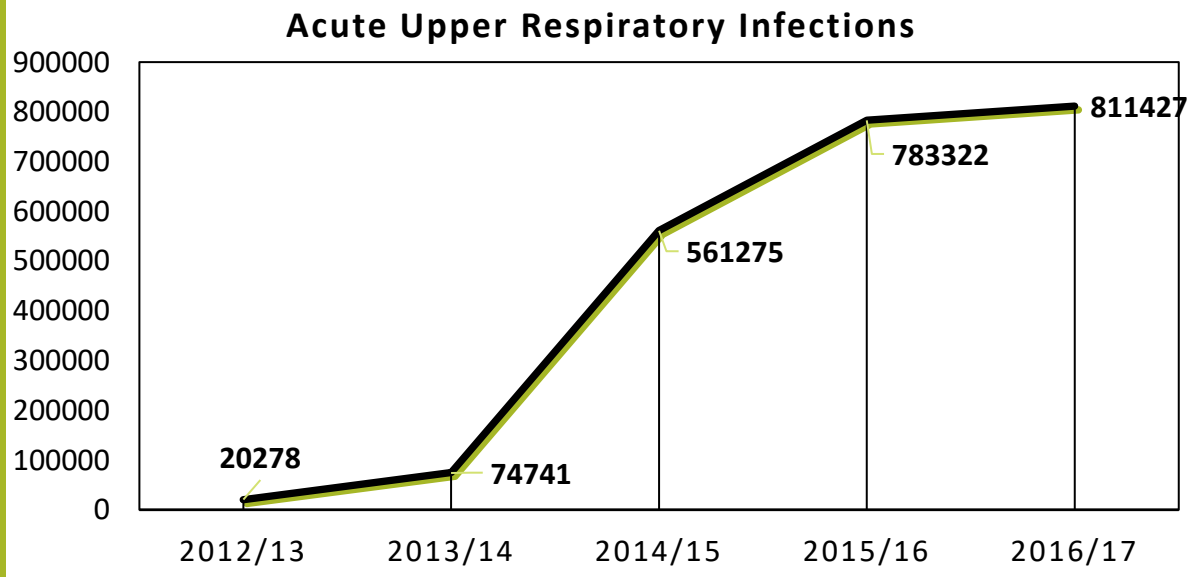
Note: E. coli concentration [log10 CFU per 100 ml] in water samples collected March to April 2019 in the Great Akaki, Kebena and Bantyketu rivers in the city of Addis Ababa, Ethiopia
Source: Eriksson & Sigvant (2019)



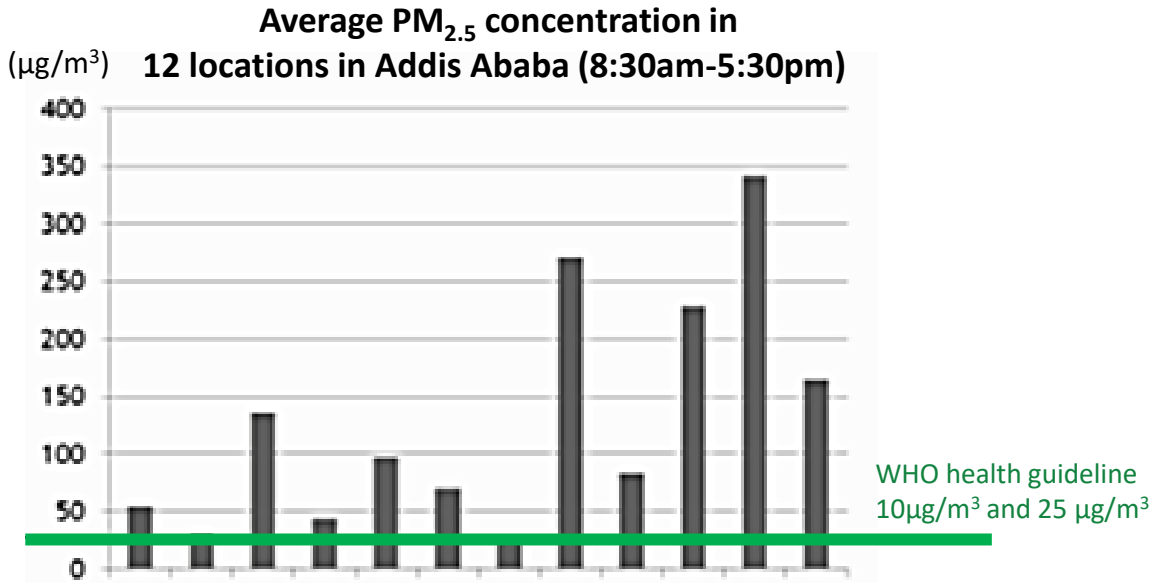
Source: World Bank (2017a)
(Photo Credit: Kathy Eales)

Air pollution is equally serious and affects public health

- Significant increases **in acute upper respiratory infections** between 2012-2018
- **Low density urban expansion increases the time for trips and the demand for private-vehicle commuting → contributing to air pollution**
- **Increase in private vehicles in Addis Ababa**: 310,180 in 2012 to 447,669 in 2016 (70% of the vehicles registered in Ethiopia)
- **Lax vehicle emission control, aging fleet, and traffic congestion** attribute to poor air quality
- Other pollution sources: indoor air pollution (cooking & heating), industrial pollution, open trash burning



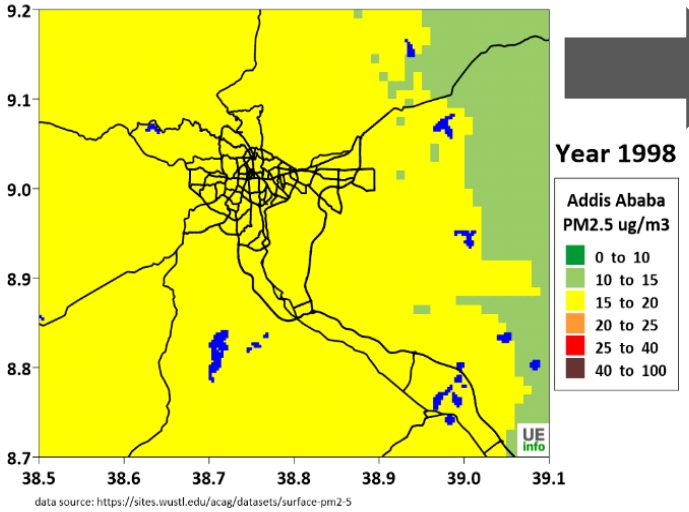
Source: Addis Ababa Health Bureau from 2012/13 -2017

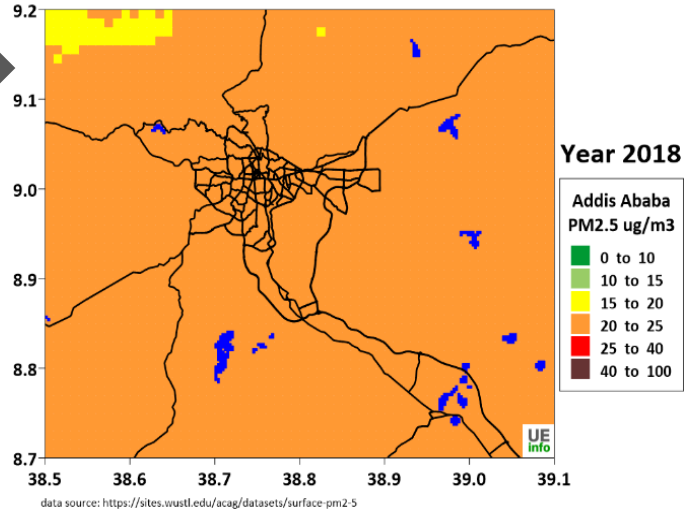


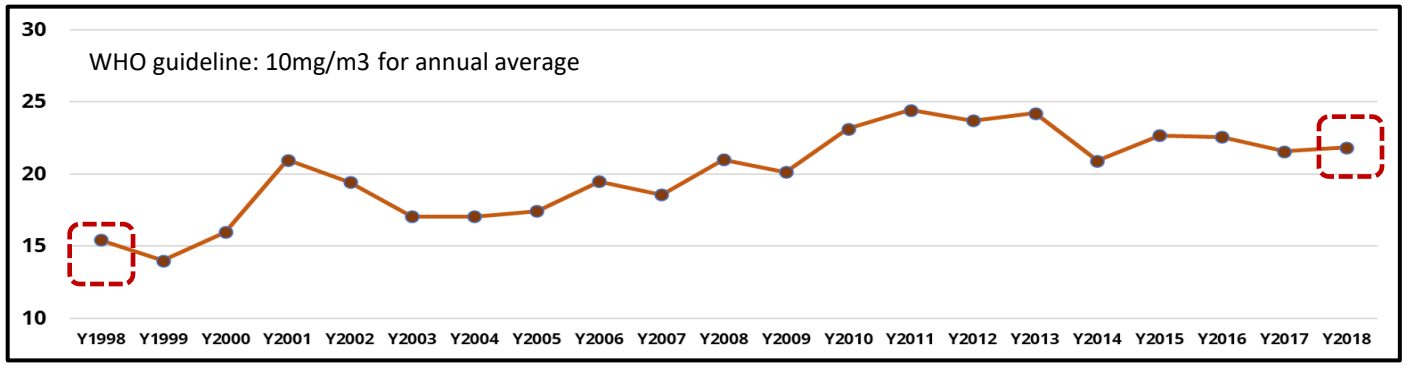
Source: Alemu (2012)

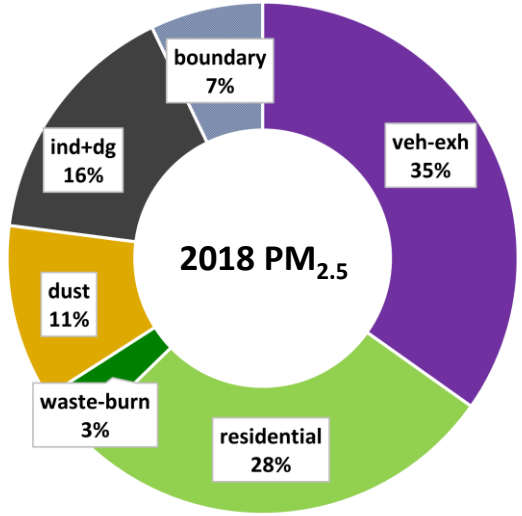
Worsening air pollution with increasing dusts, transport emissions and domestic fuel consumption and burning practices

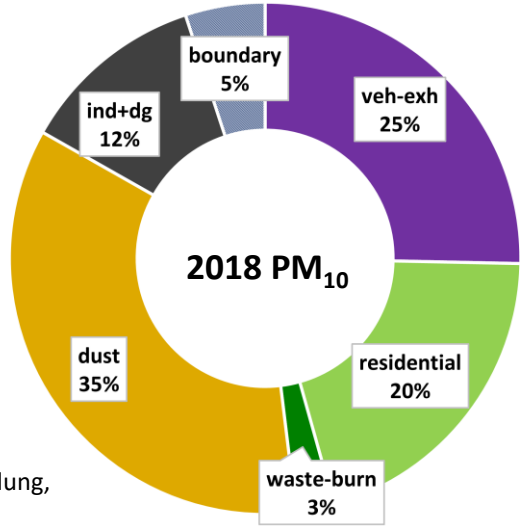
<$PM_{2.5}$ concentrations increased in the last 20 years>





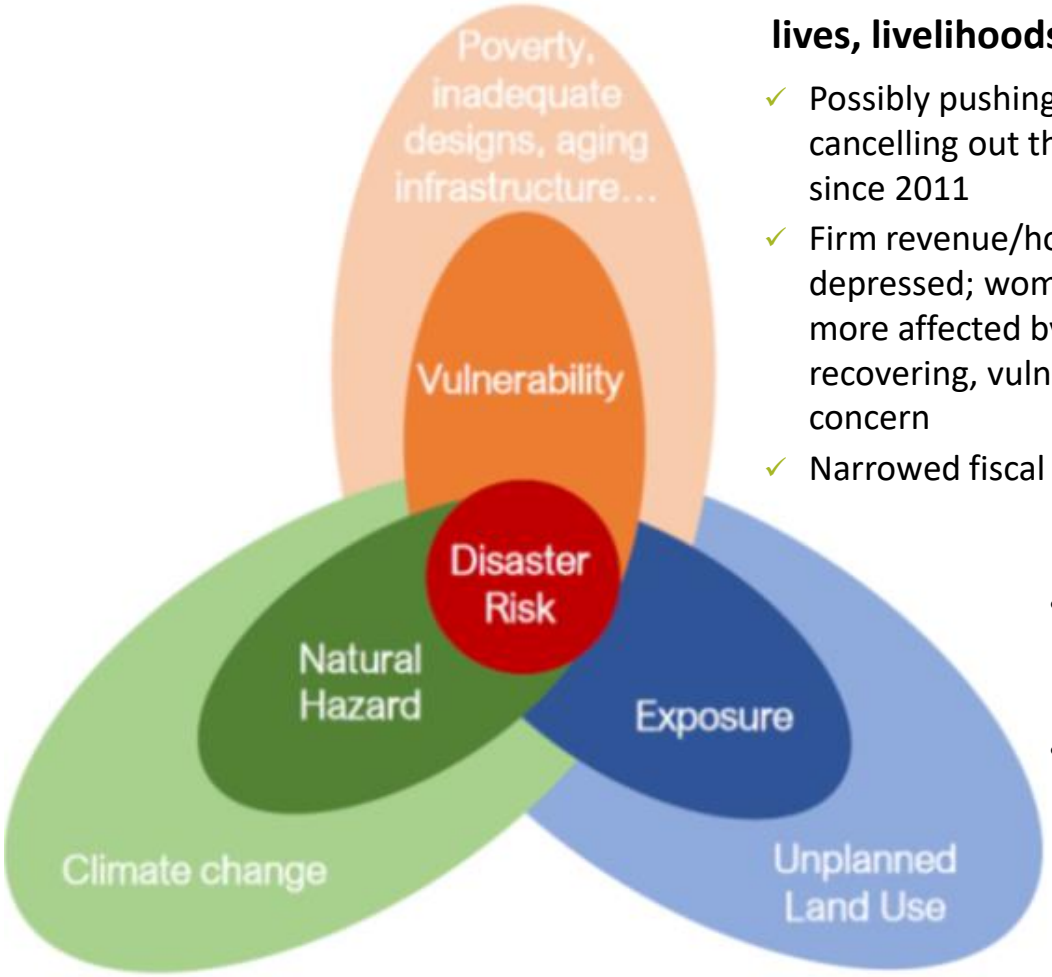




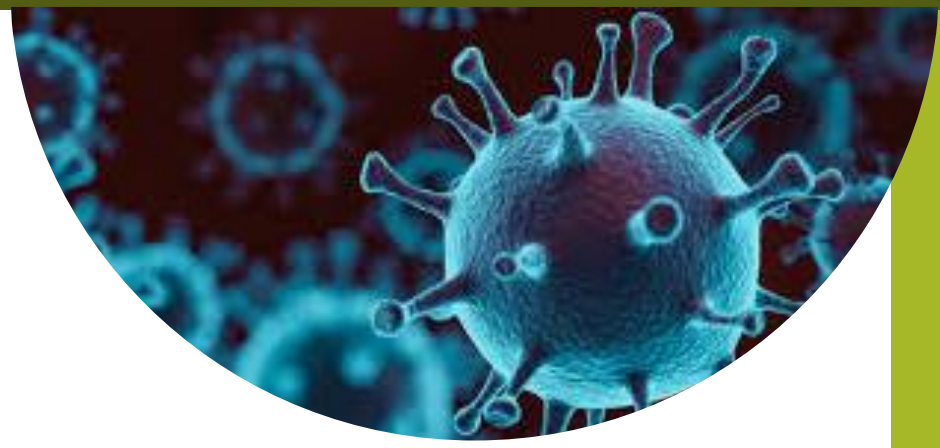


Source: Preliminary findings from Addis Air Quality Management ASA: $PM_{2.5}$ is considered the most relevant indicator for urban air quality. It can pass the barriers of the lung, enter the blood stream, and destroy the integrity of the blood-brain barrier, thus causing premature mortality respiratory, cardiovascular, and neurological diseases.
Veh-exh: vehicle exhausts.

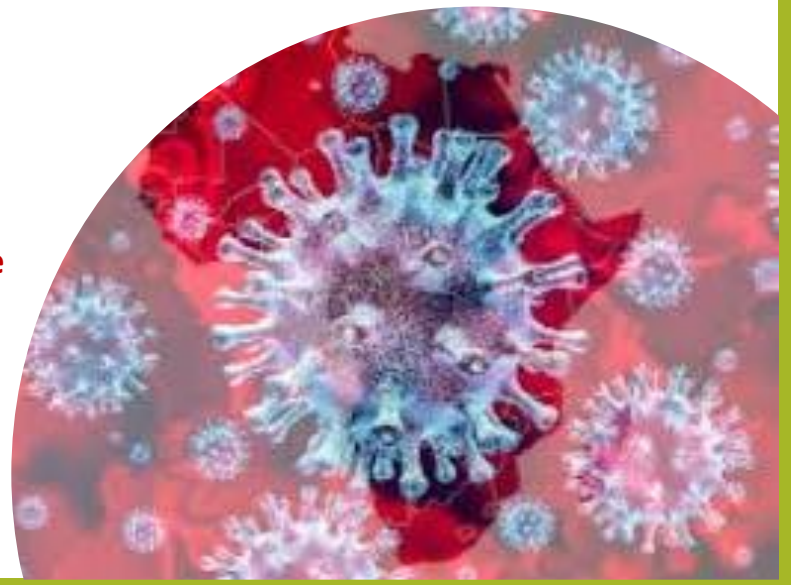
COVID-19 has exposed the city's weaknesses in disaster management systems Time to re-think the city development model



- **COVID-19 causes severe impacts on lives, livelihoods, economy, finance**
  - ✓ Possibly pushing the poverty rate by 6%, cancelling out the poverty reduction gains since 2011
  - ✓ Firm revenue/household income depressed; women-owned business twice more affected by men-owned. While recovering, vulnerability remains a key concern
  - ✓ Narrowed fiscal space



- Continuing mitigation measures targeting to reduce exposure and vulnerability
- Need for **more resilient and inclusive urban planning** considering the density matching with social and physical infrastructure, open space, resource management
- Strengthening spatial data infrastructure and digital platform



Insufficient land supply becomes a significant cross-cutting constraint for city development

Land needs and formal land production in Addis Ababa

Addis Ababa	Low growth	High growth
Estimated Land Needs	3,150 ha/a	4,150 ha/a
Average annual production 5 years 2012/13-2016/17	1,446 ha. (46%)	1,446 ha.(35%)

Source: World Bank (2019d)

- **Formal land production slow, overly complex**
  - ✓ Supply fails to meet demands, hampering investment; Only 5% land auctioned; Vacant or underused land in prime locations; Hand over without services
  - ✓ Rural to urban conversion (major source) leading tension
  - ✓ Constrained regularization due to rigid regulation
- **Active informal land development, particularly in peri-urban areas**
  - ✓ Higher price than formal government compensation (three-to-fourfold) → farmers sell off the land ahead of government action

Land supply is not financially sustainable; there is high potential for land lease revenues

Primary: Government to end-users

- **Majority of urban land is allocated at no cost or below market values**
  - ✓ Below cost recovery of servicing the land
  - ✓ Land revenues are less than 10% of total city revenues
- **No mechanism to capture property value** increase over time

⬇

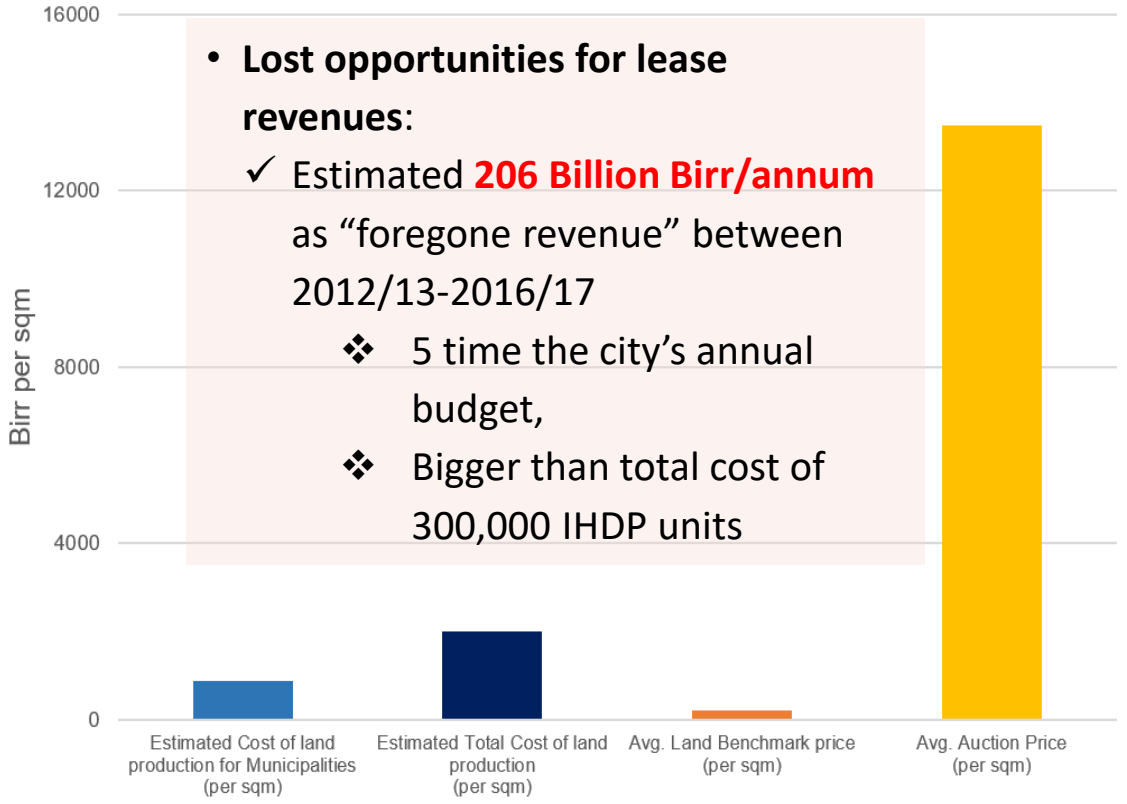
- Deprived of opportunities for land-based financing for infrastructure provision

Secondary: Among lease/permit holders

- **Slow implementation of legal cadaster** limits the protection and transaction of lease rights
- **Lack of clarity on lease law** deters private sector participation in the formal land markets
- **Complex lease pricing limits** market entry/participation
- **Conditions in the lease law limit market growth** – e.g. limited use as collateral to secure land or improvement costs

Source: World Bank (2019d)

Cost of Land Production, Avg. benchmark & Avg. Auction prices in Addis Ababa (2013-2017)



- **Lost opportunities for lease revenues**:
  - ✓ Estimated **206 Billion Birr/annum** as "foregone revenue" between 2012/13-2016/17
    - ❖ 5 time the city's annual budget,
    - ❖ Bigger than total cost of 300,000 IHDP units

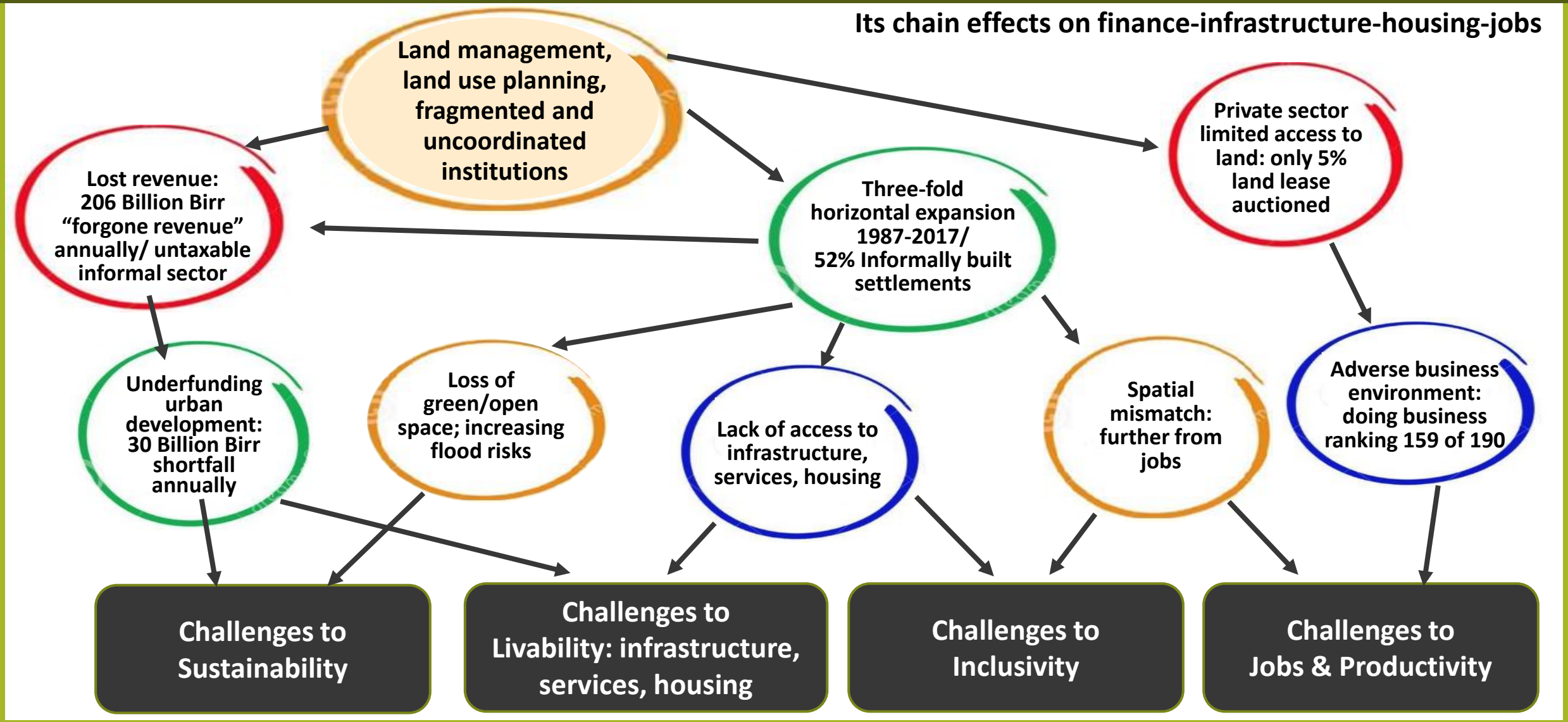
Source: World Bank (2019d)

land administration and management systems are not well established nor functioning to support Addis's nascent land markets

Key areas	Status
Guarantee ownership of title and security of tenure	√ Early stage[1]
Support land and property taxation	√ Land and property tax rates under review
Provide security for credit	√ Underdeveloped
Develop and monitor land markets	√ **No system in place**
Protect state lands	√ Weak mechanisms of protection
Reduce land disputes	√ Low land dispute resolution measures
Facilitate land reform	√ Lease proclamation and compensation proclamation under review
Produce useful statistical & public data	√ **No centralized/coordinated data management system**

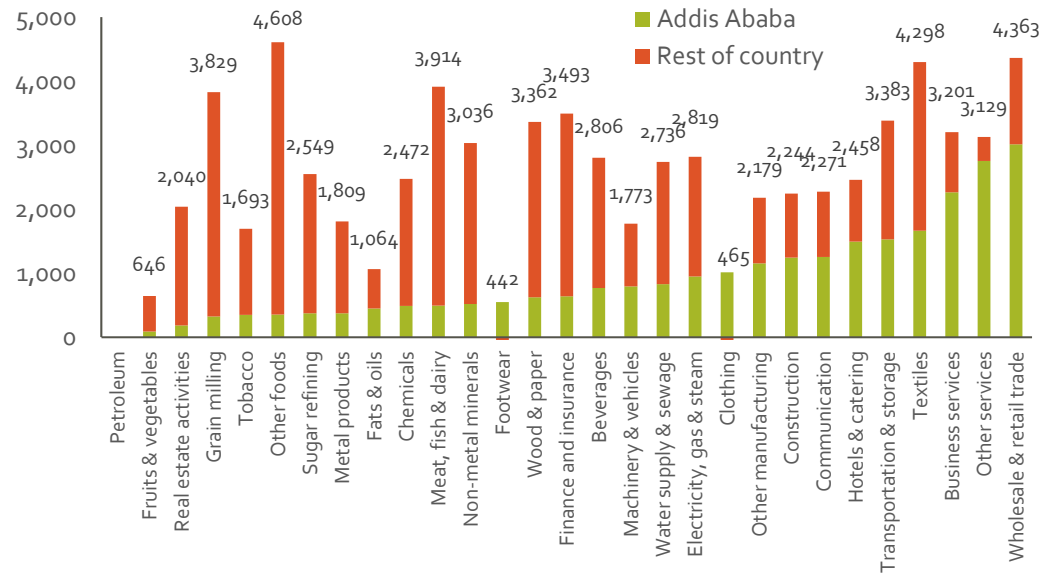
[1] Note: Slow implementation of tenure regularization for informal settlements

Poor land management & planning, uncoordinated institutions are key binding constraints for Addis Ababa



Addis Ababa:
Key questions to be answered

Estimated Number of Jobs Created from a US$1 Million Investment in Addis Ababa



Source: Background paper by Thurlow, Randriamamonjy, & Dorosh (2017)

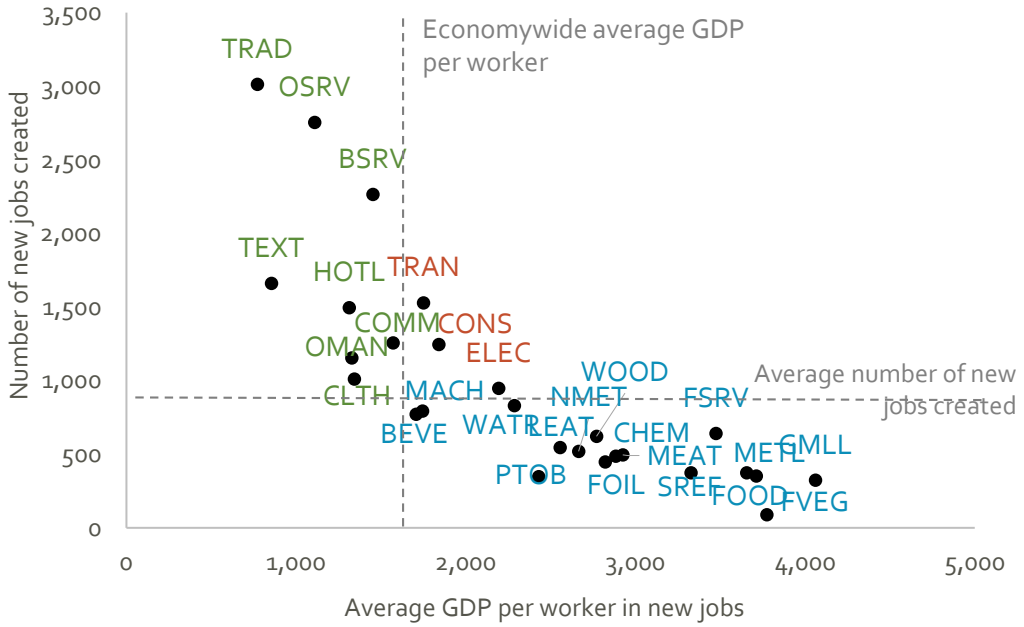
- ✓ Increased investment in Addis has job multiplier effects for the rest of the country:
- ✓ Investments in Addis also have more of a poverty reduction effect in the rest of the country than in the capital

- ✓ Promotion of polycentric urban centers for regionally balanced development
- ✓ Relocation of major manufacturing industries to regions
- ✓ Increasing competencies in secondary cities with higher location quotient for major industries: LQ for manufacturing industry in Addis is 1.8 compared to 9.1 in Hawassa and 5.7 in Mekele

ADDIS' ECONOMIC ROLE

Balancing its role as an engine of national growth & reducing primacy for regionally balanced development

Current Economic Subsectors Important to Job Creation and / or Structural Transformation in Addis Ababa



Source: EPAU/IFPRI 2016; CSA 2011a; CSA 2011b; CSA 2012; CSA 2013; CSA 2015.

Note: Color coding indicates subsectors that are more important to job creation (green), subsectors that are more important to structural change (blue), and subsectors that can help achieve both goals (red). MEAT = meat, fish, and dairy; FVEG = fruits and vegetables; FOIL = fats and oils; GMLL = grain milling; SREF = sugar refining; FOOD = other foods; BEVE = beverages; PTOB = tobacco; TEXT = textiles; CLTH = clothing; LEAT = footwear; WOOD = wood and paper; PETR = petroleum; CHEM = chemicals; NMET = nonmetal minerals; METL = metal products; MACH = machinery and vehicles; OMAN = other manufacturing; ELEC = electricity, gas, and steam; WATR = water supply and sewage; CONS = construction; TRAD = wholesale and retail trade; TRAN = transportation and storage; HOTL = hotels and catering; COMM = communication; FSRV = finance and insurance; REAL = real estate activities; BSRV = business services; OSRV = other services.

- ✓ Job creation through MSEs – relatively low added-value and question on sustainability
- ✓ Successful in bringing down unemployment rate, yet women and youths unemployment remain persistently high
- ✓ Shifting from medium to high value-added manufacturing and service sectors to create higher productivity jobs: Addis' declining share of employment in medium value-added industries
- ✓ New sectors of comparative advantage are nascent: financial services, professional services, and ICT account for only **10 %** of employment

GROWTH STRATEGY

Balancing inclusive growth

&

productive growth

FIGURE IT IS COSTLY TO START A BUSINESS IN ETHIOPIA …

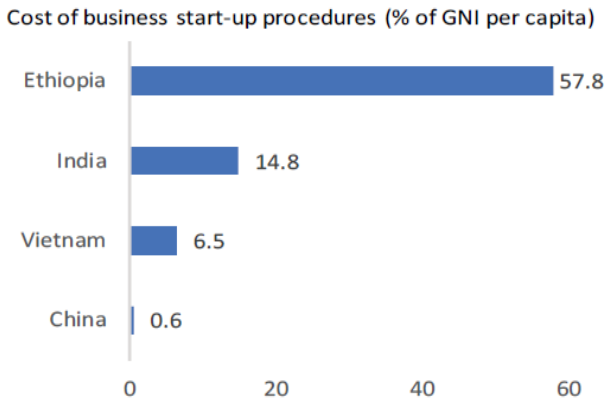
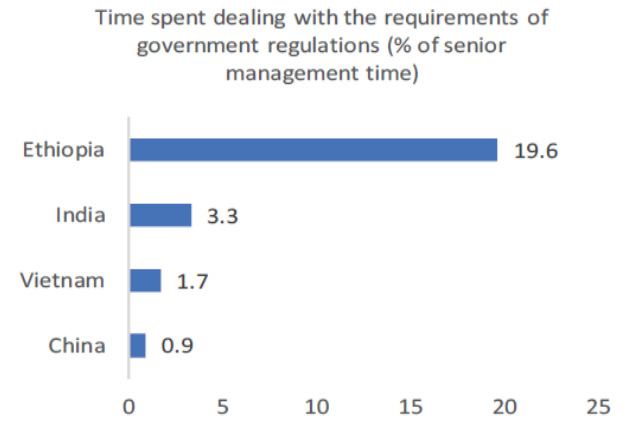
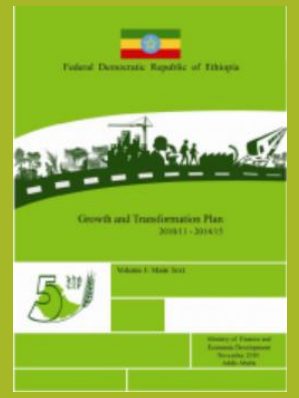


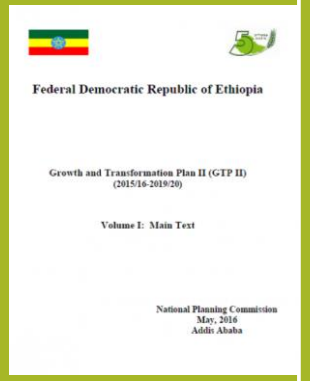
FIGURE COMPLYING WITH REGULATIONS IS TIME-CONSUMING



Source: World Bank (2019a)

- ✓ A 'big-push' approach initiated through the GTPs has been successful for unparalleled economic growth: public investment is one of the highest in the world as a share of GDP
- ✓ Private sector's role for job creation well acknowledged but business environment far from optimal: doing business ranking 159 out of 190 countries
- ✓ Time to shift a role of the government from doer to enabler



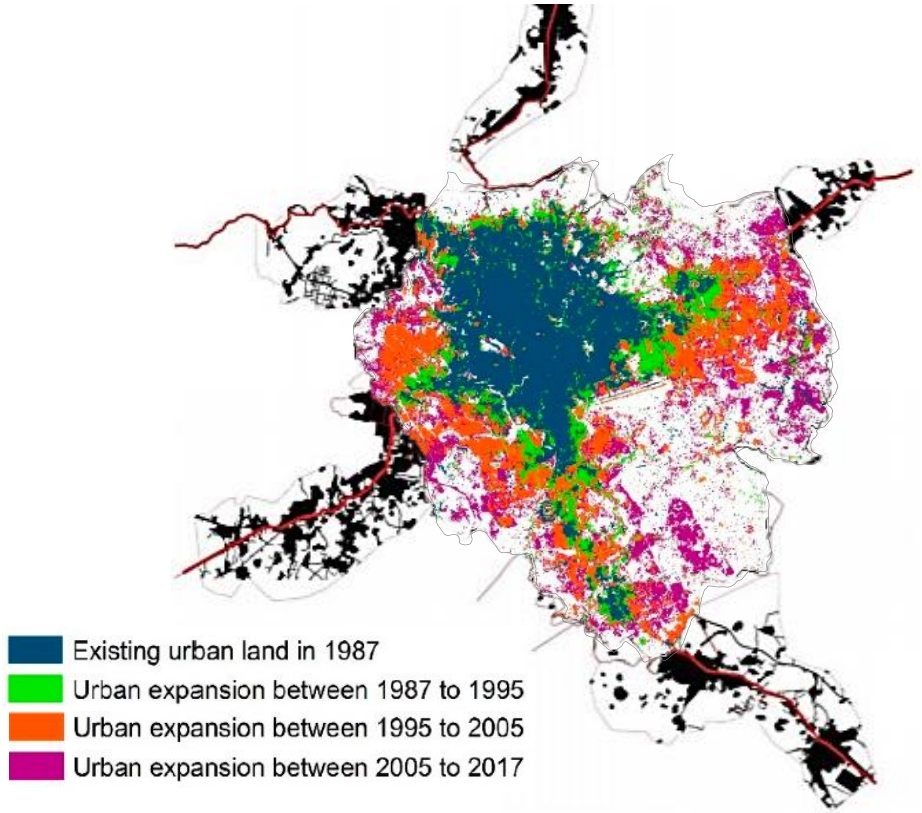


DEVELOPMENT ANCHOR

Government-driven development

vs

Private sector participation



- ✓ Three-fold increment in urban land between 1987 and 2017 (from 99km² to 283.9km²), far outpacing the population growth
- ✓ Government's plan for compact development is conflicting with land management incentive mechanism & practices: Incentives for high-density development are undermined by allocation of land below market value
- ✓ Lack of effective enforcement mechanisms to control periphery development
- ✓ Horizontal expansion increases cost of infrastructure and mismatches jobs and people
- ✓ Need of fostering dynamic and synergistic relationship between Addis and neighboring towns

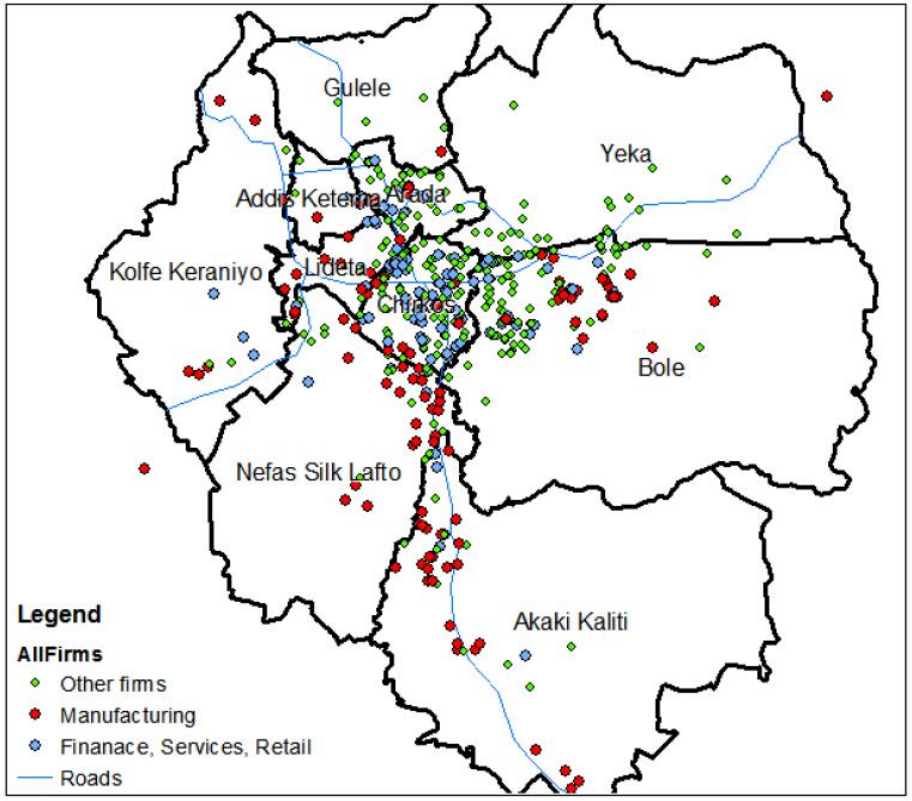
SPATIAL DEVELOPMENT

Planned compact development vs Actual horizontal expansion

Jobs vs Housing

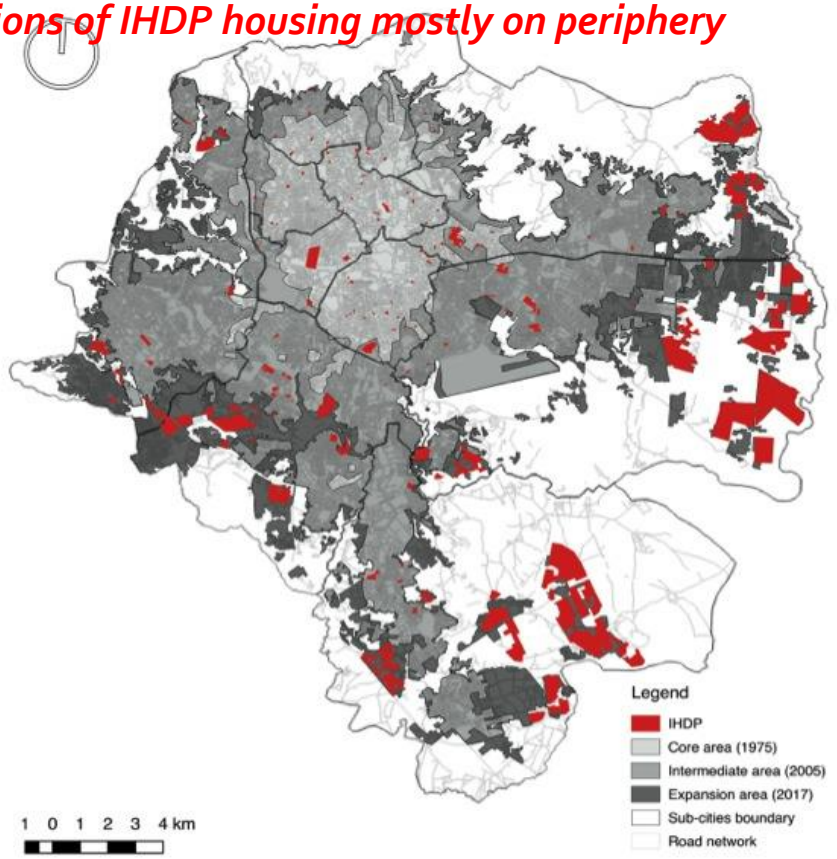
- ✓ Spatial mismatch between jobs and housing
- ✓ Transport and infrastructure not adequately supporting accessibility
- ✓ Significant search frictions exist in the matching of employers to jobs: concentration of employment and information about jobs in the centre of the city, and the sprawl of the city, which makes the cost of traveling to search for jobs expensive

Locations of manufacturing, and high end service firms



Source: Jones, Franklin, Daredia, & Zenebe (2016)

Locations of IHDP housing mostly on periphery



Source: World Bank (2019d)

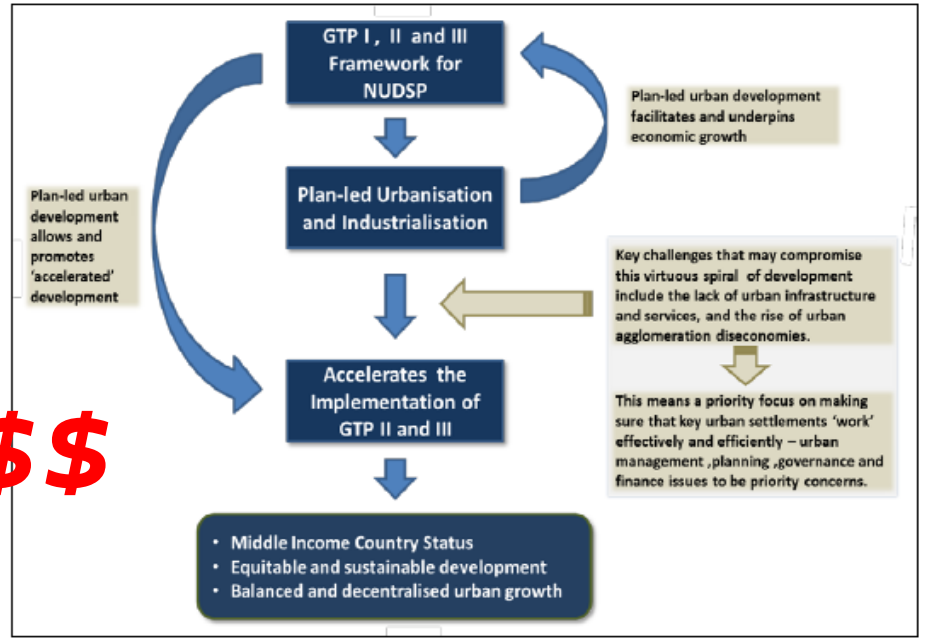
Land use
vs
Infrastructure & Housing

Source: UN Habitat (2017)

Aerial view of the city of Addis Ababa. © Shutterstock

- ✓ Disconnect among land use planning, infrastructure, housing, environment
- ✓ Unmanaged urban sprawl and intense peripheral growth reduced the overall density of the city (17,000 ppl/km^2 in 1987 to 13,000 ppl/km^2 in 2017) and exacerbated traffic congestion, pollution, inefficient and uncoordinated infrastructure and service delivery, land management, housing development, environmental challenges
- ✓ Inadequate coordination of planning, design, implementation of infrastructure often results in poor quality, delays in construction, incomplete asset, disruptions in service provision and management, as well as unclear division of roles between the city government and operators

Planning vs Financing



Source: Ministry of Urban Development and Construction (MUDCo) of Ethiopia (2015)

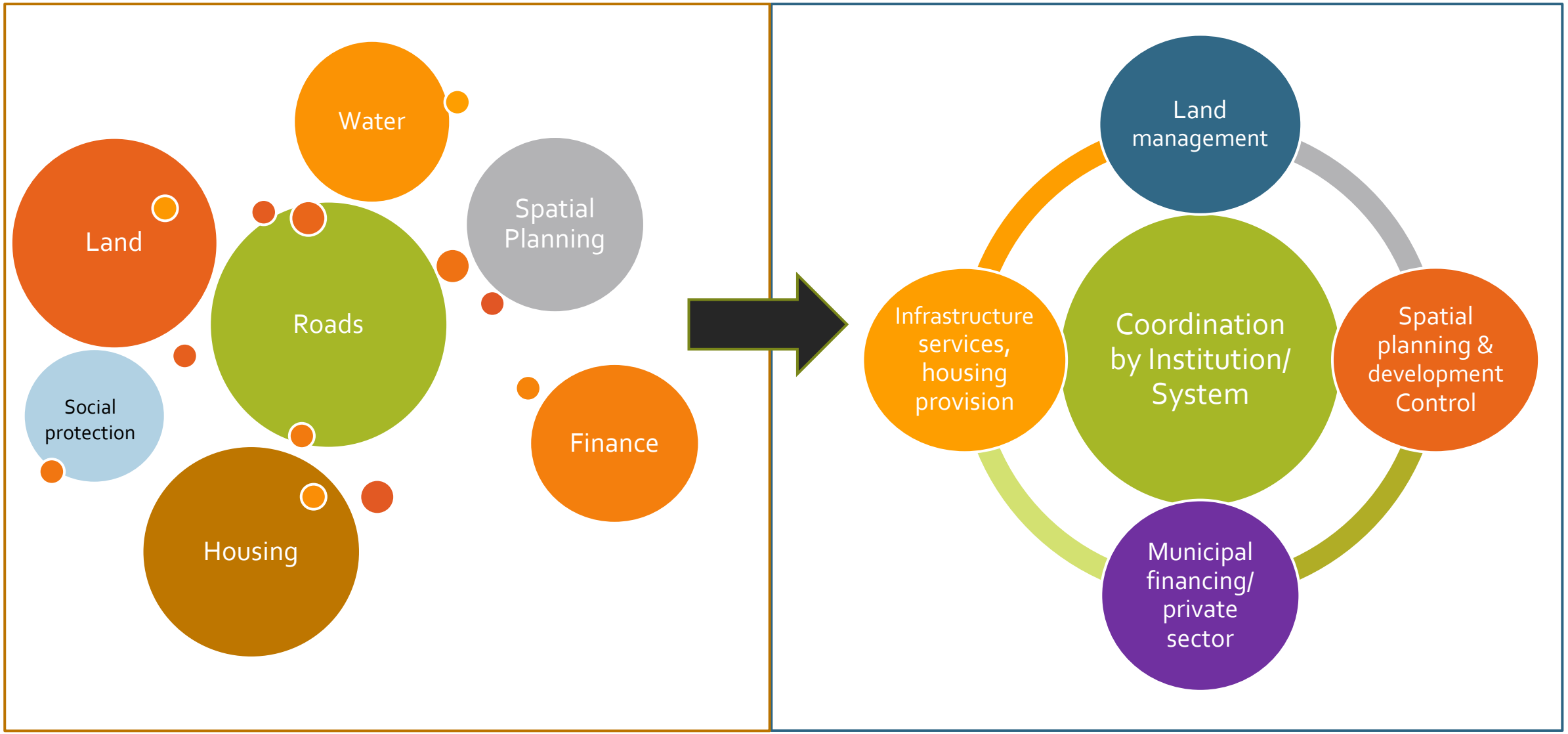
- ✓ The current expansionary land and urban development patterns make the financing more challenging: provision of infrastructure, services & housing becomes costlier; inducing informal development which has adverse fiscal, environmental & planning impacts; lack of private-public partnership; lack of the use of land-based financing
- ✓ The public investment practice indicates that resources are allocated by political decisions rather than by strategic allocation considering specific social and economic development targets: only 30% of capital projects undergo rigorous selection criteria based on societal needs, alignment to city and GTP II, and the availability of fiscal space. The remaining 70% (prioritized by the City Cabinet) are selected and funded based on political considerations.
- ✓ Poor degree of alignment between medium-term budget estimates and strategic plans
- ✓ Capital investment expenditure not connected to future financial implications for recurrent expenditure

Institutional Mandate vs Institutional Capacity/ Coordination

- ✓ Mismatches between institutional mandate and capacity: weak financial and human capacity; manpower is increasing but frequent reorganization and lack of institutional memory due to high turnover of managerial manpower and professionals
- ✓ Mismatches between regulation and enforcement: policies and rules are existing but M&E and enforcement are poor
- ✓ Complicated procedures, uncoordinated overlapping regulations leading to corrupt practices
- ✓ Lack of coordination between federal entities and city administration, between sectoral and spatial planning entities, and between planning and implementation entities
- ✓ Lack of sustainable public participation and stakeholder engagement

Addis Ababa:
Next phase and timeline

A paradigm shift is required....



.....to enhance Institutional coordination/systems

Toward more integrated and coordinated development

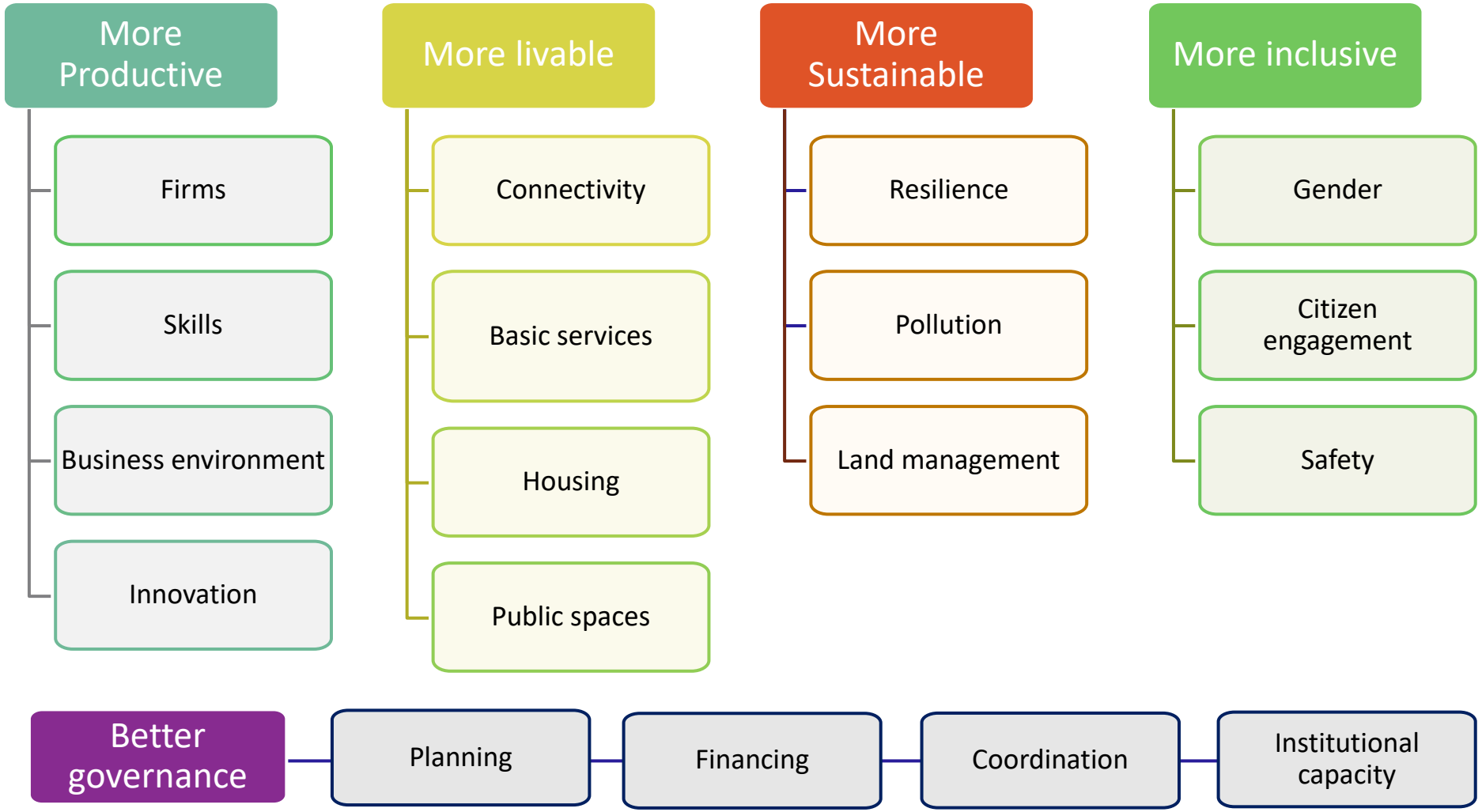
- More sustainable urban financing
- More private sector engagement
- Climate/disaster-resilient investment planning
- Sustainable environmental management & green development
- Strengthened institutional capacity & coordination

- Improved connectivity, services, housing, public spaces
- Tightened linkages and coordination for land use, infrastructure-housing planning and implementation

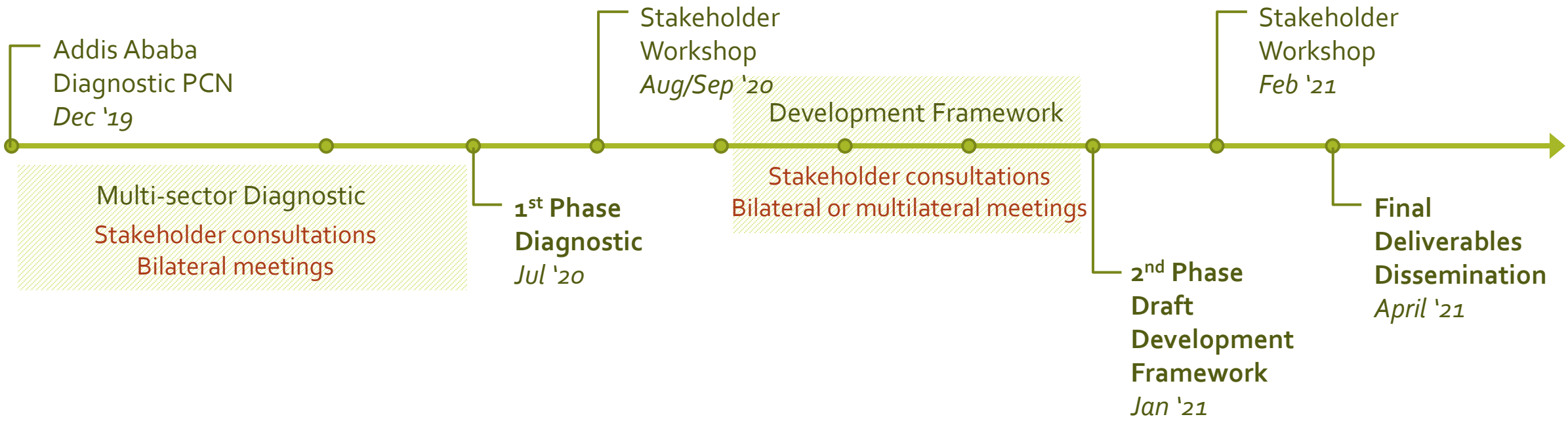
- High value-added manufacturing & services
- MSE linkages with medium & large enterprises and FDI
- Digital strategy for inclusive prosperity 2025
- Tapping creative assets
- Business environment; skills; service delivery

- More jobs for youths and women
- Building human capital: education, health
- Higher citizen engagement in planning and implementation
- Strengthened social safety net, micro-finance

Constructing a strategic development framework toward more integrated and coordinated development for more productive, livable, inclusive and sustainable Addis Ababa



Strategic development framework timeline



Key questions

- Q1. How can Addis Ababa move up to the economic value chain as the key engine of national economic growth?
- Q2. How can the government SME strategy be improved to boost productivity and create more jobs for youth and women?
- Q3. What role can the city play in leveraging private capital closing the financing gaps in capital investment?
- Q4. How can the government's compact city strategy be realized?
- Q5. How can we support the city to improve functional linkages with the surrounding Oromia towns?
- Q6. How can the government system better enable inter-sectoral coordination?
- Q7. How can the government make evidence-based policy decisions?

Technical Annexes

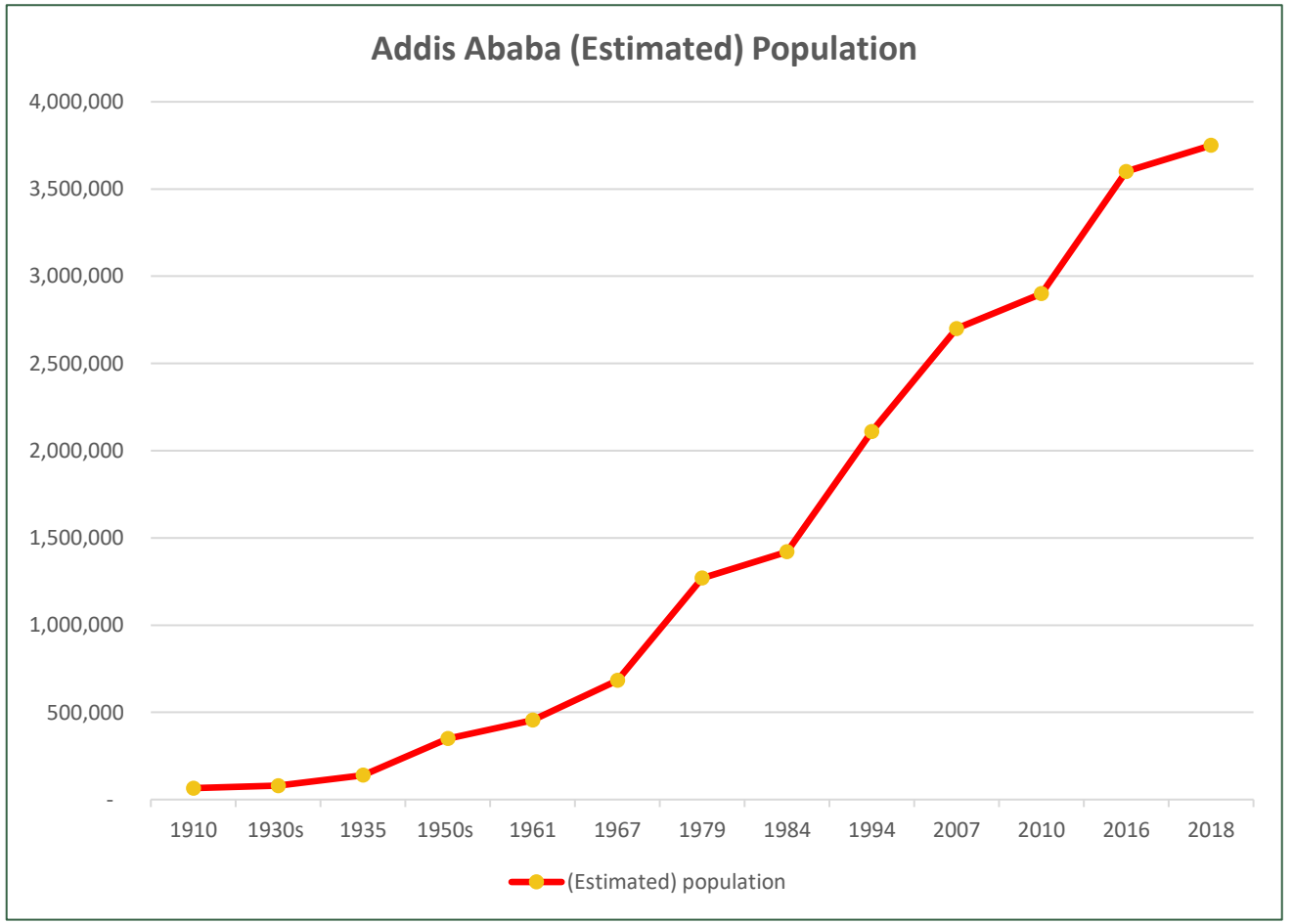
I. Key Trends in Addis Ababa

- Demographic, Socio-economic, Environmental, Spatial Features

Addis Ababa population is growing faster than Ethiopia's in the past decade, while slower than secondary cities'

2.1 Demographic – Population Growth

- Addis Ababa average population growth at **3.7%**[1] p.a. compared to national average population growth **2.3%**[2] p.a.; overall average urban population over **7.6%**[3] p.a.
- Population growth rate in Addis is constantly lower than in secondary cities but the gap is narrowing in recent years
- **Addis population**: 3.7 million in 2018[4] → Projected 4.53 million by 2025[5] (statistics vary depending on sources)
  - ✓ 20% national urban population, 3.63% national population[6]
  - ✓ 11 times bigger than ETH's second largest city

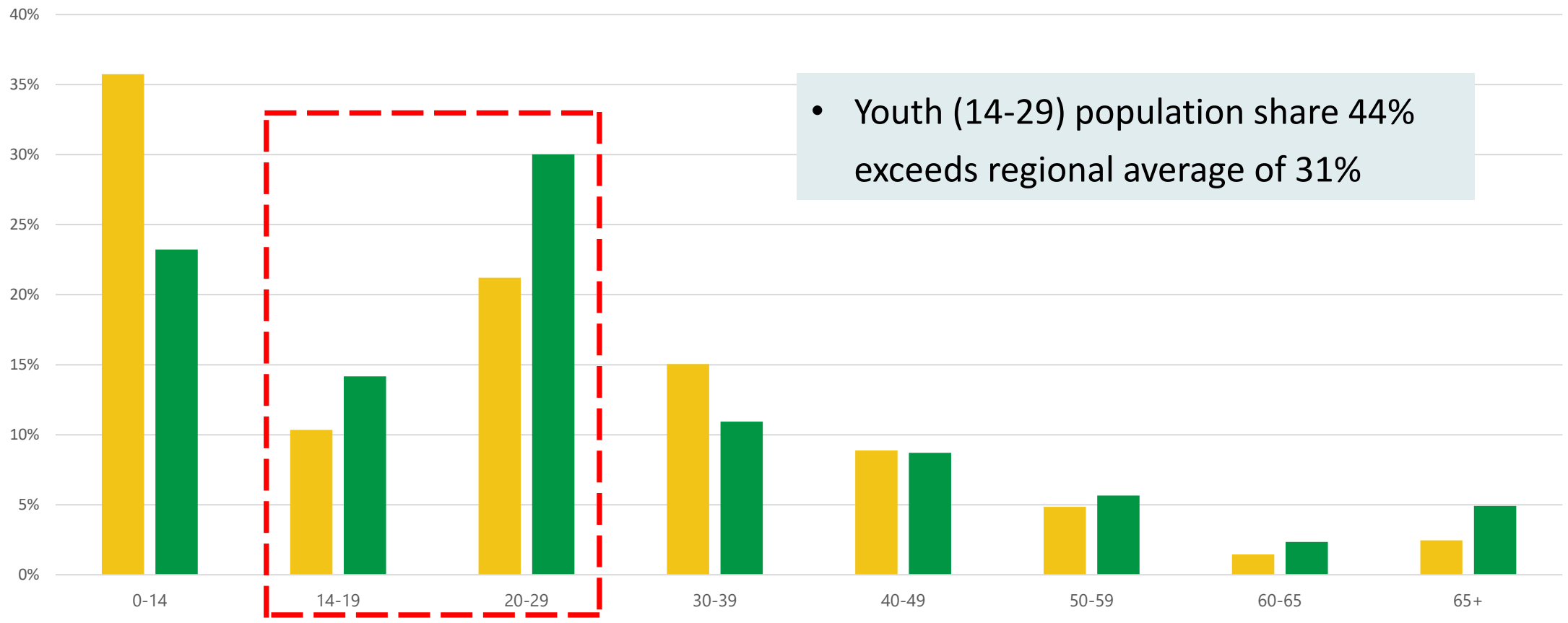


Sources: Addis Ababa City Administration, CSA census and surveys (UEUS, HCE)

1. Mahiteme (2007), CSA (2016a); 2. CSA (2007, 2016b); 3. CSA (2006b, 2016a); 4. CSA (2018); 5. CSA (2012a); 6. CSA (2016a, 2016b)

Addis Ababa has a bulge of young working age population

2.1 Demographic – Youth Population



- Youth (14-29) population share 44% exceeds regional average of 31%

Population age distribution as a percentage of total population, 2015

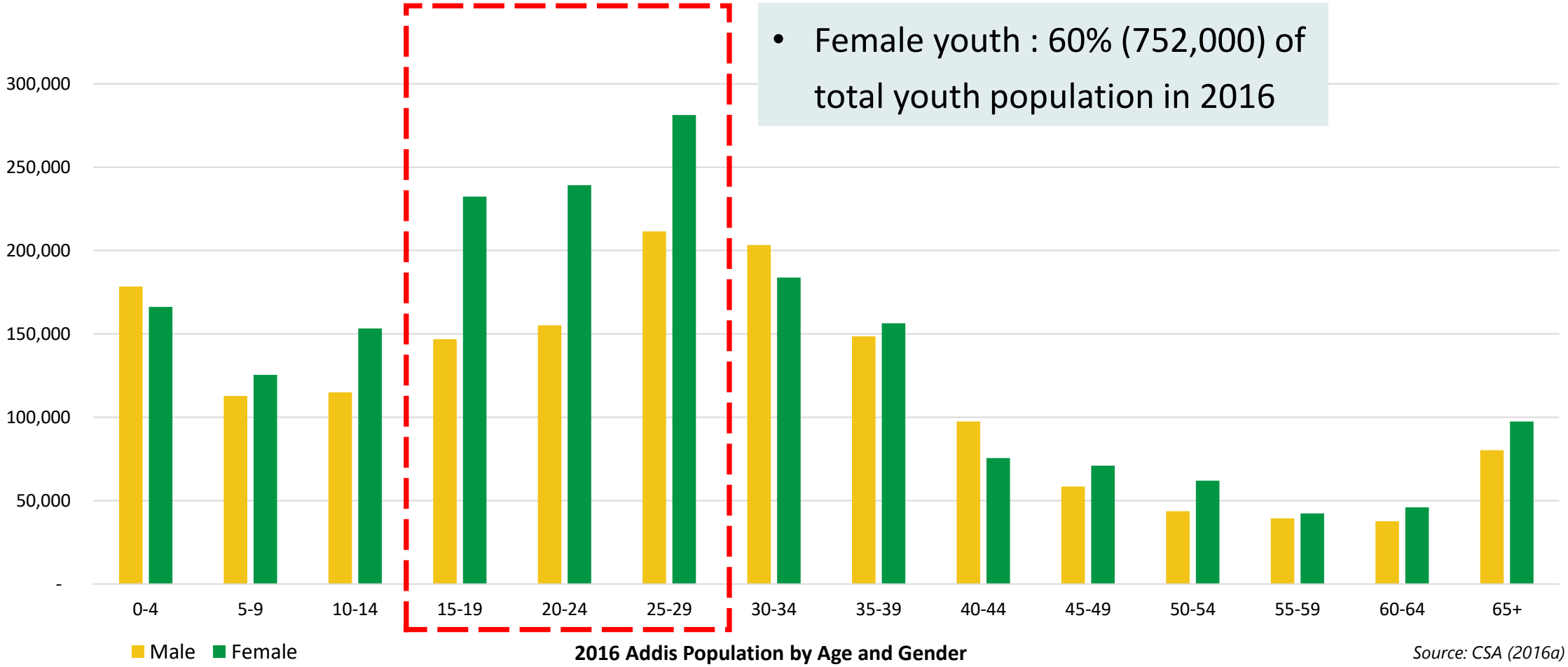
Source: Oxford Economics - Global Economic Databank

Note: Regional cities included in the benchmark are: Abidjan, Dakar, Dar es Salaam, Johannesburg, Khartoum, Kinshasa, Lagos, Luanda, Nairobi, Yaounde.

Particularly, more female youth groups

2.1 Demographic – Female Population

- Female youth : 60% (752,000) of total youth population in 2016



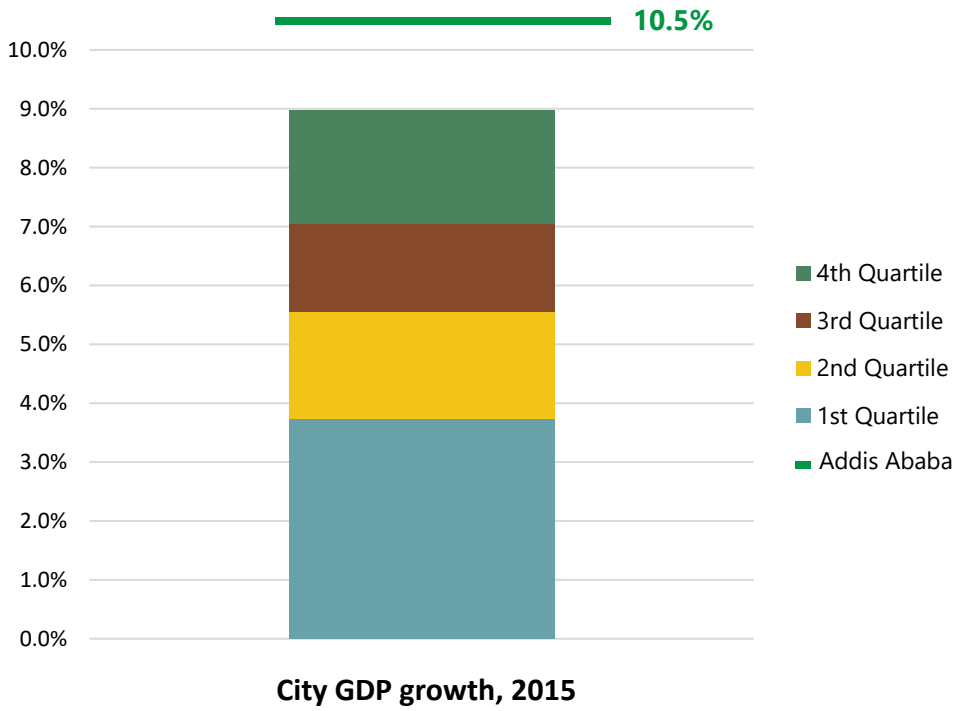
2016 Addis Population by Age and Gender

Source: CSA (2016a)

The economy is booming: Addis excels its peer African cities in its growth of GDP and employment

2.2 Economic – City GDP & Employment

- At 10.5%, Addis Ababa exceeds the top quartile of GDP growth among benchmark cities



City GDP growth, 2015

- At 3.8%, Addis Ababa exceeds the top quartile of employment growth among benchmark cities

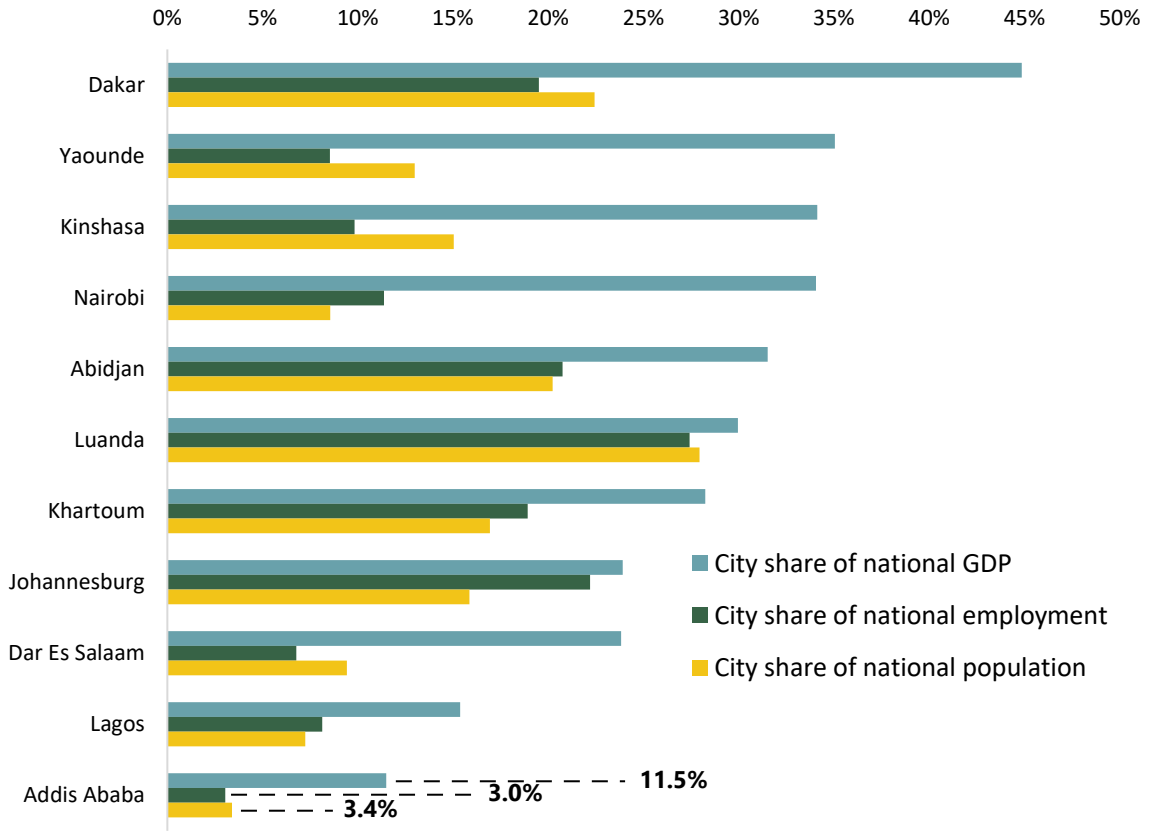
City employment growth, 2015

Source: Oxford Economics - Global Economic Databank, World Bank (2015b)

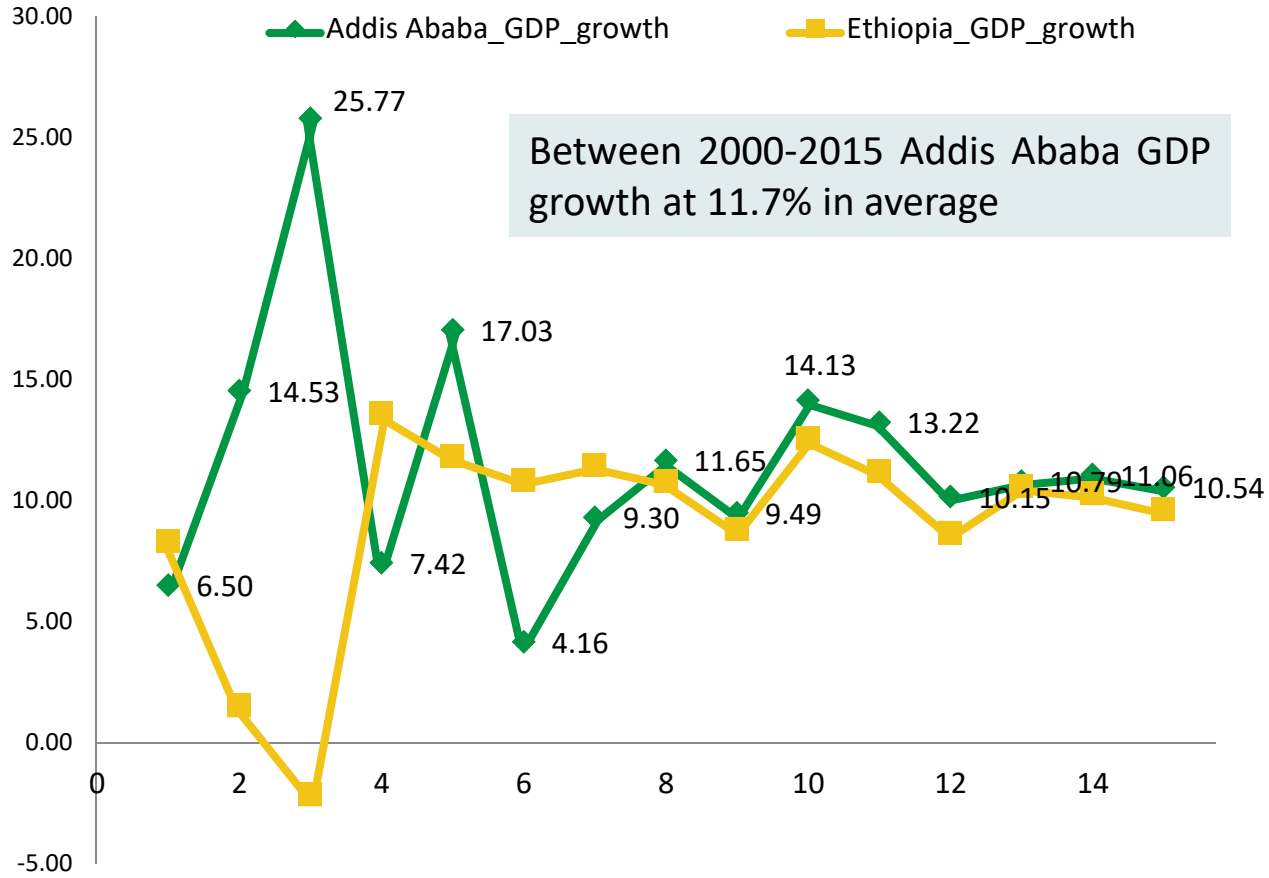
Note: Cities included in the benchmark for the regional quartiles are: Abidjan, Dakar, Dar es Salaam, Johannesburg, Khartoum, Kinshasa, Lagos, Luanda, Nairobi, Yaounde
Disclaimer: Although the data found here has been produced and processed from the Oxford Economics believed to be reliable, no warranty expressed or implied is made regarding accuracy, adequacy, completeness, legality, reliability or usefulness of any information.

Addis' GDP is growing fast at a double-digit rate, slightly higher than the national GDP growth rate

2.2 Economic – City GDP growth



City share of national GDP, employment, and population, 2015

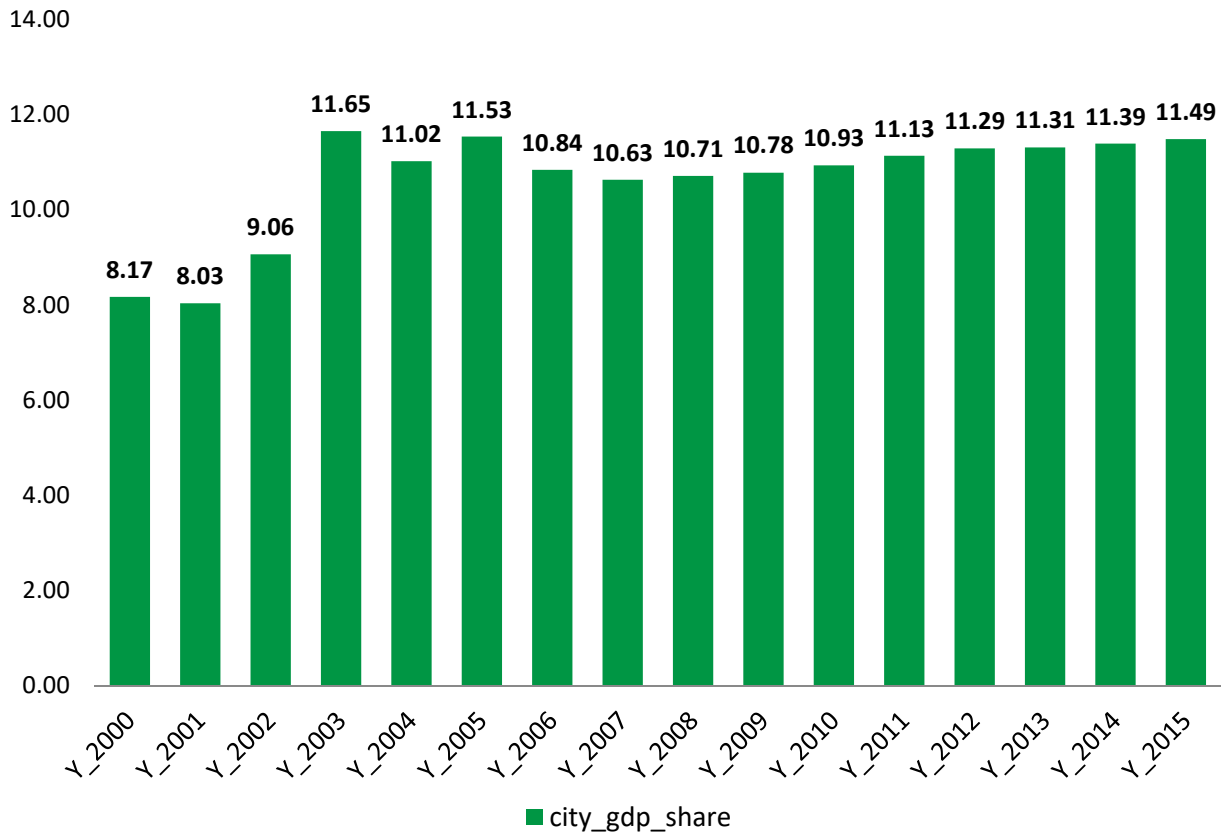


(Left/Right) Source: Oxford Economics - Global Economic Databank

Addis' GDP share of the national economy remains at 10-11% since 2003 serving as a main economic hub

2.2 Economic – City GDP Contribution to National Economy

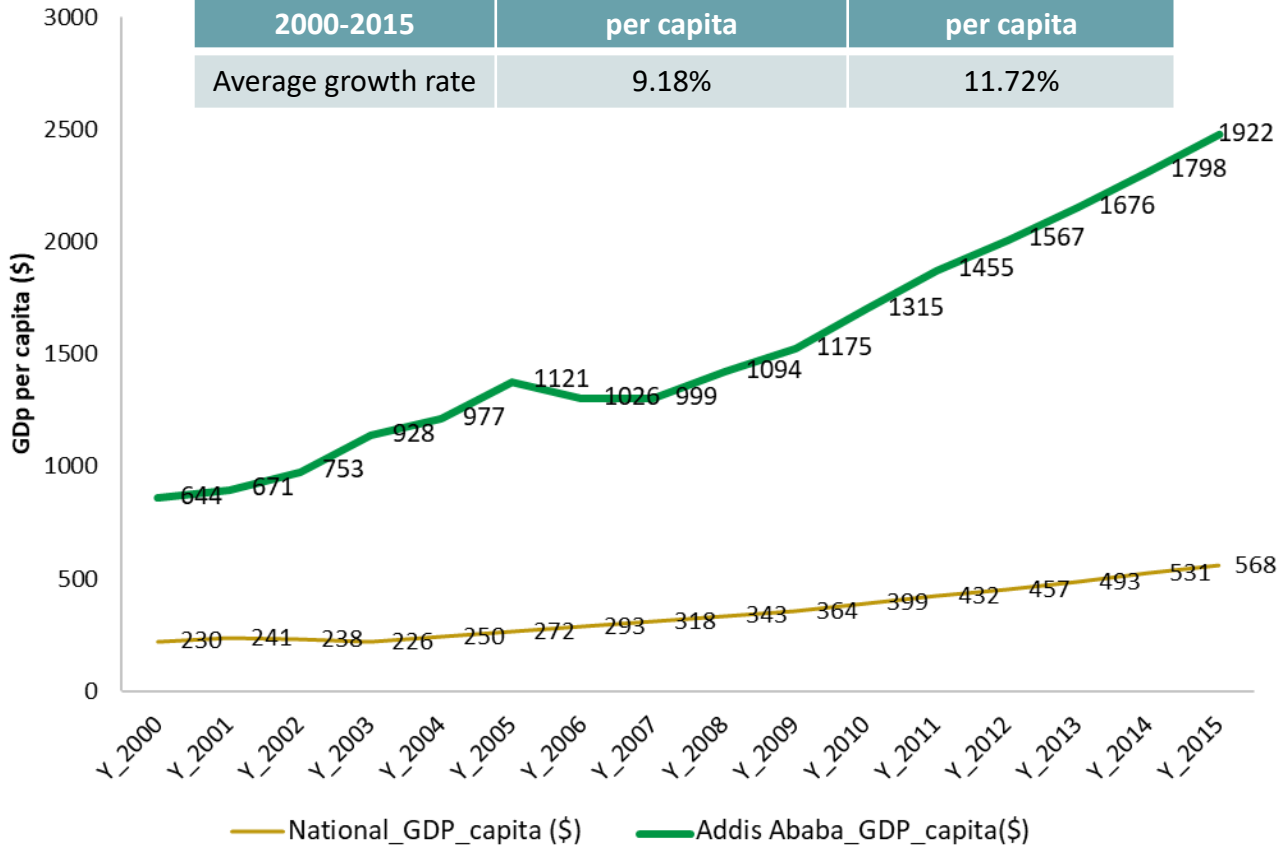
Addis Ababa GDP Share



Source: Oxford Economics - Global Economic Databank based on 2012 prices

National and Addis Ababa GDP per capita

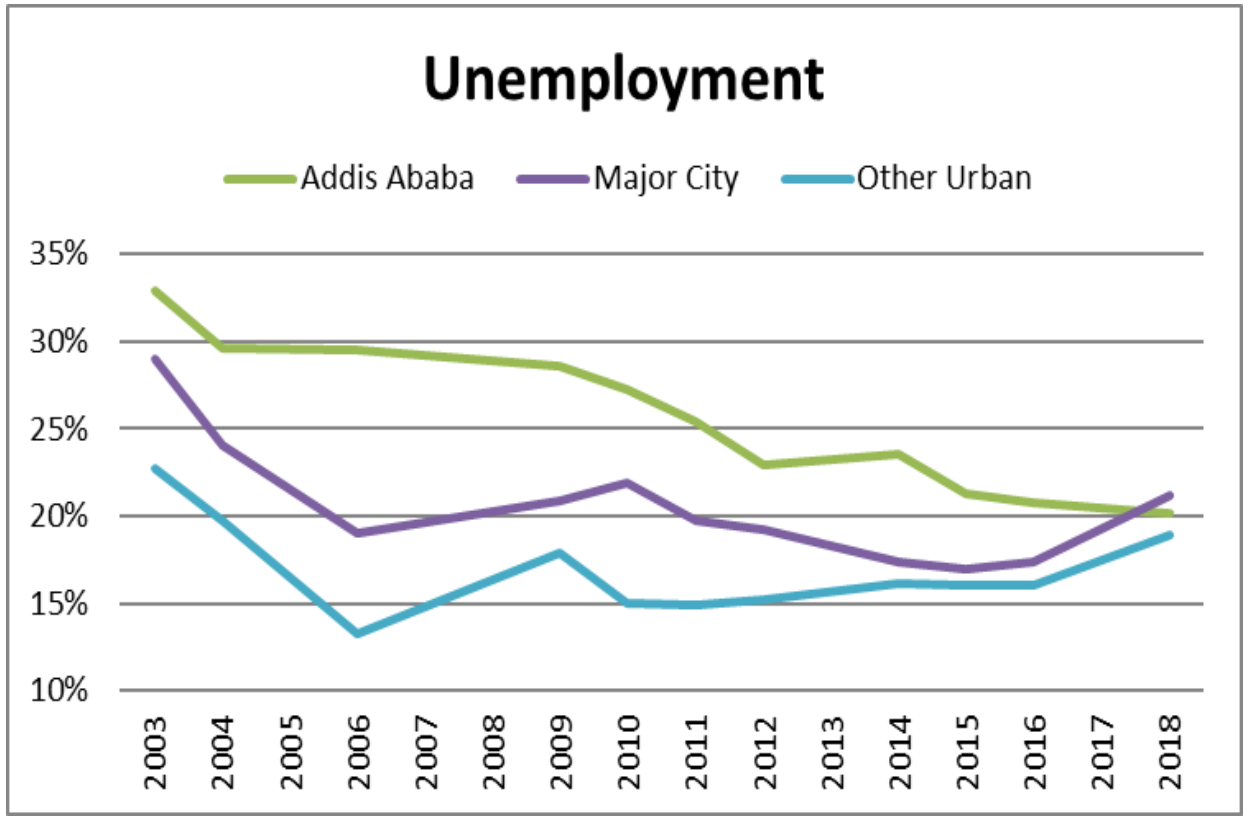
Between 2000-2015	National GDP per capita	Addis GDP per capita
Average growth rate	9.18%	11.72%



Source: Oxford Economics - Global Economic Databank based on 2012 prices

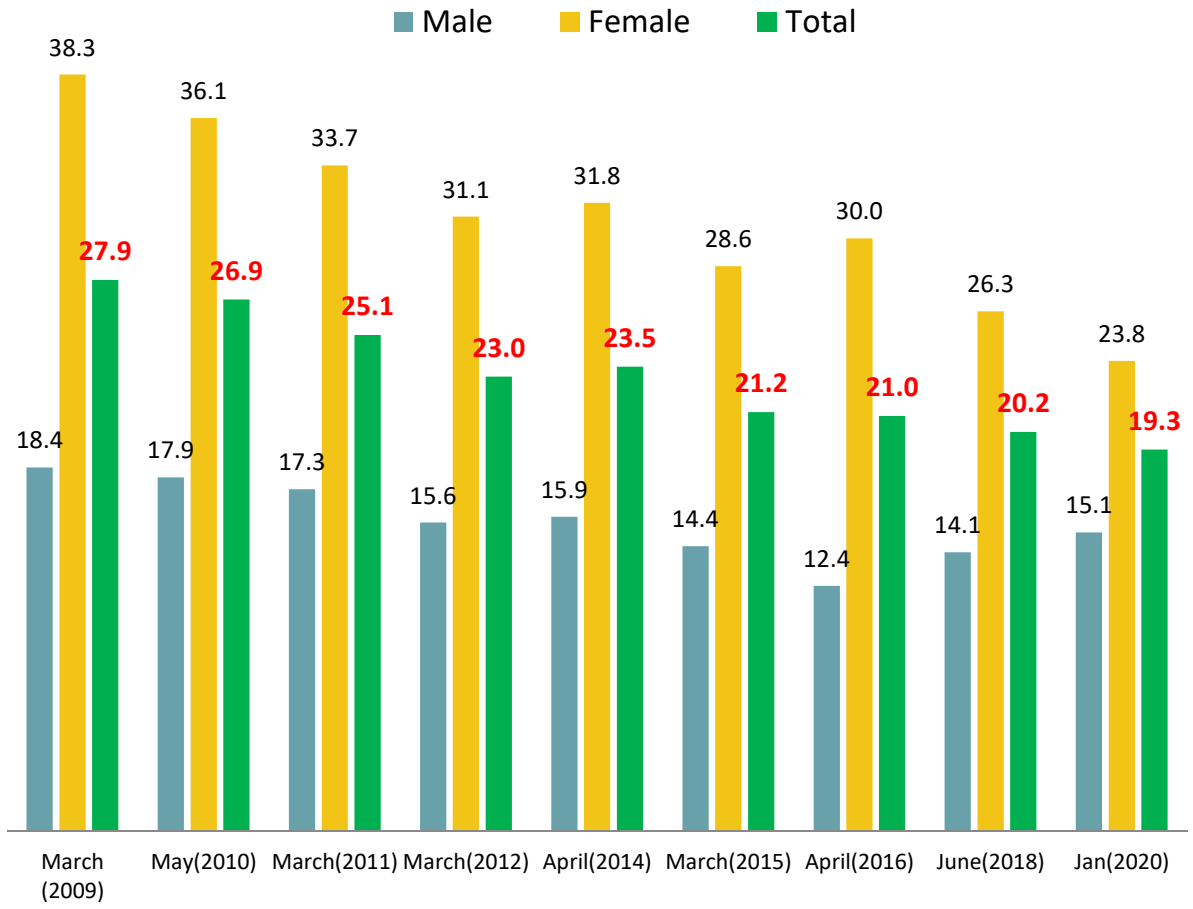
The unemployment rate in Addis Ababa has steadily decreased despite high population growth

2.2 Socio-economic – Unemployment rate



Source: World Bank (2017b)

Addis Ababa unemployment rate



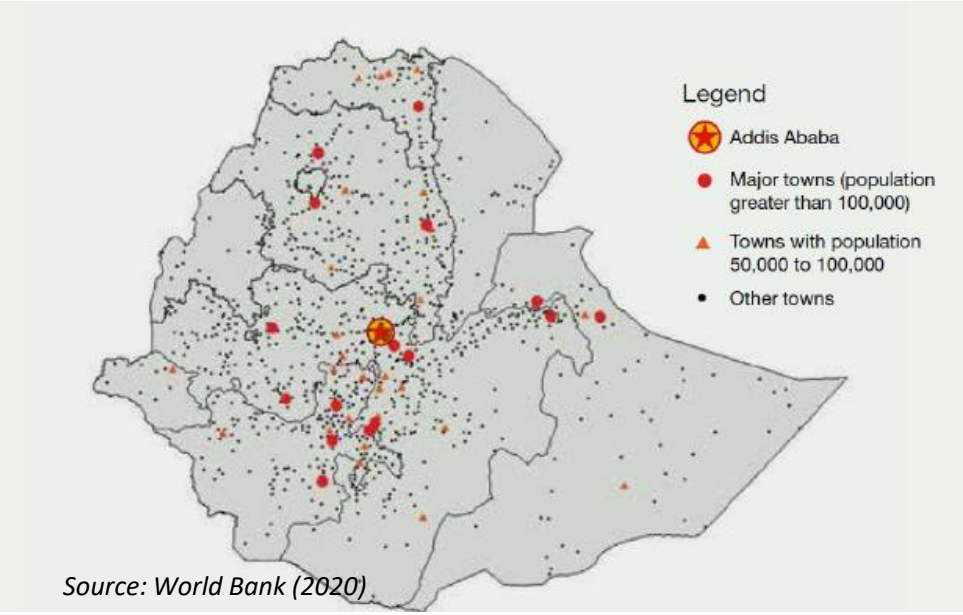
Source: CSA (2009, 2010, 2011, 2012b, 2014, 2015, 2016a, 2018, 2020)

Likewise, the poverty rate has steadily decreased in Addis but is higher than the urban average

2.2 Socio-economic – Poverty rate

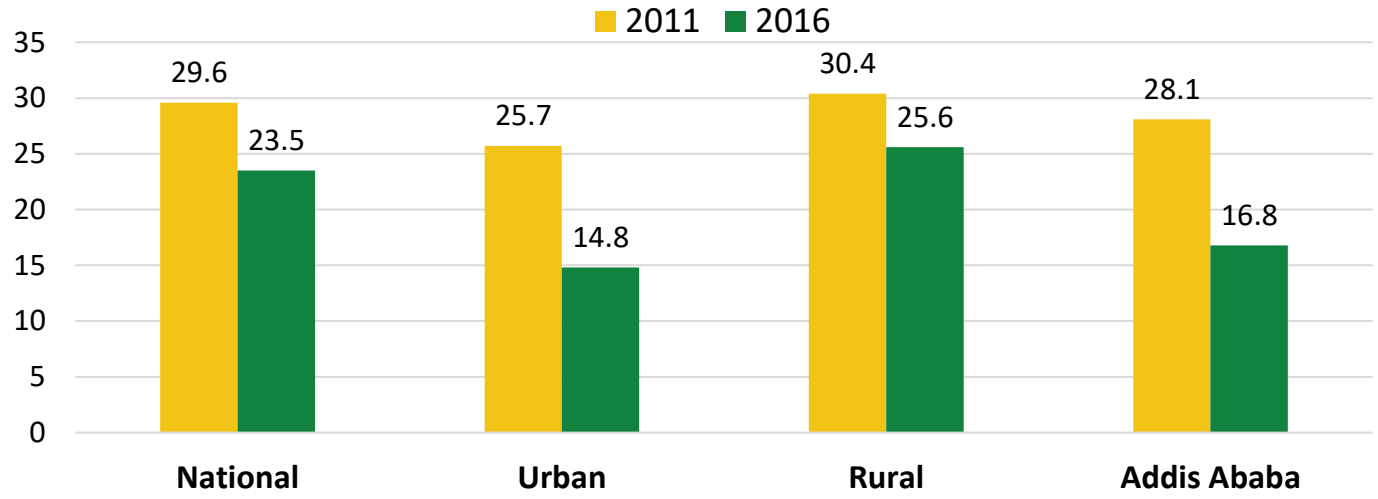
- Poverty decreased more in urban than rural
- Poverty remains high in Addis at 16.8%
- One in six is poor in Addis
- One in five urban poor people live in Addis

Towns and Cities in Ethiopia



Source: World Bank (2020)

Poverty headcount rate (%) based on national poverty line 2011-2016



Population and Poverty Distribution in Urban Ethiopia

	POPULATION		POVERTY RATE	POOR POPULATION	
	MILLION (1)	SHARE (2)	(3)	MILLION (4)	SHARE (5)
Small towns (20,000 or lower)	4.3	25.1%	20.0%	0.9	33.8%
Medium sized towns (20,000 - 100,000)	5.9	34.8%	12.1%	0.7	28.4%
Major towns (100,000 or greater)	3.6	21.1%	11.4%	0.4	16.2%
Addis Ababa	3.2	19.0%	16.8%	0.5	21.5%
Urban total	17.0	100.0%	14.8%	2.5	100.0%

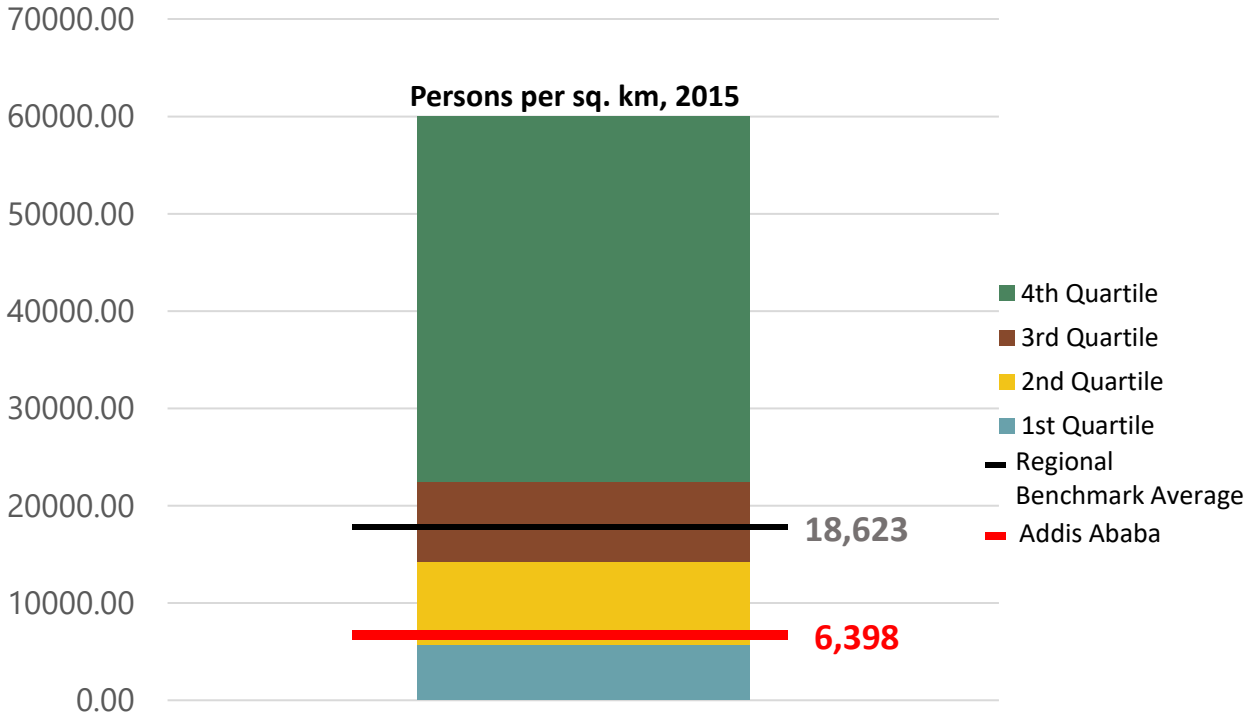
Note: Population is based on the 2016 population projection by the CSA

Source: World Bank (2020)

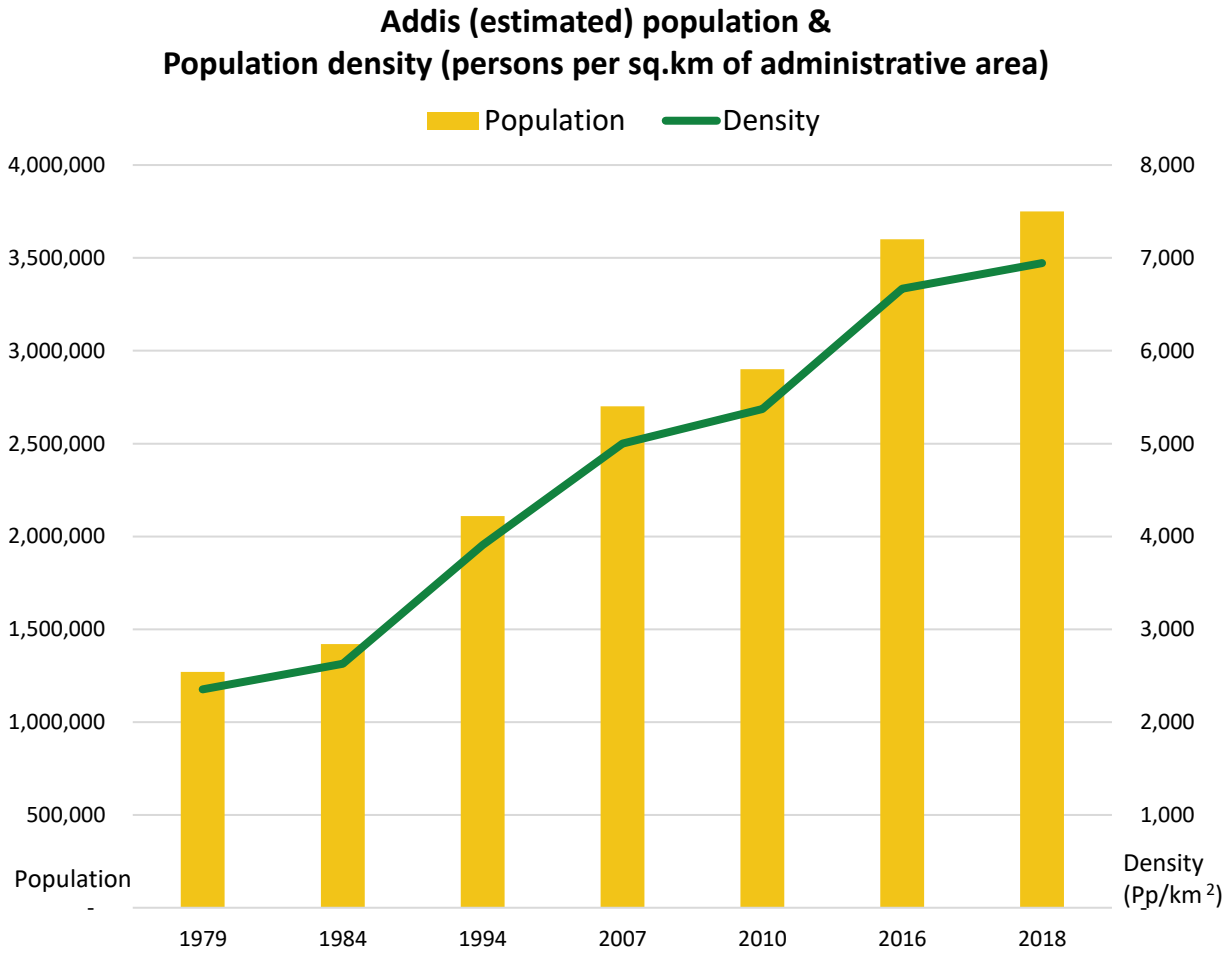
Despite the high population growth, Addis' population density is lower than other African cities'

2.3 Urban Form – population density

- Addis Ababa's 2015 population density of 6,396 is in the 2nd quartile, and significantly lower than the regional average of 18,623 persons per sq. km.



Source: Oxford Economics - Global Economic Databank



Source: UN Habitat (2017), CSA (2007, 2016a, 2018)

Note: Cities included in the benchmark are: Abidjan, Dakar, Dar es Salaam, Johannesburg, Khartoum, Kinshasa, Lagos, Luanda, Nairobi, Yaounde.

Spatial expansion has outpaced population growth in Addis due to rapid urban sprawl towards peripheries

2.3 Urban Form – urban sprawl in peripheries

- Three-fold increment in urban land between 1987 and 2017
- Between 2005 and 2017 more intensified expansion in eastern and southern directions
- Need of functional links between the city and neighboring areas

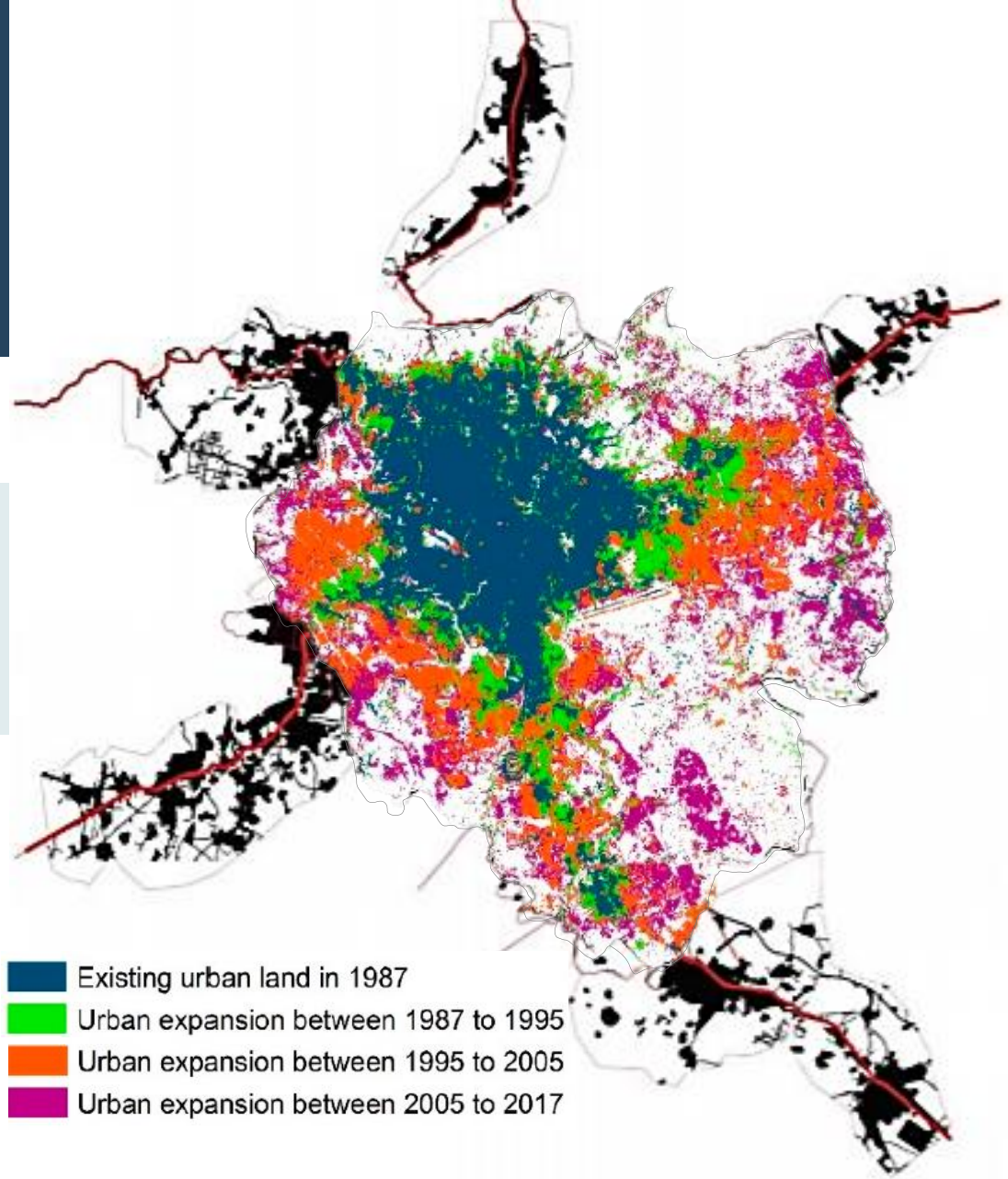
Total urban area (km^2) and proportion (%) of the urban land increase from 1987 to 2017.

City	Urban Land Area (Km^2)				Percentage of Urban Area Increased (%)			
	1987	1995	2005	2017	1987–1995	1995–2005	2005–2017	1987–2017
Addis Ababa	99	149.5	208.6	283.9	51.0	39.5	36.1	186.7

Average annual expansion (AE) in urban area (km^2) and annual urban expansion rate (AER)(%)

	City	1987–1995	1995–2005	2005–2017	1987–2017	Average
AE	Addis Ababa	6.31	5.91	6.28	6.16	6.17
AER	Addis Ababa	6.37	3.95	3.01	6.22	4.44

Source: Terfa et al. (2019)



Source: Overlapping the maps from the World Bank (2015a) and Terfa et al. (2019)

Land use patterns have changed significantly to accommodate the growing population and economic activities

2.3 Urban Form – Land use change

- **In central sub-cities:** Retail and business operation pushed out residential housing and community services
- **In surrounding sub-cities:** Agricultural and vegetation areas were converted to residential housing, manufacturing and storage

Notable changes: ■ Increased ■ Decreased

	4 Central Sub-Cities			6 Surrounding Sub-Cities			City-wide		
	Area (ha) in 2006	Area (ha) in 2016	% change by land use	Area (ha) in 2006	Area (ha) in 2016	% change by land use	Area (ha) in 2006	Area (ha) in 2016	% change by land use
Agriculture	6	2	-61.6	19786	**11424**	-42.3	19791	11426	-42.27
Vegetation	106	116	9.5	7161	**5408**	-24.5	7267	5524	-23.98
Minerals	0	0	0	418	1993	377	418	1993	376.97
Recreation	33	48	46.4	95	868	812.4	128	916	617.19
Transport	421	364	-13.6	1332	1879	41.1	1754	2243	27.92
Utilities and infrastructure	6	4	-27.8	281	355	26.1	287	359	24.99
Residential	**2647**	**2242**	-15.3	14361	**17880**	24.5	17008	20122	18.31
Community services	**223**	**187**	-15.9	631	755	19.6	854	942	10.3
Retail/Business	**201**	**554**	174.8	89	243	173.2	291	797	174.31
Manufacturing and storage	**40**	**187**	368.3	211	**1995**	847	251	2182	770.64
Administration	330	313	-5.2	701	1029	46.7	1031	1342	30.12
Bare Land	61	81	33.2	2669	2941	10.2	2729	3022	10.72
Special Use	124	101	-18.6	22	46	105.1	146	146	0.28

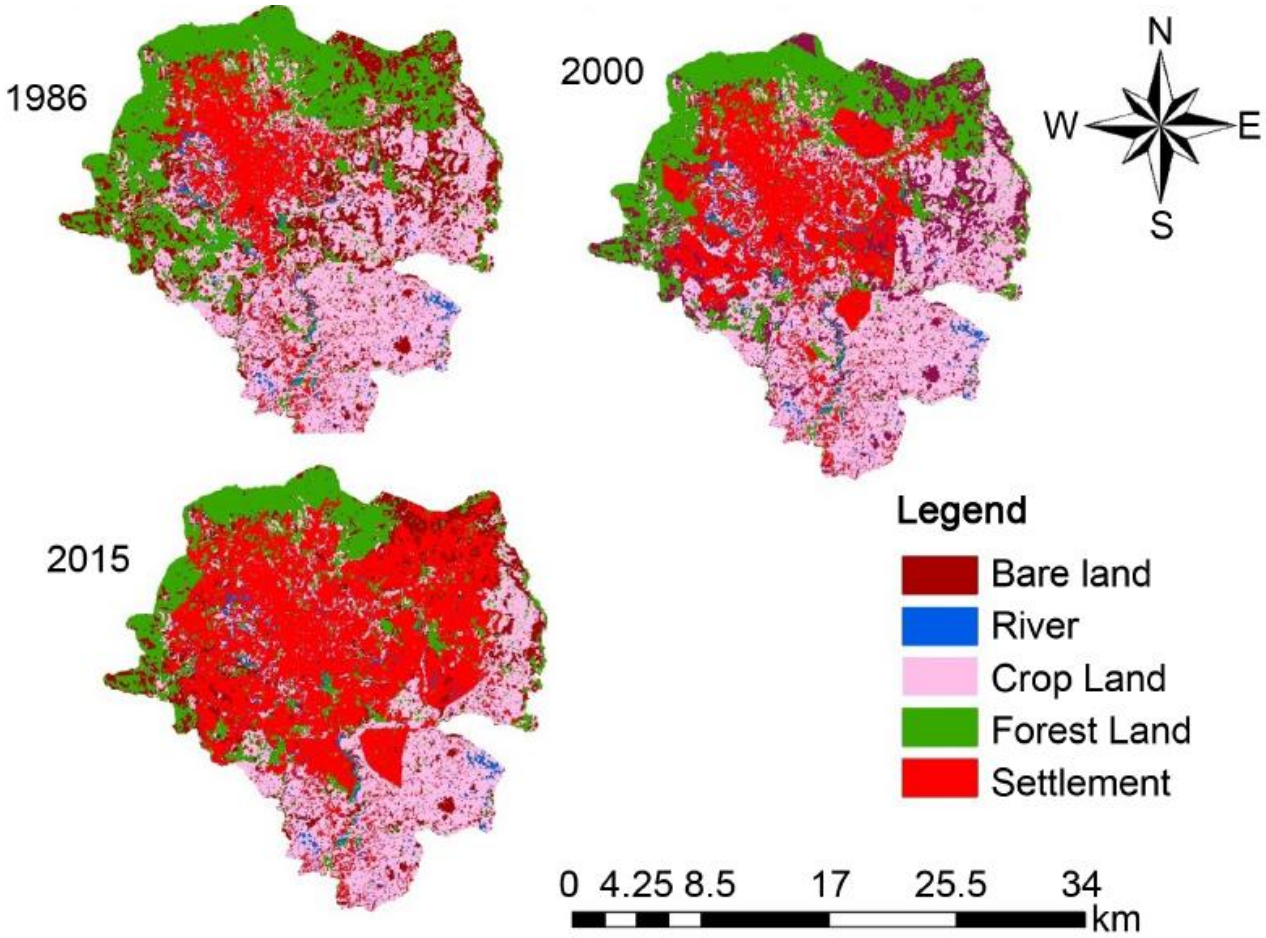
Note: The significant increase in mineral extraction reflects the demands of road and housing construction. While vegetation decreased, a botanical garden was established near the city's northern boundary and this increased the area of recreation land by 773 ha.

Source: Larsen, Yeshitela, Mulatu, Seifu, & Desta (2019)

While accommodating new growth, a shift to long-term thinking is required to plan ways to make room for nature and green areas.

2.4 Environment – Forest loss and green space

- Forest cover loss concentrated in the north, mainly in Yeka, Gullele, Kolfe Keranyo, Nafas Silk due to settlement expansion
- **Vegetation/forest land loss**: 8,310 ha between 1986-2015[1] (**21% → 5% of total area**)
- **Lacked green space in Addis**: 0.4 – 0.9 m^2/capita (WHO recommended minimum: 9m^2/capita) [2]
- **Disappearance of green space is estimated to be responsible for 40% of the flooding and landslides in the city** [2]



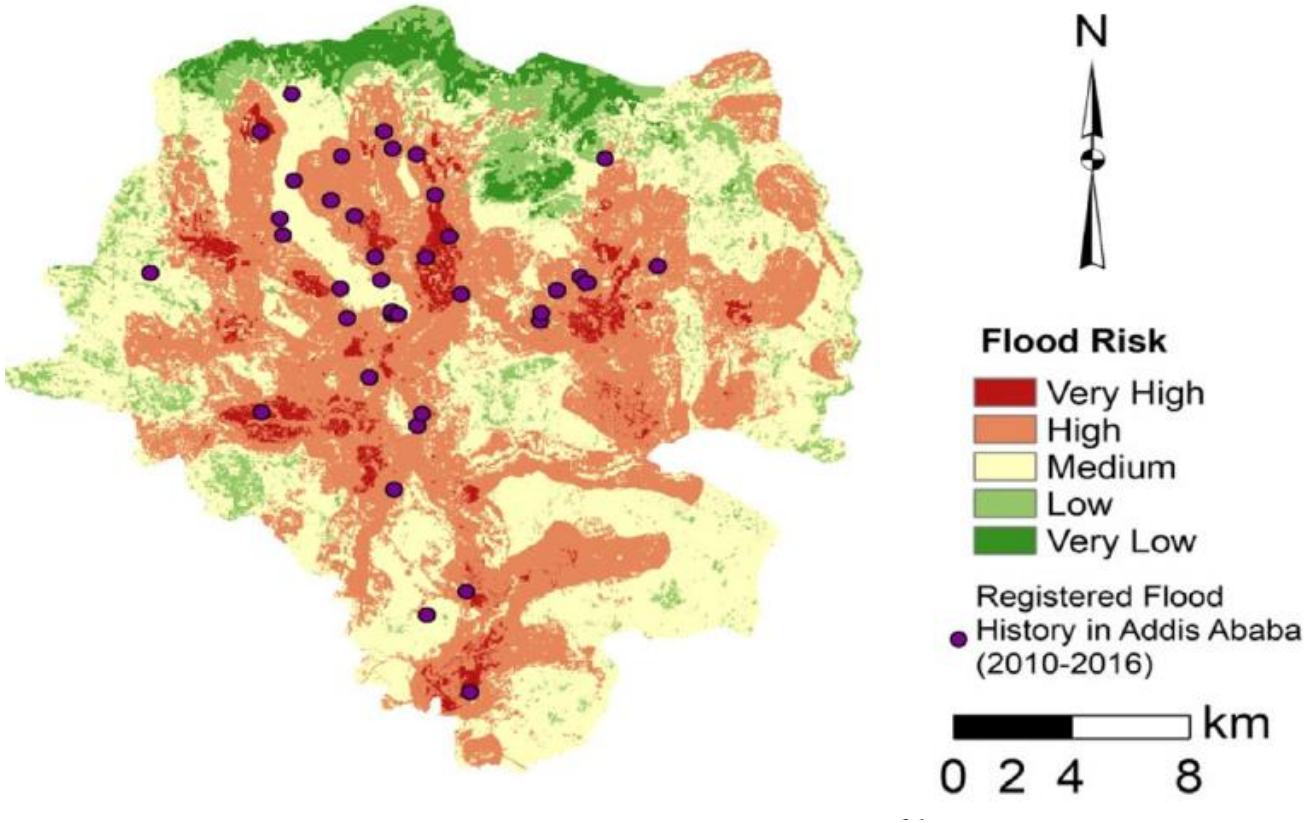
Source: Assaye et al. (2017)

1. Assaye et al. (2017); 2. UN Habitat (2017)

Climate Change impacts will increase in urban flash flooding, landslides and heat stress.

2.4 Environment & Resilience – Climate change and Flooding

- **Climate Change impact:**
  - ✓ Expected increase in mean annual rainfall: +35-50% by 2050 (currently around 1200mm)
  - ✓ Increase in mean annual temperature: +1.5% by 2050 (reinforced by urban density and soil sealing – "heat island effect")
- **Flood risks:**
  - ✓ Expansion of built environment increases flood discharge and flood risk: +28% runoff potential, +60% flood volume (1984-2002)
  - ✓ Localized flooding due to inadequate drainage, poor road design, obstruction of pipes (solid waste), inappropriate construction
  - ✓ City center is critically affected, 67 % of the population in the flood-prone residential area lives in mud and wood constructions



Source: Feyissa et al (2018): GIS based quantification and mapping of climate change vulnerability hotspots in Addis Ababa. Geoenviron Disasters 5, 14

Shortage of water has been a critical concern for Addis residents

2.4 Environment & Resilience – Water shortage

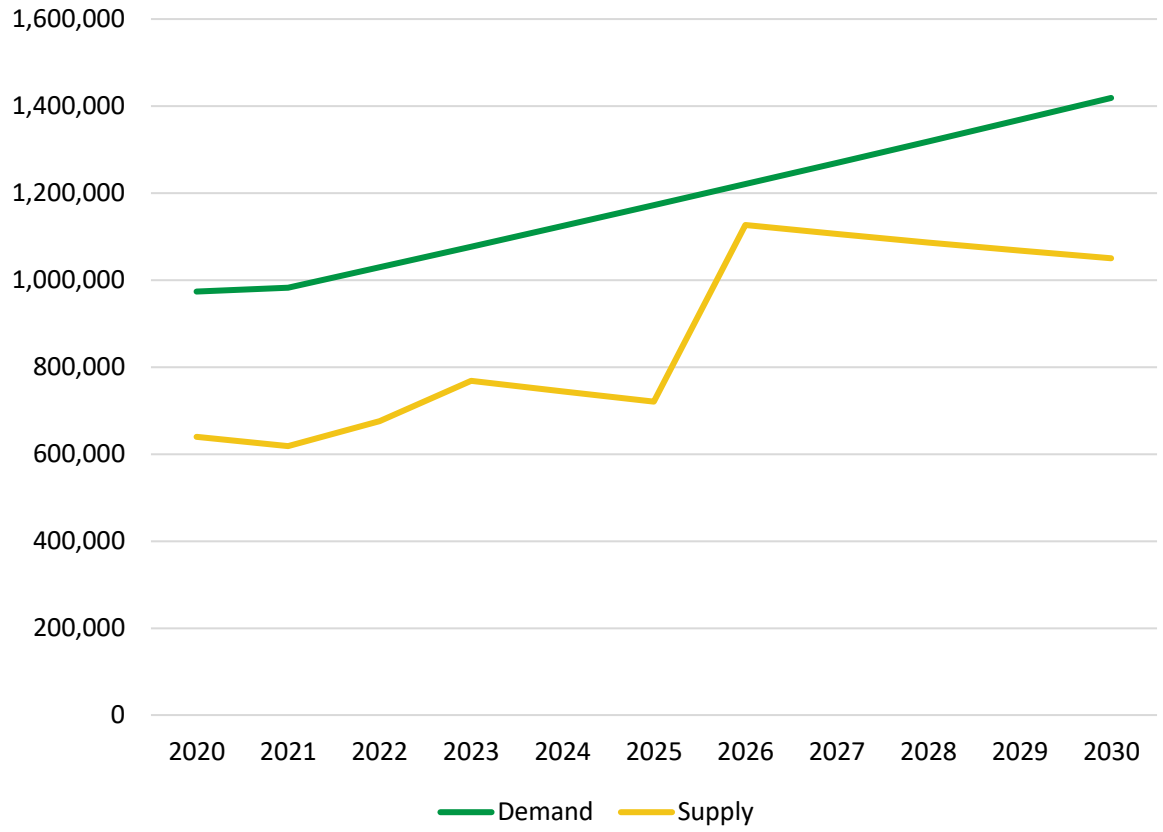
- **Water insecurity**:
  - ✓ Water production: 520,000m^3/day (lower than the production capacity of 574,000m^3/day) due to electric fluctuation and aged infrastructure
  - ✓ Demand and supply: **Not meeting the current and projected demand,** due to water supply projects not implemented as GTP II plan and the decline of ground water sources
  - ✓ Rationing and frequent water cuts are due to **power outages**
  - ✓ Frequency: **19 woredas getting water once a week**

Frequency/duration of water supply

Category	No. of Woredas	% of total
7days/week, 12-24 hours per day	21	18%
4-6 days/week	26	22%
2-3 days/week	50	43%
1 day/week	19	17%
Total	116	

Source: Addis Ababa Water and Sewerage Authority (AAWSA) (2020)

Projected demand and supply balance

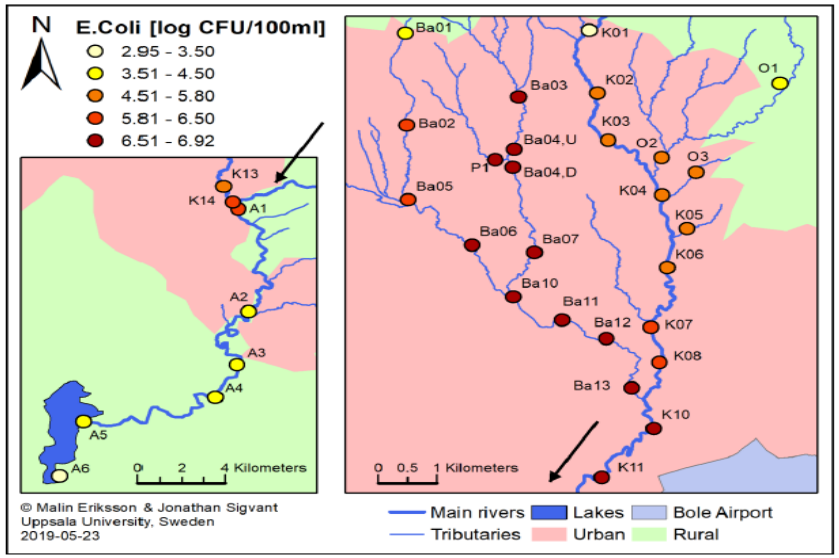


Source: Addis Ababa Water and Sewerage Authority (AAWSA) (2020)

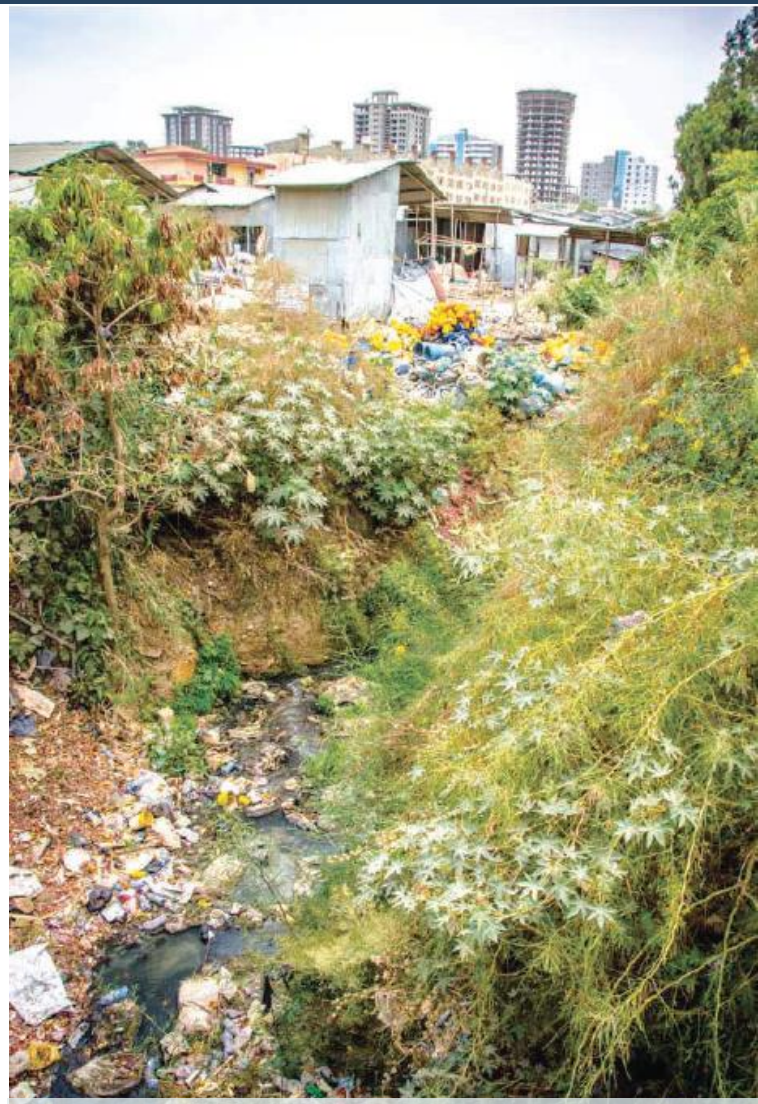
Water pollution poses risks to sustainability of the city environment

2.4 Environment & Resilience – Water pollution

- **High surface water contamination** in both Kebena and Akaki river, throughout the city, **mostly from domestic, municipality and industrial wastewater and solid waste**
- Rivers in Addis Ababa are simply used as a **receptacle of all kinds of solid and liquid wastes**
- **Fecal contamination**. With only 29% of the city connected to the sewage system, human feces end up in the river - the average *E. coli* concentration found is about the same as the concentration found in wastewater before treatment (5.2 to 8.7 log10 CFU per 100 ml)



Note: E. coli concentration [log10 CFU per 100 ml] in water samples collected March to April 2019 in the Great Akaki, Kebena and Bantyketu rivers in the city of Addis Ababa, Ethiopia
Source: Eriksson & Sigvant (2019)

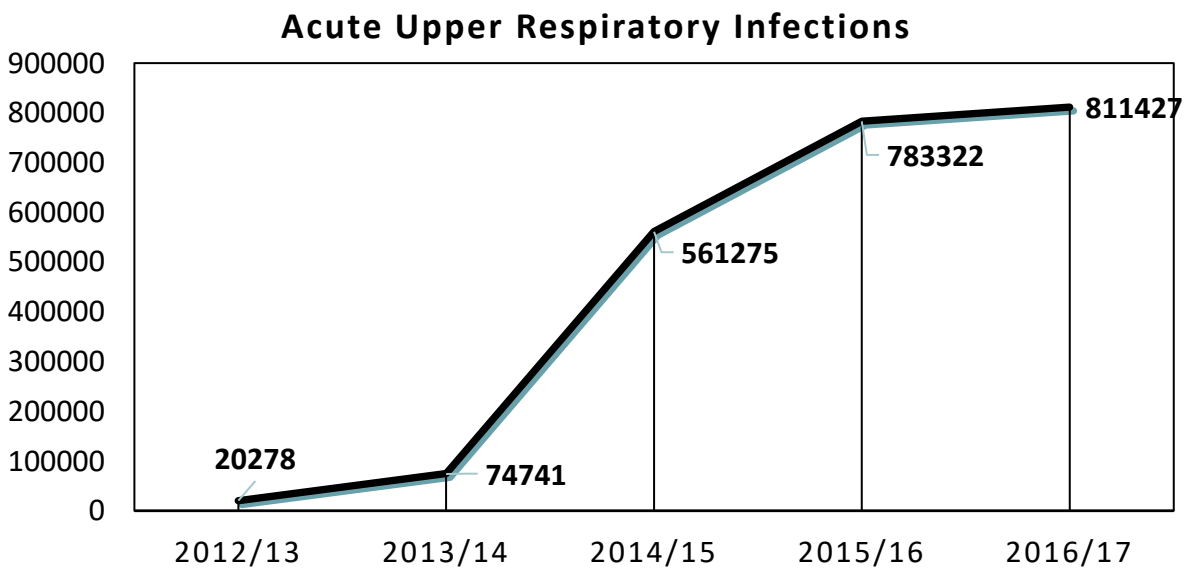


Source: World Bank (2017a)
(Photo Credit: Kathy Eales)

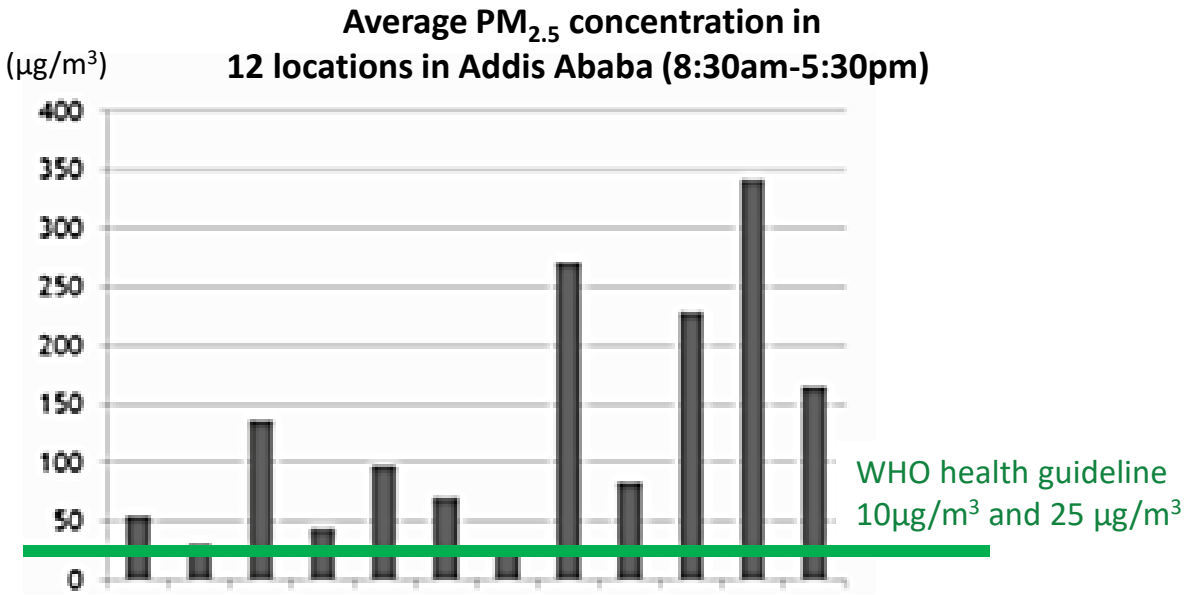
Air pollution is equally serious and affects public health

2.4 Environment & Resilience – Air pollution

- Significant increases **in acute upper respiratory infections** between 2012-2018
- **Low density urban expansion increases the time for trips and the demand for private-vehicle commuting → contributing to air pollution**
- **Increase in private vehicles in Addis Ababa**: 310,180 in 2012 to 447,669 in 2016 (70% of the vehicles registered in Ethiopia)
- **Lax vehicle emission control, aging fleet, and traffic congestion** attribute to poor air quality
- Other pollution source: indoor air pollution (cooking & heating), industrial pollution, open trash burning



Source: Addis Ababa Health Bureau from 2012/13 -2017



Source: Alemu (2012)

II. How is Addis Ababa Performing to Respond to Such Trends?

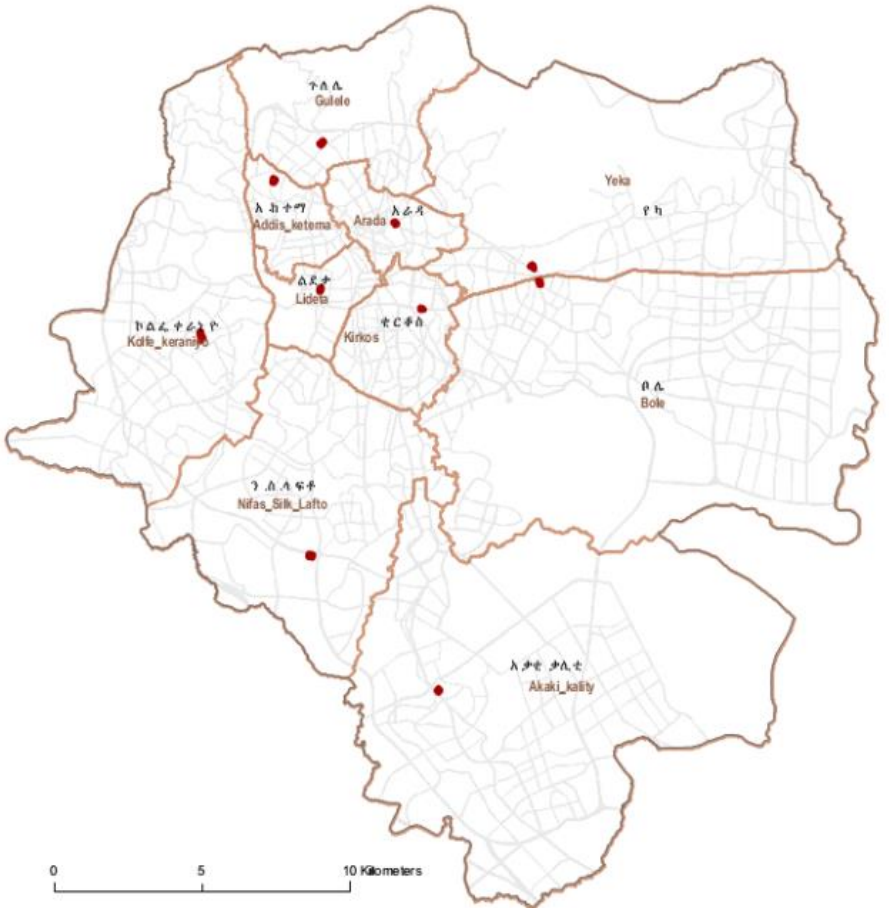
- City governance & financing
- Infrastructure & services
- Land & housing
- Urban economy & market

Addis is one of 11 states and city governments forming the second tier government within the federal system - a self-governing body, composed of 10 sub-cites and 116 woredas

3.1 City Governance - Structure

Vision	Enable Addis Ababa City government peaceful. Secure and good governance becoming conducive for residents social and economic benefits and needs as well as international diplomatic city (www.addisababa.gov.et)
Legal Personality	The city's legal identity as self-government body is emanated from the federal Constitution Article 49(1) and Revised Charter 361/2003.Proclamation 64/2019 determines the executive organs of Addis Ababa

Institutional organization:	**City**	**Sub city**	**Woreda**	**HPR**
1. Administration centers	1	10	116	
2. Councilors	138	3480	34800	23
3. Executive organs	• Mayor • Deputy Mayor • Cabinet • City Manager	• Chief Executive Officer • Standing Committee	• Chief Executive Officer • Standing Committee	
4. No of Executive organs	99 Budgetary Units (PEFA 2019,Report)	31-33	21	
5. Judiciary bodies	City court	-	Social Courts	-
6. Office of Auditor General	Auditor General	-	-	-



Addis went through a series of structural and institutional reforms and the city manager's role has diminished in delivering municipal services

3.1 City Governance – Municipal Functions

- **Structure:** Council-Mayor-City manager governance model
- **After structure modifications**: Most of the decentralized units were made directly accountable to the City Mayor
  - ✓ Expanded mayor's roles (political power/commitment/interference increased)
  - ✓ Diminished City manager's roles (professional management/managerial roles decreased)
  - ✓ Reduced responsibilities for Sub-cities/Weredas

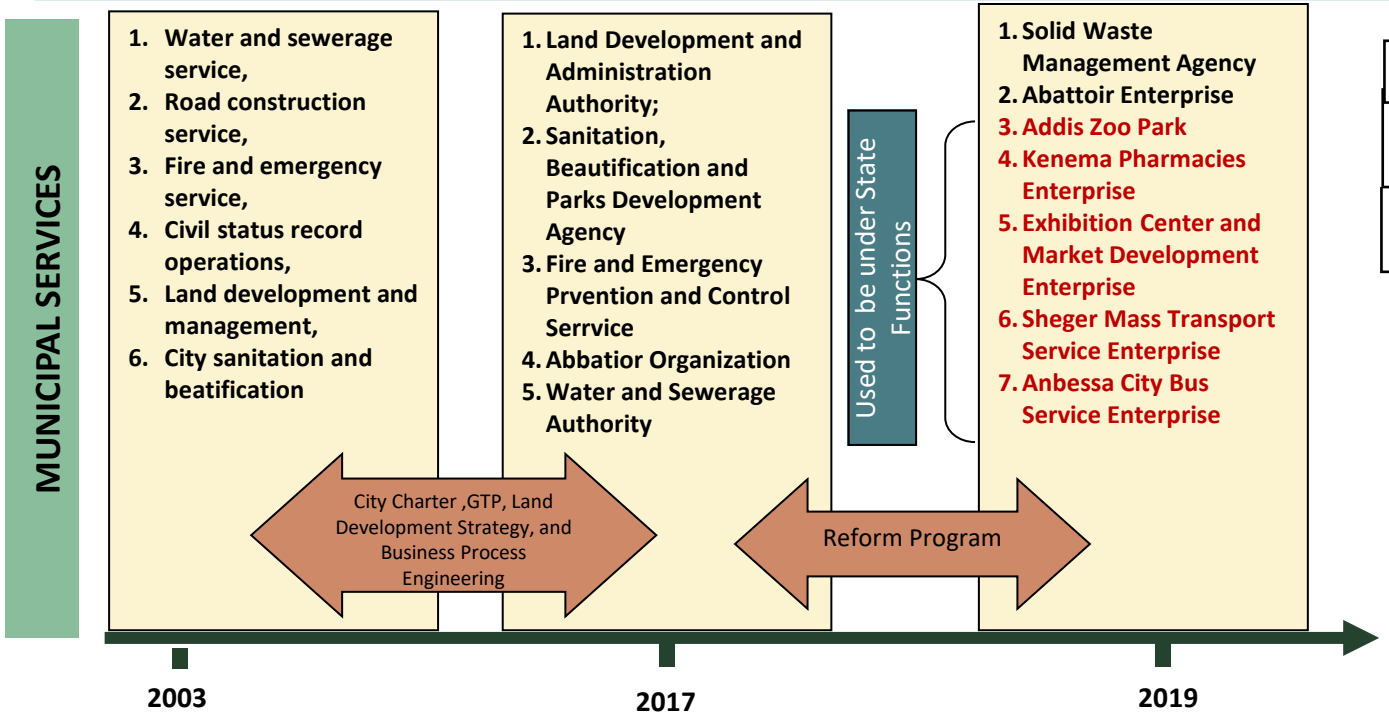
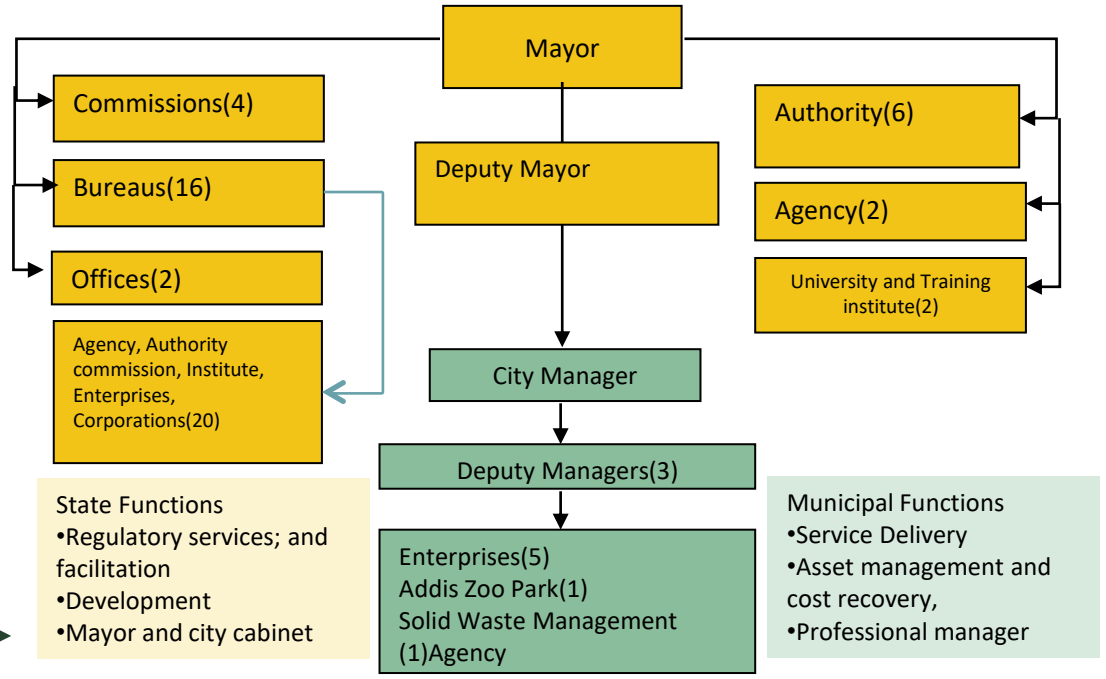


Figure : Municipal Services organization over the last 15 years,
Source: Designed based on Addis Ababa City Government (2003, 2019)



Source: Compiled by the WB consultant from Addis Ababa City Government (2019)

Responsibilities are not clearly defined and overlapped with several entities, which hampers the efficiency of delivery and maintenance and accountability to the citizens

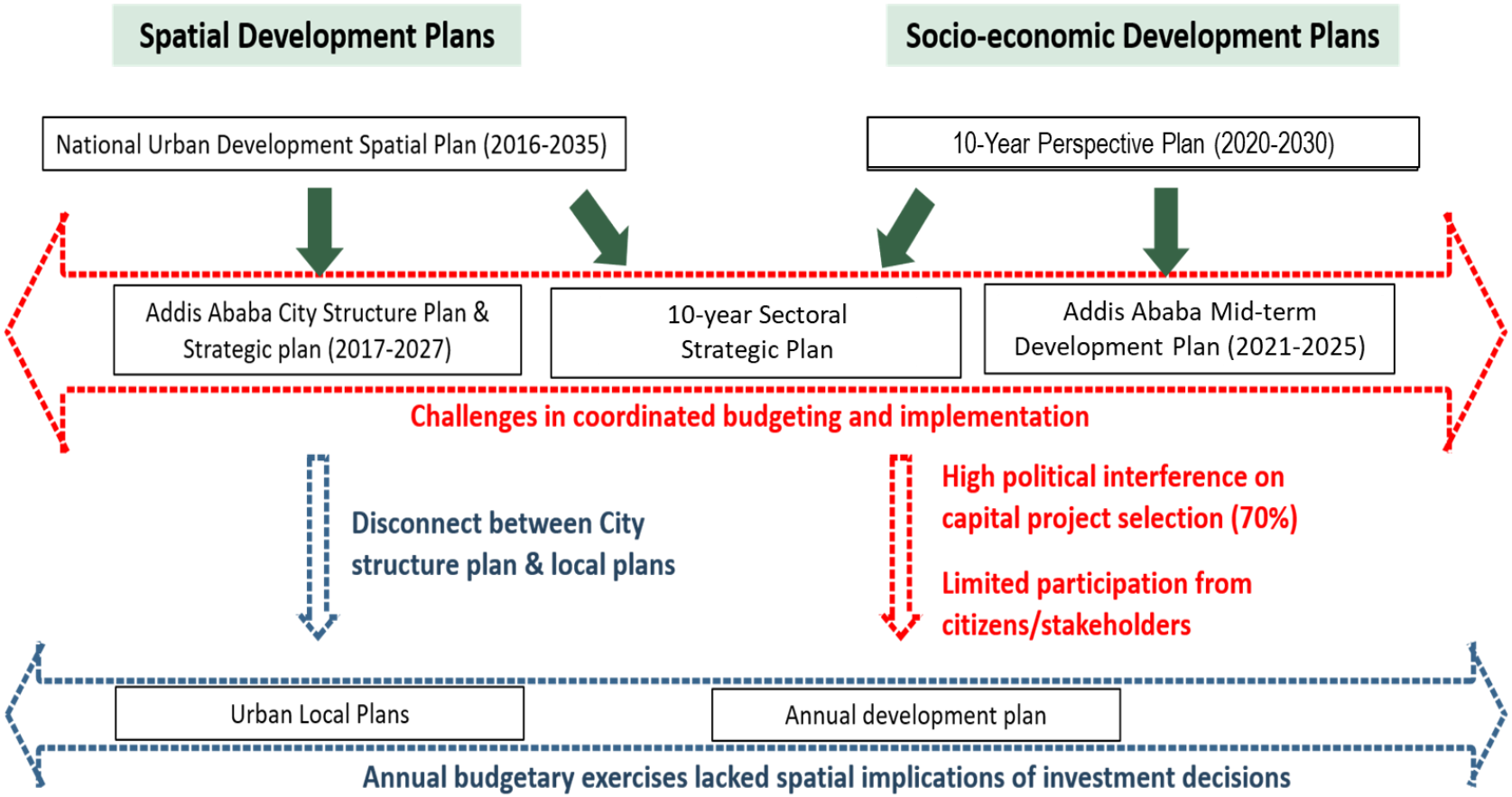
3.1 City Governance – Roles and Responsibilities

Sectors	Items	sub-category	Responsible entities											
			Woreda		Sub-city		City Administration		Federal government		Utility companies		Private	
			New works	Maintenance	New works	Maintenance	New works	Maintenance	New works	Maintenance	New works	Maintenance	New works	Maintenance
1. Infrastructure														
ROAD	Arterial street	Express way							X	X	X	X		
		Boulevard					X	X						
		Partial Express Street					X	X						
	Sub arterial street						X	X						
	Collector street						X	X						
	Access Path		X	X	X	X								
	Footpath						X	X						
	Drainage			X		X	X	X						
Sewerage & SWM	Sewerage	trunk main sewer					X	X						
		secondary line					X	X						
	Solid waste	Collection points/Transfer stations	X	X	X	X						X		X
		Land fill site					X	X						
2. Utilities														
	Street lighting						X	X						
	Electricity								X	X	X	X		
	Water supply						X	X			X	X		
	Wastewater						X	X			X	X		
3. Services														
	Transport	City Bus					X	X	X	X	X	X	X	X
		Taxi											X	X
		LRT							X		X	X	X	
		Terminal					X	X			X	X		

Strategic vision and plans are in place, how to effectively and efficiently coordinate its implementation is a challenge

3.1 City Governance – Plan and implementation

- Limited/low level of Implementation and monitoring of spatial and sectoral plans
- Need of strong linkages between planning and financing, mechanisms for institutional coordination and collaboration, and strategies for managing the urban edge and the sprawl
- Need of coordination with Oromia region to manage urban growth and boost economic development of the Addis and Oromia region → built upon the lessons from the failure of integrated spatial planning ("Master Plan") for Addis and Oromia special zone



More challenges in coordination and resource management also inhibit the performance of city government

3.1 City Governance – Challenges

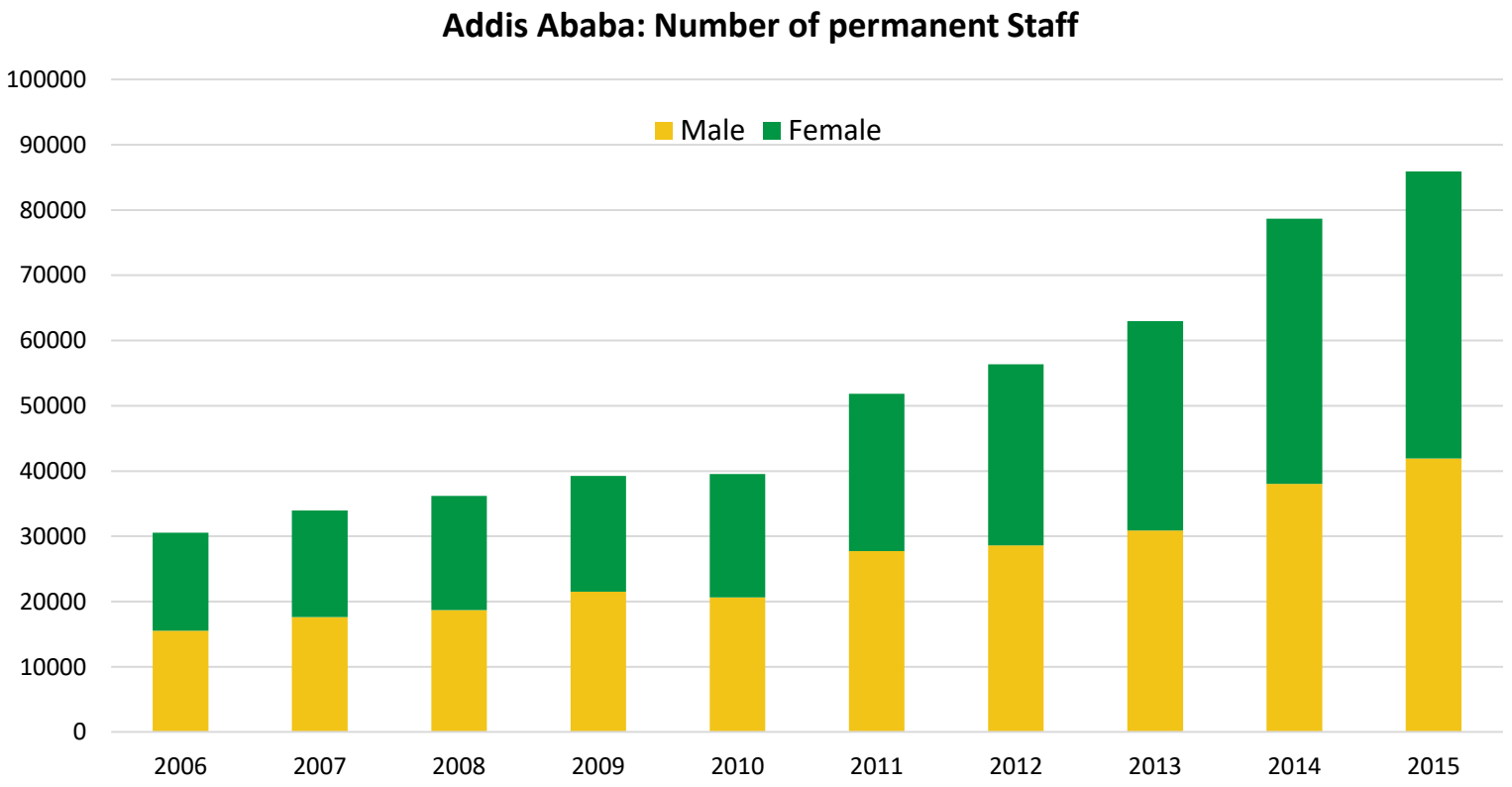
- **Need of separation of government branches**: Lack of decision making structures and mandates that separate the corporate and political body of the City Government; and lack of check and balances for oversight and holding the executive branch accountable
- **Lack of vertical coordination among different levels of government:** Lack of coordination between Federal entities and the City Government; and lack of coordination among the centre, sub-city and Woreda level administrations
- **Lack of horizontal coordination among different sectors**: Lack of coordination between (sectoral and spatial) planning entities; lack of coordination between planning and implementing entities; and lack of coordination among infrastructure/utility agencies
- **Deficit of Institutional memory and inefficiency:** Lack of institutional memory through high turnover of managerial manpower and professionals; predominantly manual or/and paper-based records system; lack of coordination of spatial and non-spatial data; lack of modern equipment
- **Resource base:** Lack of appropriate tax policy, structure, collection and administration; and lack of modern and integrated tax information system
- **Data management and supporting ICT capacity**: non-existent of integrated information management system; lack of ICT equipment and technical capacity
- **Stakeholder involvement:** Lack of sustainable public participation with regards to project planning and implementation; lack of trust and relational ties with stakeholders, hence loss of potential development partners

Source: Addis-Ababa City Planning Project Office (AACPPO) (2017)

The shortage of skilled workers and high turnover become bottlenecks

3.1 City Governance – Challenges in human resource

- 57% of the staff are young people in age range(18-32)
- 63% of the staff are less than 10 years of service in 2018
- High turnover due to frequent transfers - 18% in 2018



Source: Addis Ababa public service bureau (2018)

Chart 4: Percentage distribution of employees according to age (2018)

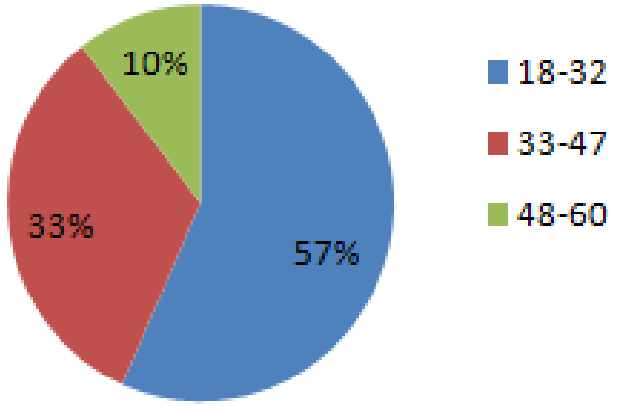
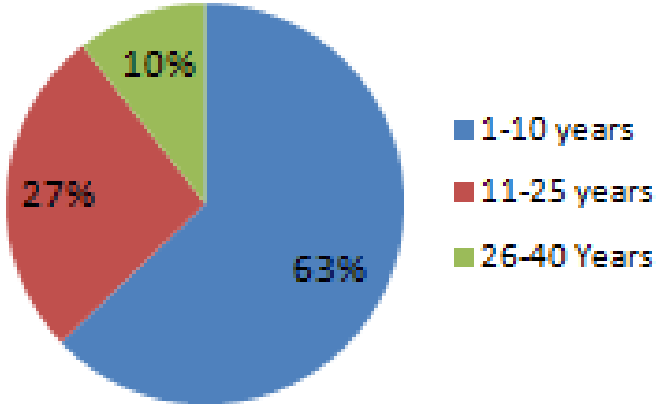


Chart 5: Number of Staff According to Years of Service (2018)



City financing has significantly increased in both revenue and expenditure at a faster rate than the city's GDP growth rate

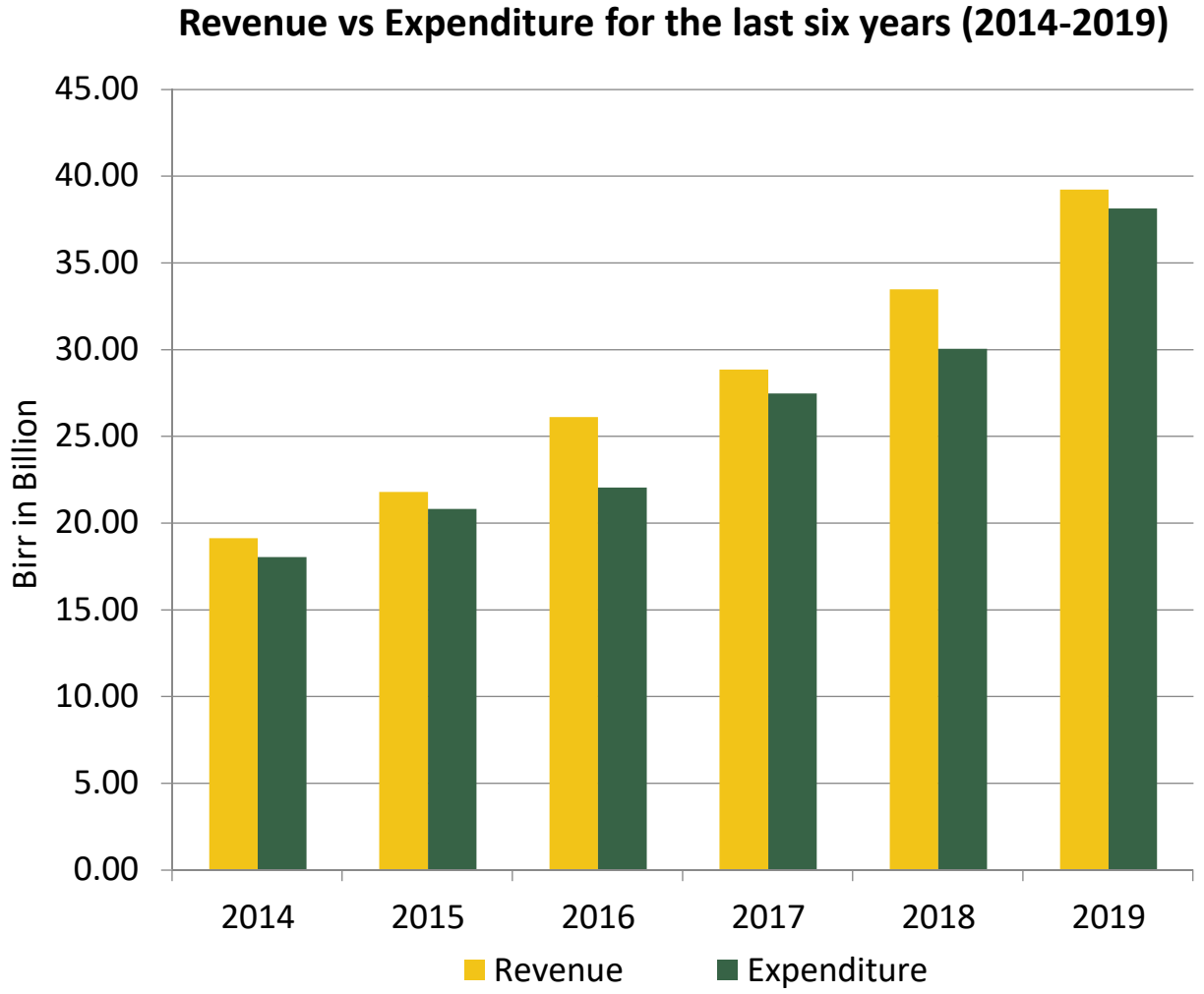
3.2 City Financing – Revenue & expenditure

- As a chartered city, Addis has a unique privilege to collect and retain state revenue as well as municipality revenue
- It is financially self-sufficient and does not receive any grants from federal government and has extensive budgetary powers.

MUNICIPAL FINANCE ITEMS OF REVENUE AND EXPENDITURE

REVENUE				EXPENDITURE	
1	Items of Domestic Revenue	2	External Assistance		Items of Expenditure
1.1	Tax Revenue		Multilateral Institutions	1	Personnel Services
	Tax on Income, Profit and Capital Gain	3	External Loan		Emoluments
	Value Added Tax /VAT/		Multilateral Loans		Allowances/Benefits
	Value Added Tax On Services				Pension Contributions
1.2	Excise Taxes on Locally Manufactured Goods			2	Goods and Services
	Sales Turnover Tax On Locally Manufactured				Goods and Supplies
	Service Turnover Tax				Travelling and Official Entertainment Servi
	Stamp Sales and Duty				Maintenance and Repair Services
1.3	Non-Tax Revenue				Contracted Services
	Administrative Fees and Charges				Training Services
	Sales of Public Goods and Services				Stocks of Emergency and Strategic Goods
	Government Investment Income			3	Fixed Assets and Construction
	Miscellaneous Revenue				Fixed Assets
1.4	Capital Revenue				Construction
1.5	Subsidy Revenue			4	Other Payments
1.6	Municipality Revenue				Subsidies, Investments and Payments
	Municipality Tax Revenue				Debt Payments
	Municipality Rent Revenue				
	Municipality Service Charge				
	Sale of Goods and City Services				
	Other Capital Revenues				

The city spends on 4 main and 13 sub expenditure items

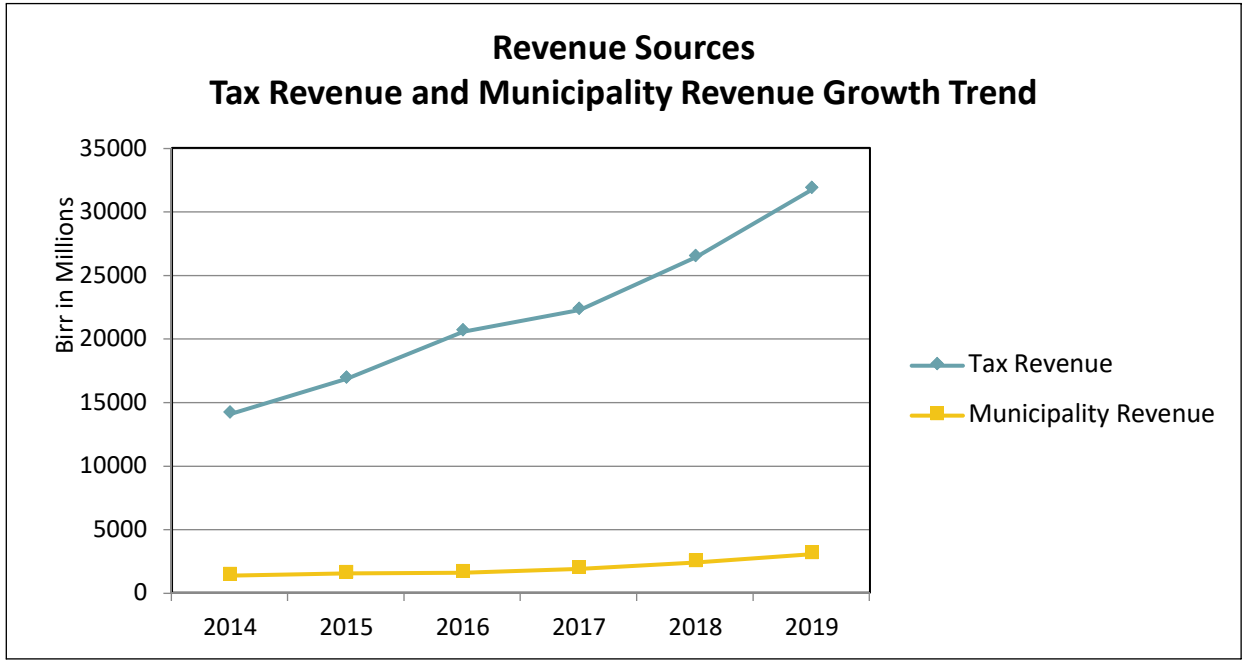


Source: Addis Ababa City Administration

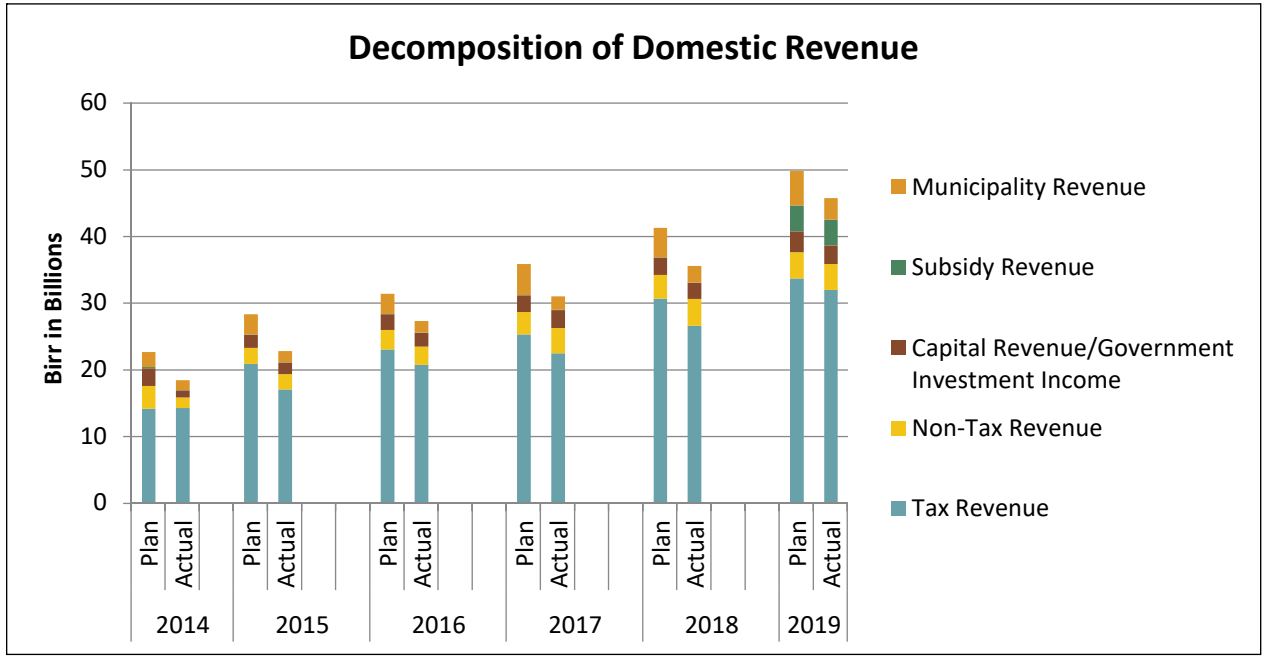
City's revenue increase is largely driven by tax revenue while municipality revenue base and rates are too low

3.2 City Financing – Revenue

- City's revenue has doubled in the last 5 years
- Actual revenue outturn is around 85% of target due to low collection, decrease in land lease sales. Performance of municipality revenue collection is particularly low at 43-58%
- High revenue elasticity of over 1 against GCP
- Tax, municipality revenue and government investment income contribute 81%, 8% and 7% of the domestic revenue



Source: Addis Ababa City Administration

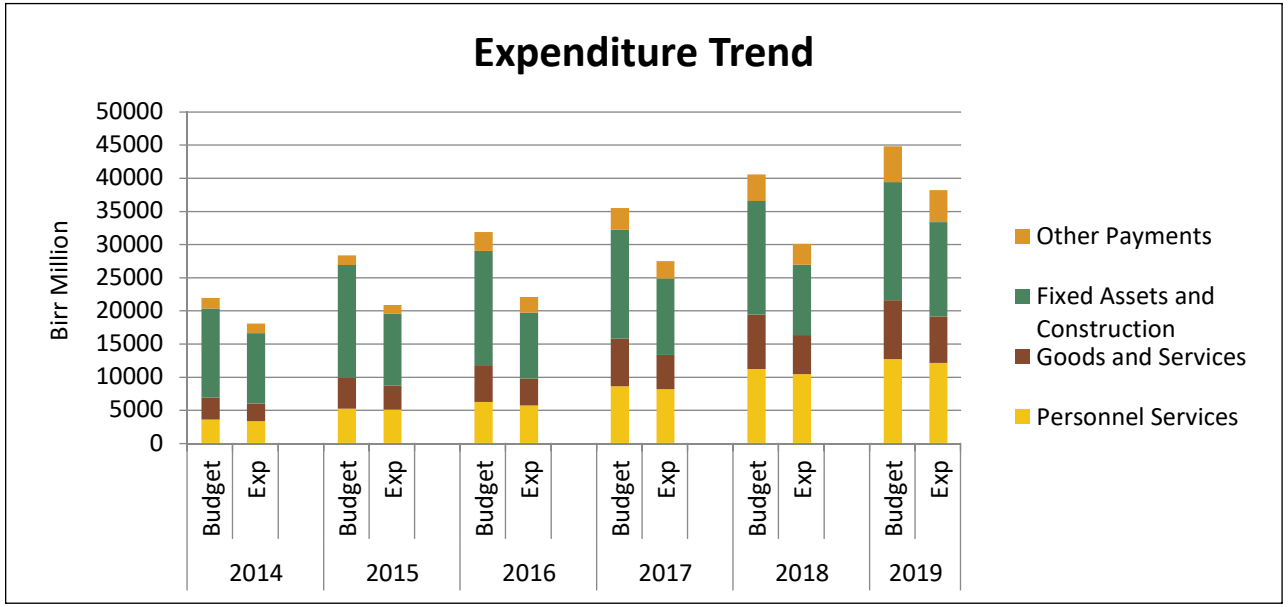


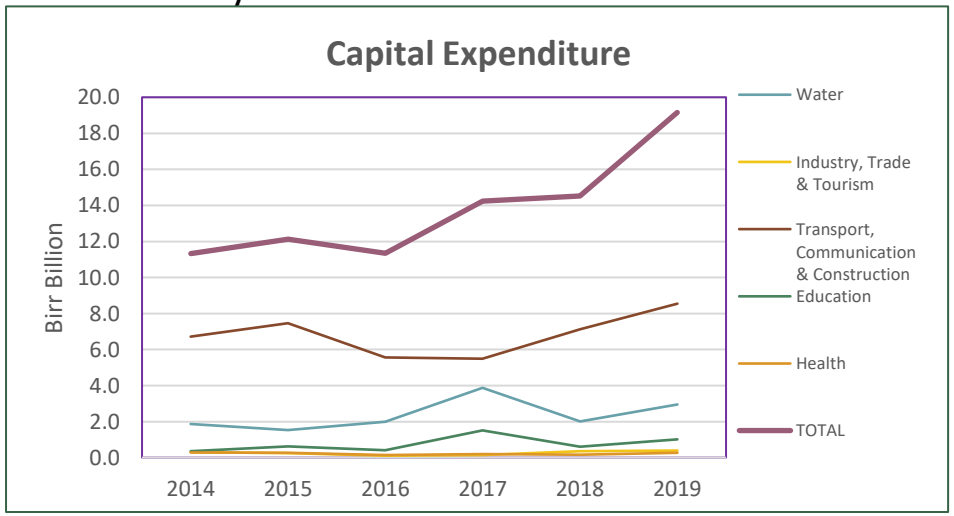
- The share of municipality revenue remains low at 8%. Without Addis' privilege of retaining state revenue, it would have been very hard to finance its expenditure demands
- Revenue Enhancement Plan identified five major reasons for low performance in municipality revenue collection: (a) weak institutional and human resource base, (b) low tax base and rates, (c) low tariffs and too infrequently adjusted, (d) low charges and fees for utilities, and (e) weak debt collection and non-recovery of major investments

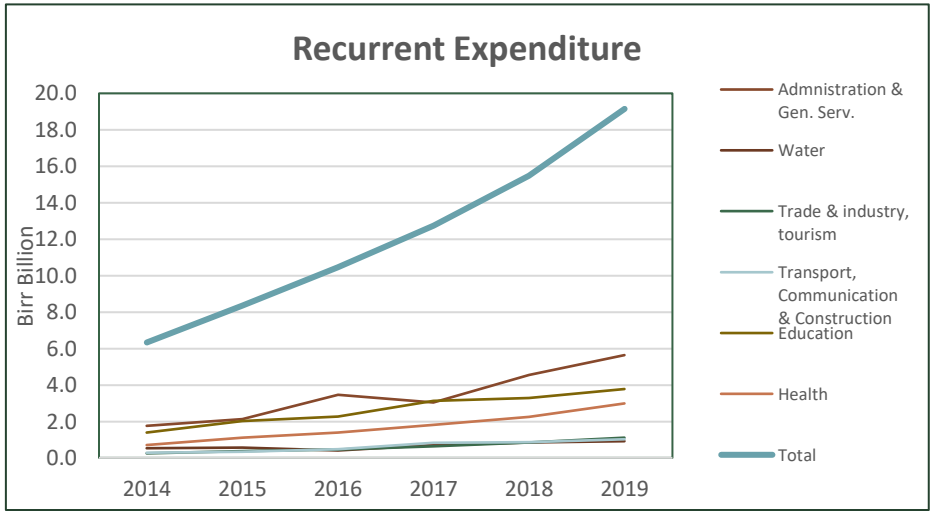
City's expenditure has equally increased, but budgets are not strategically allocated, underutilized and subject to significant variations

3.2 City Financing – Expenditure

- Budgets are not strategically allocated but largely driven by political decision and lack participatory planning
- Budget is essentially an annual document, lacking a medium or long-term strategic character
- Actual expenditure outturn is 69-78% of budgets due to delays in procurement, implementation capacity, and shortage of foreign currency
- Variations in expenditure composition are large at 17-30%, indicating an inability to spend resources according to plans and negatively impacting efficient service delivery
- Recurrent expenditure has increased faster than capital expenditure
- Construction, transport and water are key sectors (60%) for capital expenditure; admin, education and health for recurrent expenditure







Source: Addis Ababa City Administration

Financing development needs is in big challenge

3.2 City Financing – Development needs

- Development needs under the structure plan amount to 881 billion birr for 10 years with the following financing options:
  - ✓ Federal: 49 Billion birr (6%)
  - ✓ City: 453 Billion birr (51%) – **Average 45 Billion birr per annum**, relying heavily on external assistance and local loan
  - ✓ Private Sector: 379 Billion birr (43%)
- Capital expenditure amounts to **15.5 Billion birr** in 2018, representing 9% of the city's GDP. While higher than other Ethiopian cities, it's far from meeting the city's development needs
- Own source municipality revenue represents only 1.5% of the city's GDP. This strengthens the argument that the city needs to strengthen its own municipality revenue generation and engagement of private sectors for municipal services.

Indicators	2016	2017	2018
	%of GDP	%of GDP	%of GDP
Total Revenue	18.49	18.35	20.30
Domestic Revenue	17.86	18.01	20.07
Municipality Revenue	1.22	1.29	1.53
Grant from Road fund	0.03	0.04	0.01
External Grants	0.02	0.01	0.01
External Loans	0.60	0.33	0.22
Total Expenditure	15.46	17.19	18.22
Recurrent Expenditure	7.42	8.12	9.40
Capital Expenditure	8.04	9.07	8.81
Aggregate Surplus (Inc. Grants)	3.03	1.16	2.08
GDP (ETB billion)	141.01	157.03	164.77

Source: Addis Ababa City Administration

City's public expenditure and financial accountability has been slightly downwards since 2014 - transparency and accountability has significantly improved but critical shortcomings remain

3.2 City Financing – Public Expenditure and Financial Accountability (PEFA) findings

Budget Reliability

- Low outturn in both revenue and expenditure
- High variations in expenditure composition

Strategic Allocation of Resources

- Poor alignment b/w budget allocation and strategic plans
- Selection of investment to a high extent based on political considerations
- Only 12% budget unit prepares Medium-term budget estimates tracking sector plans

Efficient Use of Resources for Service Delivery

- Reasonably good management of recurrent income and expenditure; but weak public investment and asset management
- Only 30% of capital projects undergo rigorous criteria
- No forward-linked recurrent expenditure connected with MT capital expenditure frame

Management of Assets and Liabilities

- 7 public enterprises financial records not captured in city's financial statements
- Contingent liabilities on bonds for the housing agency & bus transportation network not recorded

Health services are improving, but not meeting the growing demands

3.3 Services – Health

- **2016/17 Health stats**:
  - ✓ Under 5 mortality rate: Reduced to 28/1000 in 2016/17
  - ✓ Mothers' mortality rate: Reduced to 412/100,000 in 2016/17
  - ✓ Access to safe water: 91.35% in 2016/17
  - ✓ Life expectancy: 67 years
- Most health clinics are **privately owned**
- Government: **67** health centers, **6** hospitals and **2** health posts in 2017/18
- **Private**: **676** clinics of different levels in 2012
- Physically accessible to most of the health facilities
- But, **not sufficiently meeting the growing demands**
  - ✓ Population-hospital ratio: 35,000 population per health center- not meeting the national standard (25,000 population per health center)

Photo: World Bank (2015a)

Source: WB Health GP input; World Bank (2019c)

Access to formal education is improving with gender equality, more support is needed in increasing access to secondary schools and vocational training

3.3 Services – Education

Photo: World Bank (2015a)

- **2017/18 Education stats: Addis Ababa faring better than their peers in other regions**
  - ✓ Gross enrolment ratio for pre-primary: 91.93%
  - ✓ Gross enrolment ratio for primary: 93.6%
  - ✓ Gross enrolment ratio for secondary: 85.3%
  - ✓ More female secondary school students (55%)
- **1168** pre-primary schools, **806** primary schools, **217** secondary school – majority belonged to the private sector
- **School feeding program** contributing to the learning of poor and vulnerable children
- **Challenges:**
  - ✓ Access to secondary schools; water and sanitation facilities
  - ✓ Weak linkage between education and labor market

Source: Education GP input; Ministry of Education of Ethiopia (2018), World Bank (2019c)

Current social protection programs have low coverage and are fragmented

3.3 Services – Social safety net

- **Socio-economic stats**:
  - ✓ Poverty rate: 28.1% in 2011 → 16.8% in 2016
  - ✓ Unemployment rate: 25.1% in 2011 → 19.3% in 2020
- A new Jobs Commission was established in 2018 with a mandate of spearheading the youth employment agenda
- **Challenges**:
  - ✓ Influx of migrants to Addis Ababa
  - ✓ Low coverage and fragmented current social protection program (several on-going social protection programs but not coordinated)
  - ✓ lack of appropriate data and management information system

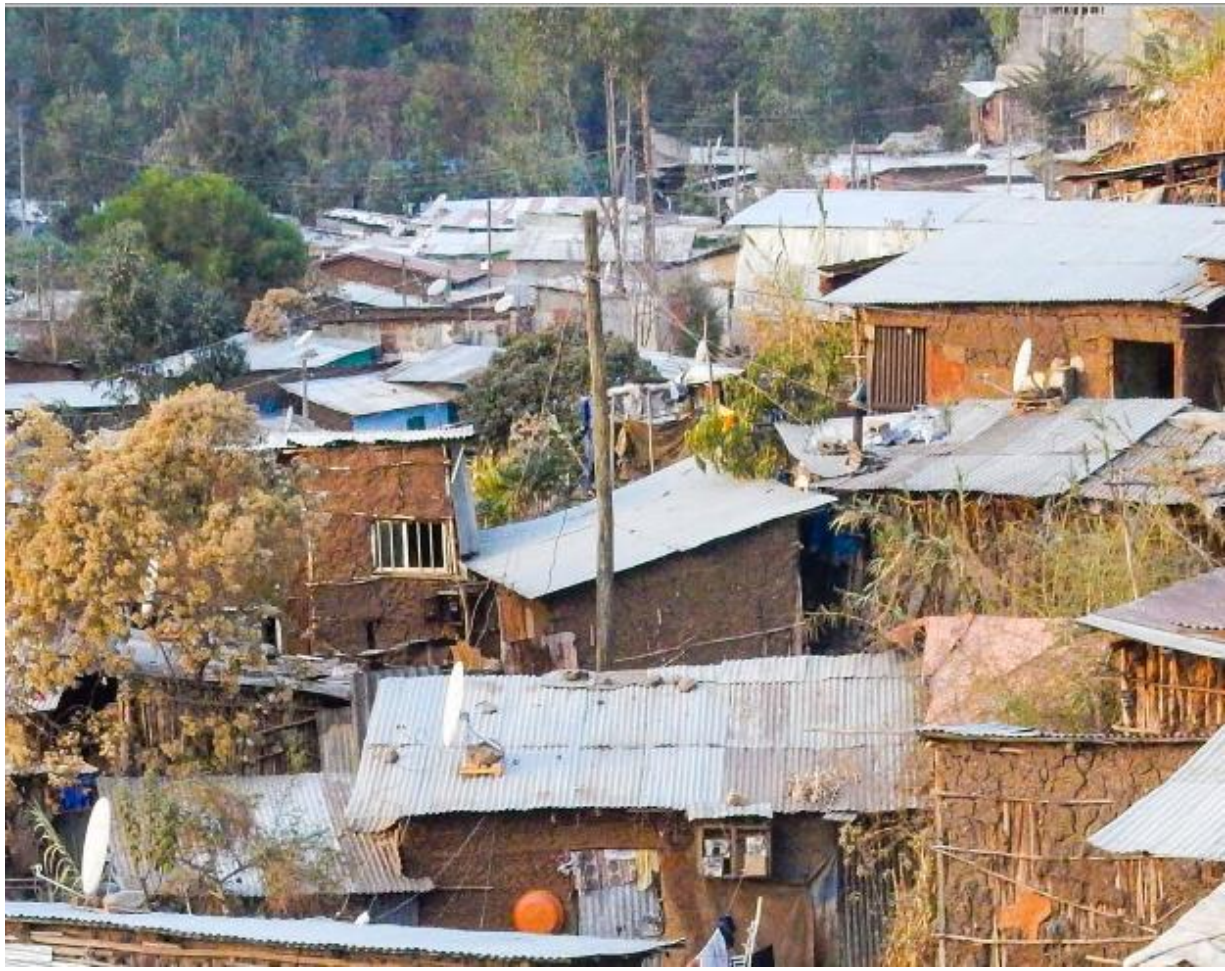


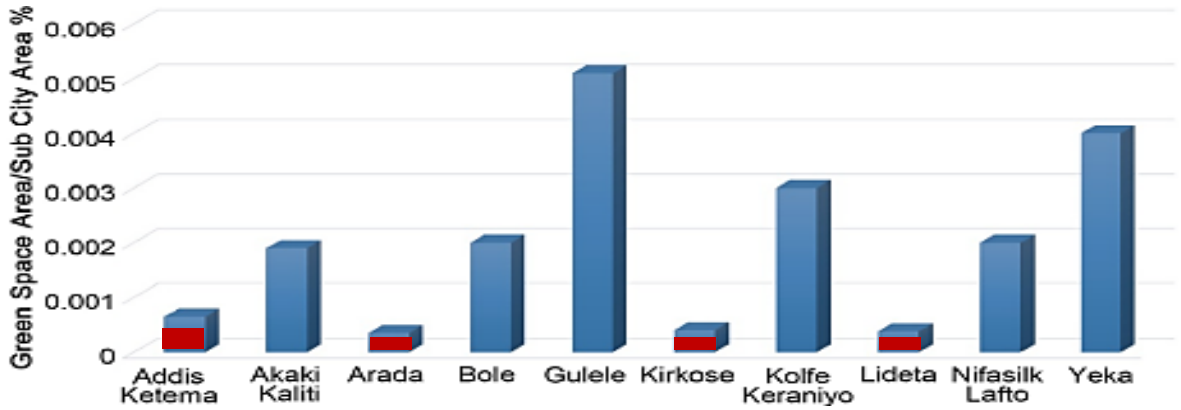
Photo: World Bank (2015a)

Source: WB Health GP input; World Bank (2019c, 2020), CSA (2020)

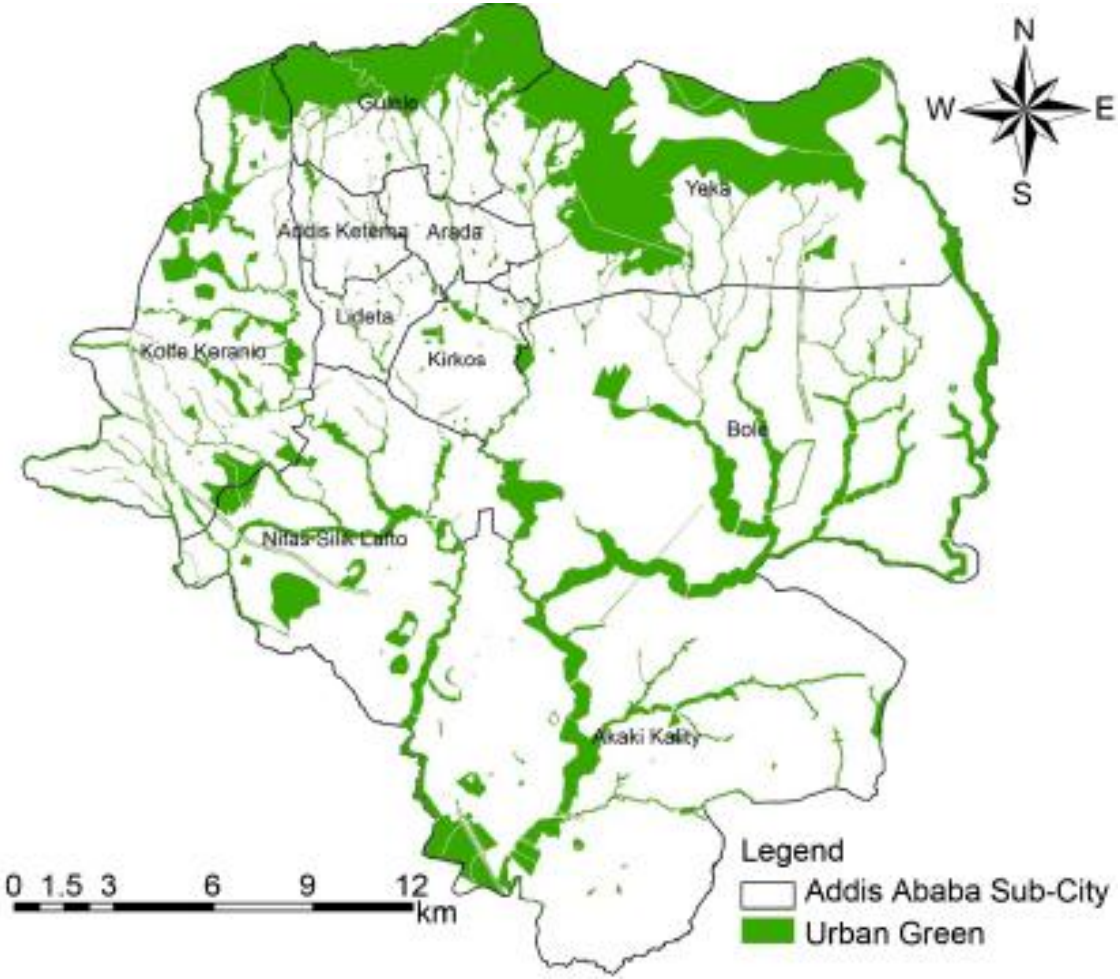
Planned public green spaces are limited in terms of its availability and distribution

3.3 Services – Public spaces

- **359** Sports facilities in 2012
- **18** functional recreational parks in Addis Ababa (113.7 ha) in 2017 - **at 0.4-0.9 m²/person** (WHO recommended minimum 9m²/person)
- Especially four central sub-cities barely access to green spaces
- **Challenges**:
  - ✓ Sports field: Limited private sector involvement and land use violations
  - ✓ Green space: Deforestation, land degradation and proliferation of unplanned (informal) settlements
- **Government-led projects:** Government perceived the needs and initiated riverside green development (e.g. Beautifying Sheger Project)



Comparison of urban green space in 10 sub-cities

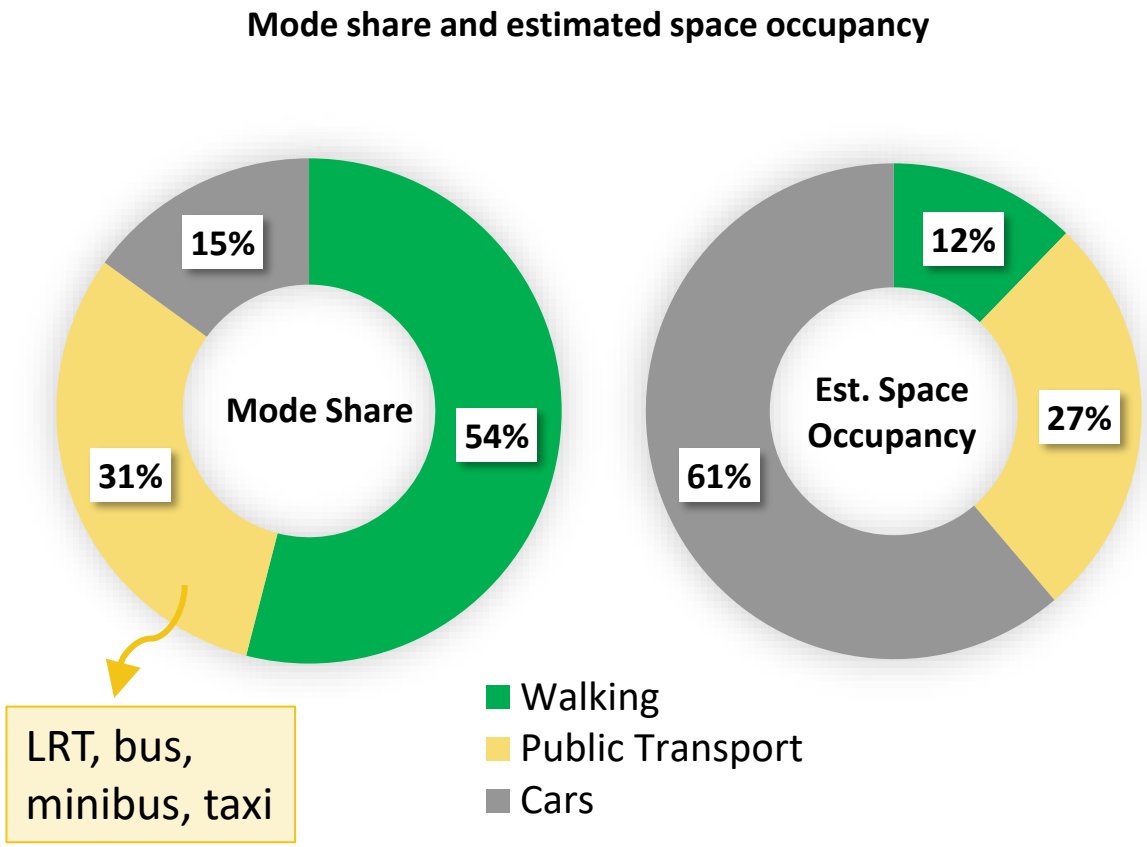


Map of urban green spaces, 2015

Source: (Left/Right) Assaye et al. (2017)

Public transport experiences service overlaps and low reliability; Walking receives the least level of service

3.3 Services – Non-motorized transportation



Source: SCTDP Baseline Report

- **Need of expanding the mass transit system and TOD:**
  - ✓ Light rail transit with 120,000 passenger/day
  - ✓ Lack of coordination between land use and transport
- **Need of optimizing bus network and Modernizing bus operations:**
  - ✓ **Three types of bus: Anbessa, Shegar, mini/midi buses**
  - ✓ High competition among different bus operators
  - ✓ Coverage at the expense of frequency (e.g. Anbessa)
  - ✓ Fleet breakdowns
  - ✓ Congestion at stops, road safety concerns for passengers
- **Poorly-served pedestrians:**
  - ✓ **440km pedestrian road (only 12% of the total road)[1]**
  - ✓ **53% of city core - no pedestrian facilities [1]**
  - ✓ **lack of walkability**: sidewalks, often discontinued, blocked, or fail to reflect pedestrian desire lines
  - ✓ Disproportional risks to pedestrians (84% of death due to car accidents)[2]

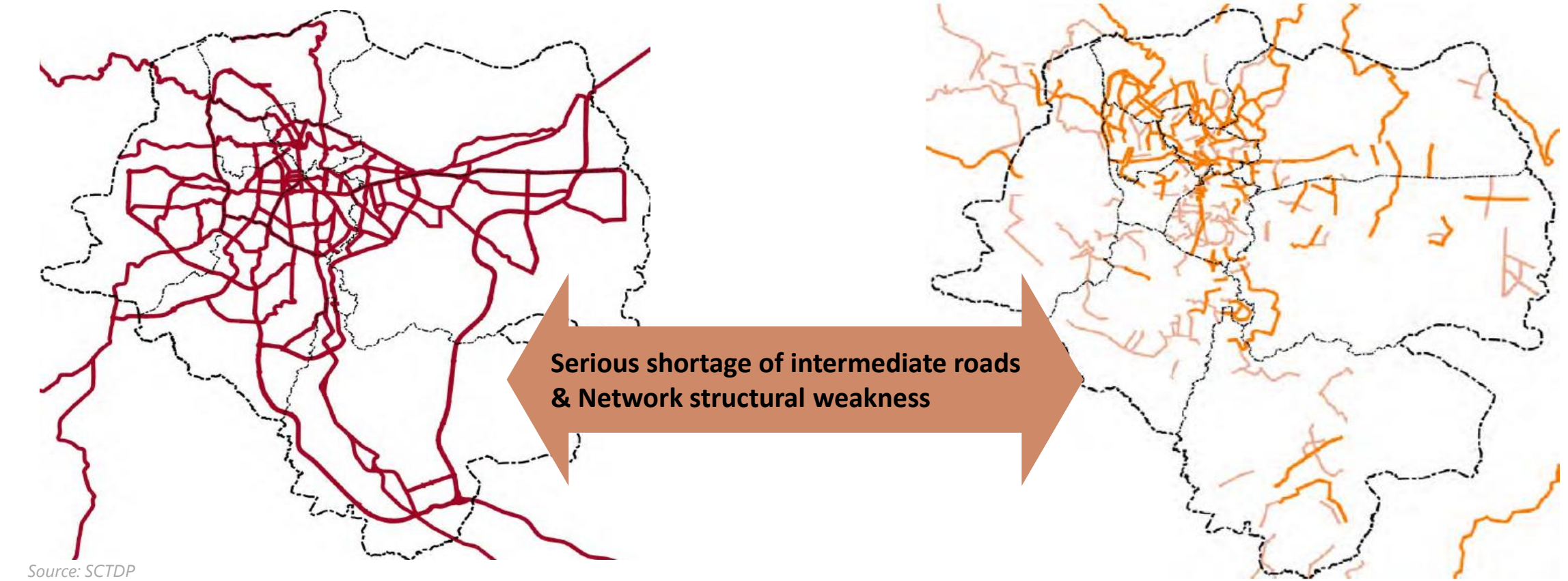
Source: WB Transport GP input, [1]Addis Ababa Transport Bureau & Addis Ababa Transport Strategy Committee (2019) Transportation strategic plan for Addis Ababa city, [2] Addis Ababa Road Safety Report (2019)

The coverage of principal roads improved on a par with international density standards, but intermediate roads still have low density

3.3 Infrastructure – Transport

- **Principal Roads (expressways & major arterials)**
  - ✓ Good road density: 1.5km road per sq. meter
  - ✓ Largely on a par with international density standards

- **Intermediate Roads (minor-arterials & collectors)**
  - ✓ **Inadequate road density**: 0.74km per sq. meter
  - ✓ 5 sub cities only @ 10-20% of international density standards: Yeka, Bole, Akaki, Kolfe, Nifas

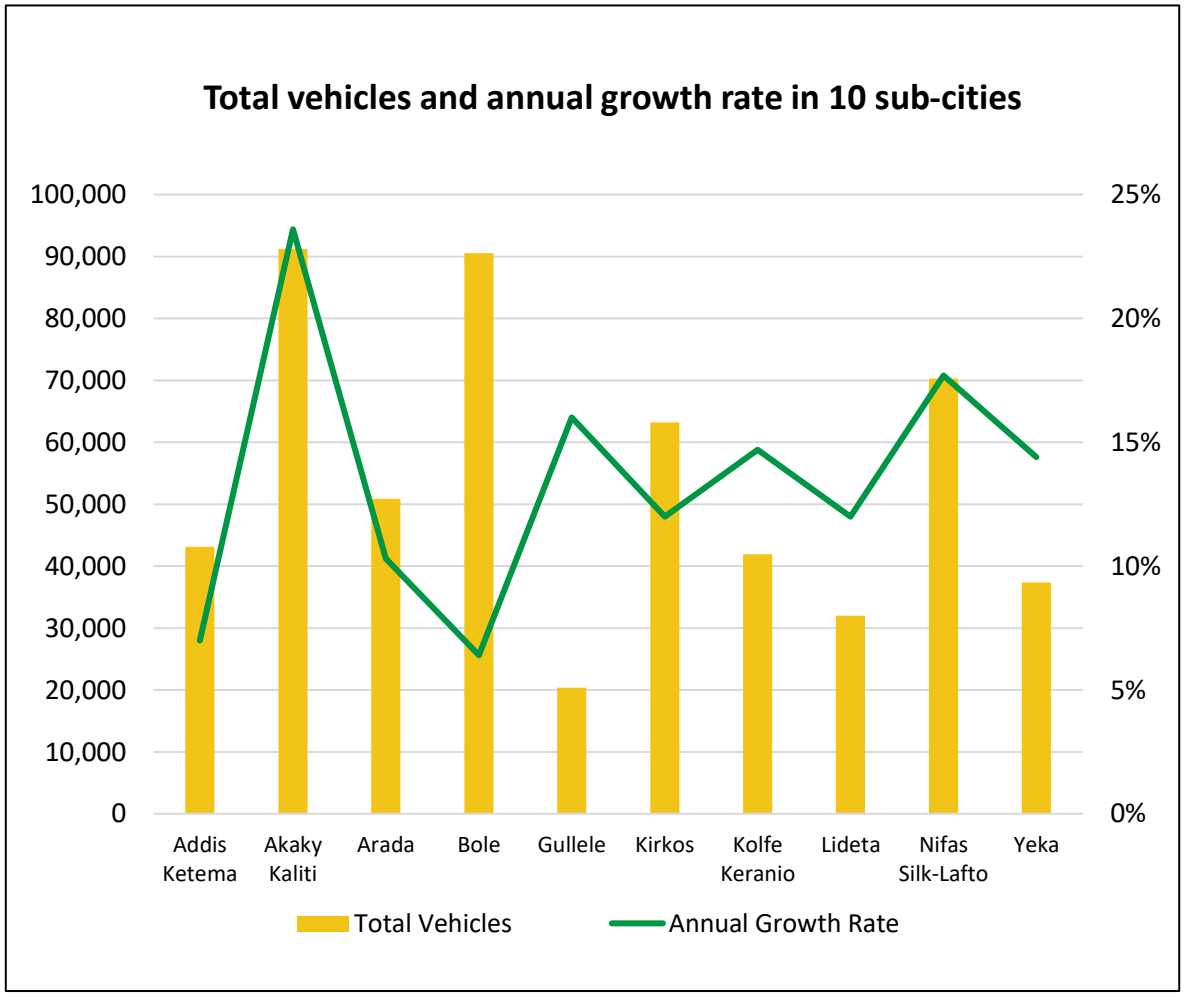


Source: SCTDP

Rapid motorization outpaces transport infrastructure growth; Parking spills over into sidewalks and roads

3.3 Infrastructure – Transport

- **Rapid motorization in the city:**
  - ✓ 0.5 million city-registered vehicles (51% private car) - reaching 1 million by 2024
  - ✓ Number of vehicles in 10 sub-cities increased 13.4% in average in 2018 (highest in Akaki-Kaliti at 24%)
- **High traffic congestion:** Spatial mismatches between jobs & housing, lack of regulation, enforcement and parking supply attribute to congestion and road safety problems
- **Need of improvement in traffic management system**



(Left/Right) Source: Drivers and Vehicles License and Control Authority (2018) Parking Study; SCTDP

Despite the increased water supply coverage, the service is not reliable nor is the cost recovered

3.3 Infrastructure – Water supply

Frequency/duration of water supply

Category	No. of Woredas	% of total
7days/week, 12-24 hours per day	21	18%
4-6 days/week	26	22%
2-3 days/week	50	43%
1 day/week	19	17%
Total	116	

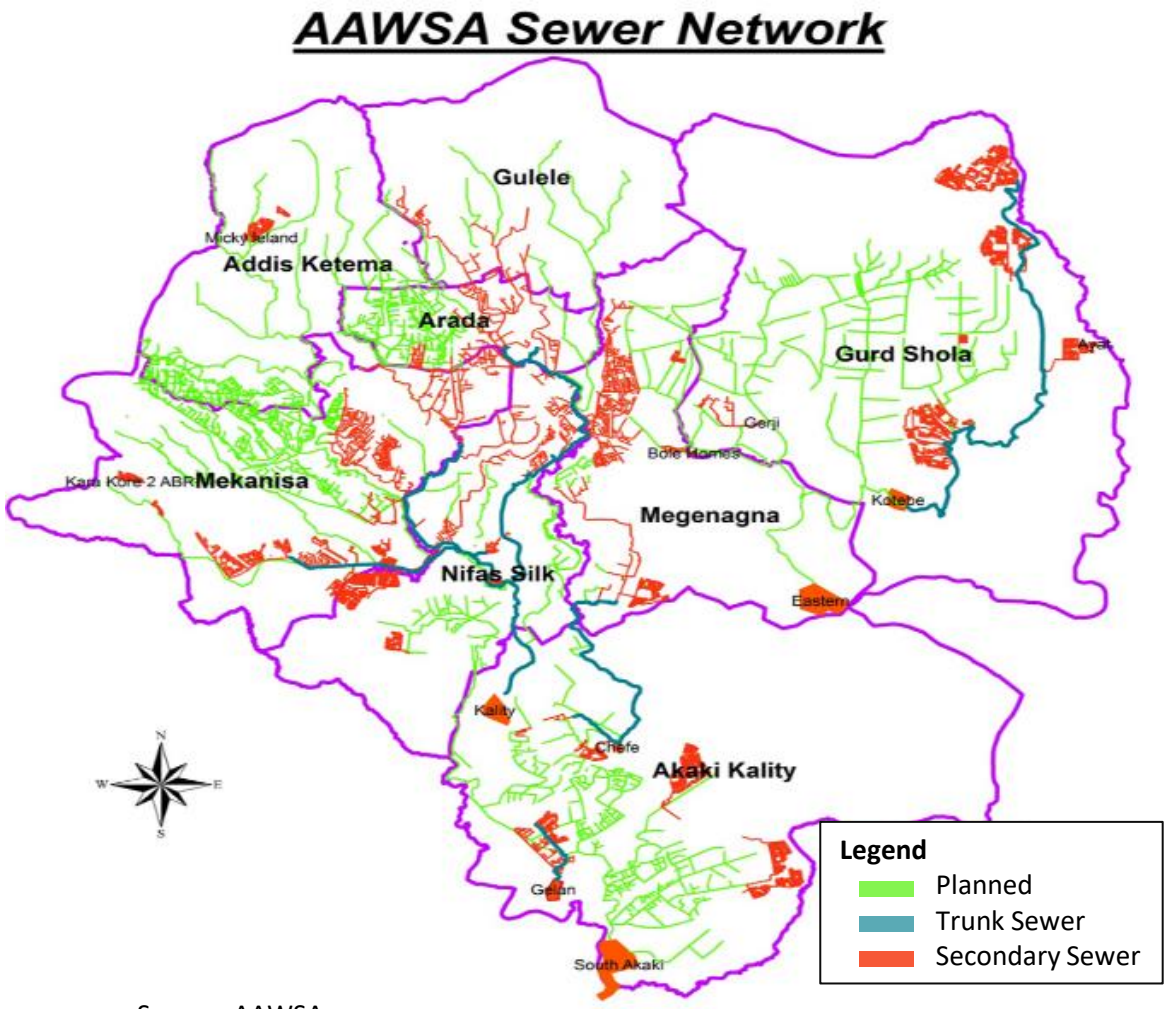
Source: Addis Ababa Water and Sewerage Authority (AAWSA) (2020)

- Water supply : water services coverage is 100%, while the **real coverage is estimated about 65%.**
  - ✓ 559,000 customers in 2019
  - ✓ Produced 486,000 m^3/day (**Not meeting the need** of 972,000m^3/day)
  - ✓ 99 water reservoirs (10-12,000m^3) –using as equalizing peak hour demand
  - ✓ 3,381,809 km distribution lines (12-450mm)
- **Low cost recovery ratio: 0.93 (below O&M cost)**
- **High non-revenue water (NRW): 39.4%** primarily due to technical loss
- **80% revenue collection efficiency in 2019**
- **Challenges**:
  - ✓ Technical difficulties in connection for high-rise buildings
  - ✓ Power instability affect the amount of water production
  - ✓ High Non Revenue Water (NRW) due to damages on the water supply line, aged infrastructure and pipes.

The City has particularly low capacity in sanitation and wastewater management

3.3 Infrastructure – Sewerage & Sanitation

- Sewerage:
  - ✓ 167,557 customers (**29**% of the total potential customer)
  - ✓ 115 km trunk main sewer line and secondary line of 913 km – conveying to the Kaliti treatment plant
  - ✓ 26 wastewater treatment facilities, recently upgraded the capacity from 37,550 m^3/day to 146,360 m^3/day – **But not meeting the demand of 285,993 m^3/day** (2020 estimate)
- Sanitation: public and private arrangements
  - ✓ 382 communal and 289 public latrines
  - ✓ Most sludge collected by 280 vacuum trucks (of 213 private), 3,155m^3/day **(only 18% coverage)**
- Tariff: not implementing wastewater tariff (a one-time connection fee & wastewater and fecal sludge emptying charge by per trip (445-890Birr))
- **Challenges**:
  - ✓ Limited resources for investment with low tariff: limited to maintain the existing systems, not expanding to meet the growing demands.
  - ✓ Limited capacity & coordination
  - ✓ Weak enforcement



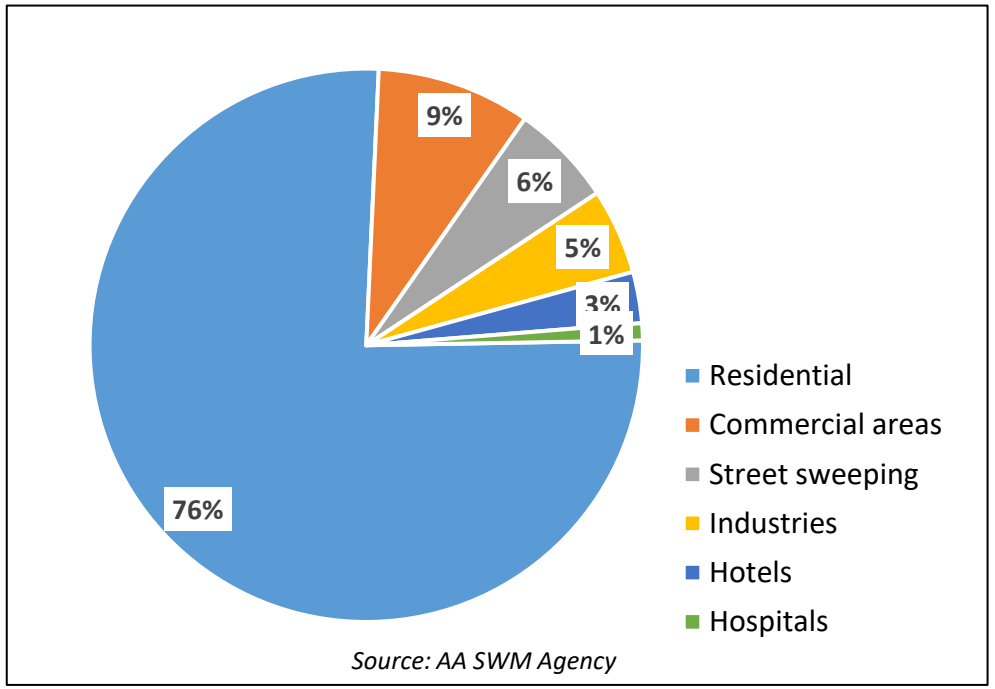
Source: AAWSA

The city's capacity to collect, sort, process, recycle and dispose of solid waste is also limited

3.3 Infrastructure – Solid waste management

- **Waste collection and transportation**[1]:
  - ✓ 3,200t/day waste generation (65% organic waste), 5% recycled
  - ✓ **Collection rate**: 80% – **with uncollected and dumped wastes in unauthorized areas such as ditches, sewers, and streets → increasing flood risks**
  - ✓ **Agency**: 79 vehicles, 40 container lifters, 19 side loaders, 10 Hino compactors, and 10 Renault compactors
  - ✓ **Private**: 100 compactor trucks owned by 40 companies
- **Processing**: a new Waste-to-Energy facility (WtE) in 2019 designed to treat 57% of collected waste and generate 25MW-electricity
- **Disposal: 1 official Reppie landfill** - old dumpsite operated in poor condition (100+death due to landslide)
- **Fee collection**: through water bill (USD 0.33 –0.56 for bi-weekly collection in 2012)[2]
- **Addis Ababa SWM strategy prepared, subject to approval**
- **Challenges**:
  - ✓ Weak implementation capacity in terms of SWM equipment and facilities
  - ✓ Weak interinstitutional and cross-city coordination
  - ✓ Low public awareness and participation
  - ✓ Lack of reliable baseline information/data
  - ✓ Lack of clear rules and standards for hazardous waste treatment

Sources or stream of total solid waste in 2019



Source: AA SWM Agency

Photo Credit: Jian Xie

Photo Credit: Toshi Mito

Source: ENV GP inputs; 1. AA SWM agency, 2. Kneeland & Knutson (2012)

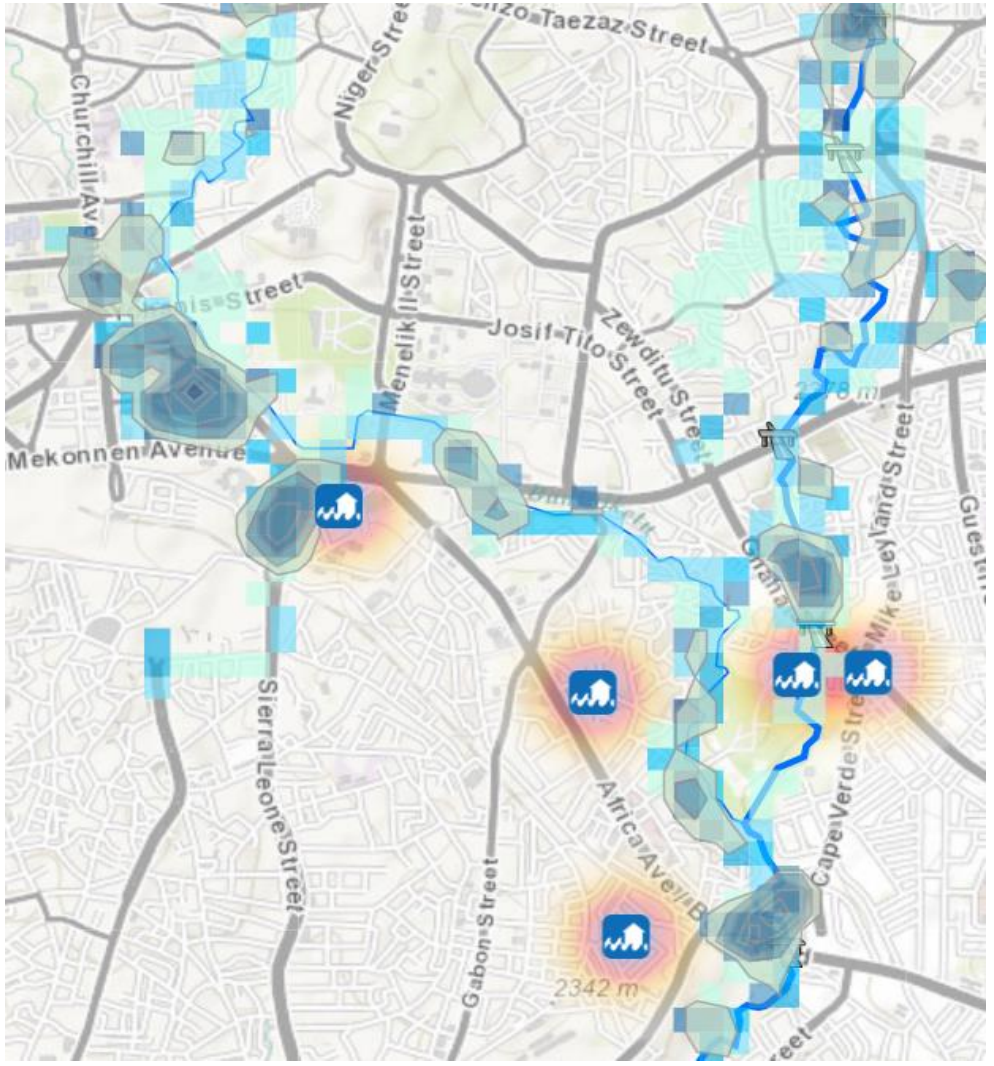
Localized flash flooding frequently occurs due to inadequate drainage, poor road design, inappropriate SWM, and encroachment

3.3 Infrastructure – Stormwater drain and flood management

- **Limited understanding of flood risk**: lack of comprehensive hazard/ vulnerability data (especially flood)
- **Undermining hazard-informed urban planning/development + lack of coordination** among sectors: Flash flood, flowing heavy rains, resulting in financial and human loss in formal/informal settlements located along the rivers and waterways & contributing to congestion on the road

Source: Addis Ababa City Road Authority (AACRA) & World Bank (2019)

Source: Peña (n.d.)



Source: Peña (n.d.)

The ageing electricity network is overloaded and not able to provide reliable service

3.3 Infrastructure – Electricity

- **Aging electricity network**: some segments are over 30-40 years
- **Need of urgent maintenance and expansion to keep up with the current load**: transmission and distribution lines and the sub-stations in urgent need of repair and expansion
- 614 MW demand in 2014 (42% of the country's interconnected system peak load)
- System loss: 20 - 22.7% in 2014
- **Frequent power outage**: In average, 8.2 times in a month, 4.6 % annual sales losses due to outages
  (National data, 2015 enterprise surveys)

  → **hampering firms' productivity**

Source: World Bank (2015a)

Formal land supply fails to meet demands, while informal land supply fills the gap

3.4 Land – Bifurcated, distorted and opaque markets

- Government is the sole formal supplier of land
- **Formal land production slow, overly complex and not well financed**
  - ✓ Hand over without services
  - ✓ Rural to urban conversion (major source) leading tension
  - ✓ Constrained regularization due to rigid regulation
  - ✓ Vacant or underused land in prime locations
- **Active informal land development, particularly in peri-urban areas**
  - ✓ Higher price than formal government compensation (three-to-fourfold) → farmers sell off the land ahead of government action

Land needs and formal land production in Addis Ababa

Addis Ababa	Low growth (ha/annum)	High growth (ha/annum)
Estimated Land Needs	3,150	4,150
Average annual production 5 years 2012/13-2016/17	1,446 ha. (46%)	1,446 ha.(35%)

Source: World Bank (2019d)

Land transfer/allocation is not demand-responsive

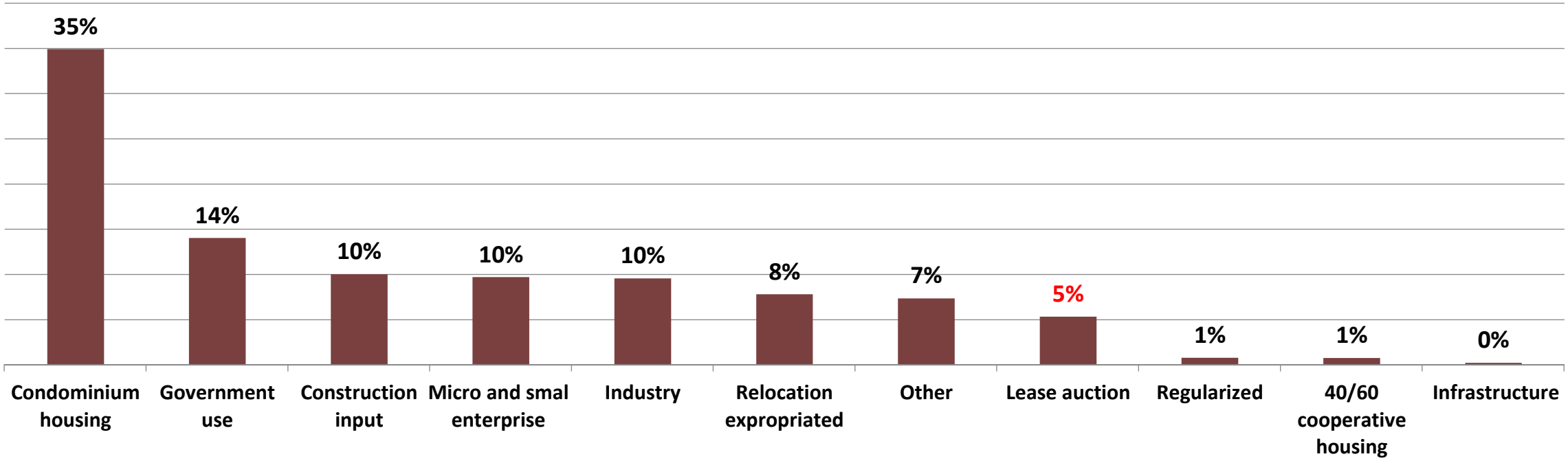
3.4 Land – Primary market: Government to end-users

- Majority of land allocated for government uses
- Only **5%** land auctioned

→

- Very little land for real estate development
- Private sector has little access to land at high cost

Addis Ababa City: Land Production 2012/13-2016/17 (Hectares)



Source: World Bank (2019d)

Land supply is not financially sustainable; there is high potential for land lease revenues

3.4 Land – Primary & secondary market

Primary: Government to end-users

- **Majority of urban land is allocated at no cost or below market values**
  - ✓ Below cost recovery of servicing the land
  - ✓ Land revenues are less than 10% of total city revenues
- **No mechanism to capture property value** increase over time

⬇

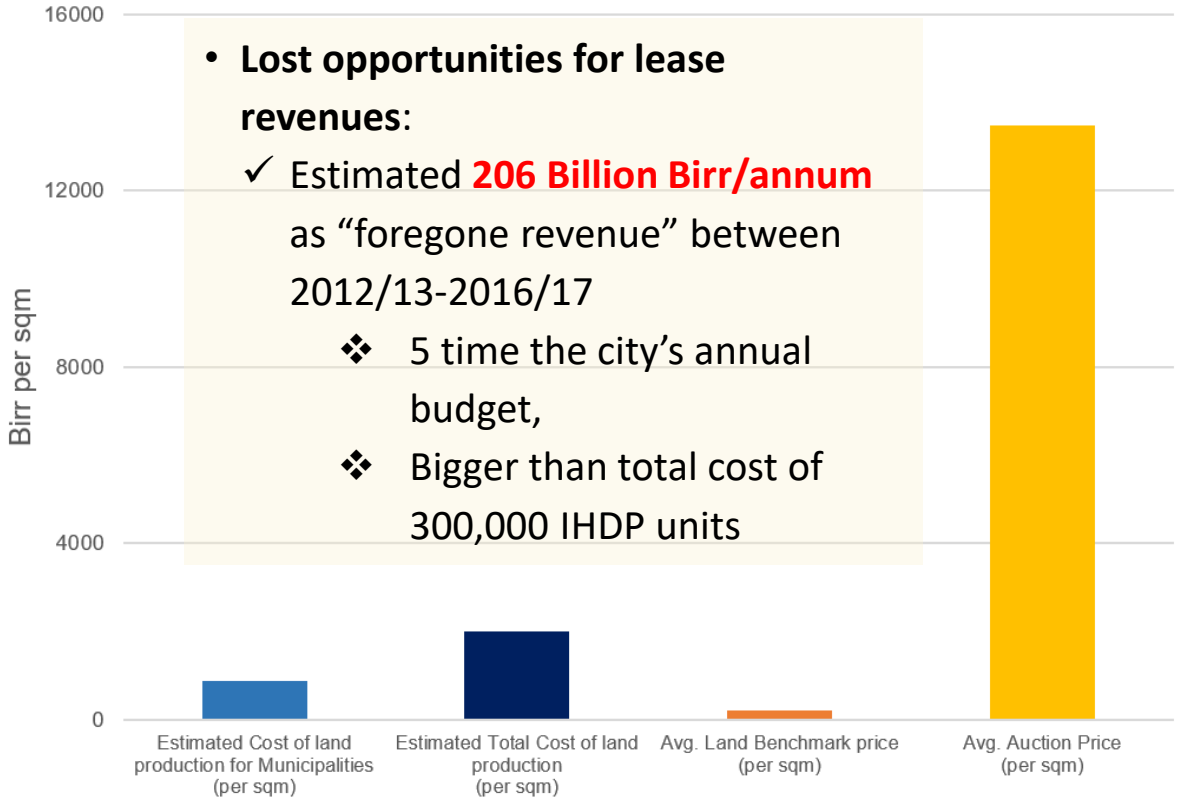
- Deprived of opportunities for land-based financing for infrastructure provision

Secondary: Among lease/permit holders

- **Slow implementation of legal cadaster** limits the protection and transaction of lease rights
- **Lack of clarity on lease law** deters private sector participation in the formal land markets
- **Complex lease pricing limits** market entry/participation
- **Conditions in the lease law limit market growth** – e.g. limited use as collateral to secure land or improvement costs

Source: World Bank (2019d)

Cost of Land Production, Avg. benchmark & Avg. Auction prices in Addis Ababa (2013-2017)



- **Lost opportunities for lease revenues**:
  - ✓ Estimated **206 Billion Birr/annum** as "foregone revenue" between 2012/13-2016/17
    - ❖ 5 time the city's annual budget,
    - ❖ Bigger than total cost of 300,000 IHDP units

Source: World Bank (2019d)

The city has not provided an enabling environment for land market

3.4 Land – Land management: Improving but more needs to be done

Key areas	Status
Guarantee ownership of title and security of tenure	√ Early stage[1]
Support land and property taxation	√ Land and property tax rates under revision
Provide security for credit	√ Underdeveloped
Develop and monitor land markets	**√ No system in place**
Protect state lands	√ Weak mechanisms of protection
Reduce land disputes	√ Low land dispute resolution measures
Facilitate land reform	√ Lease proclamation and compensation proclamation under revision
Produce useful statistical & public data	**√ No centralized/coordinated data management system**

[1] Note: Slow implementation of tenure regularization for informal settlements

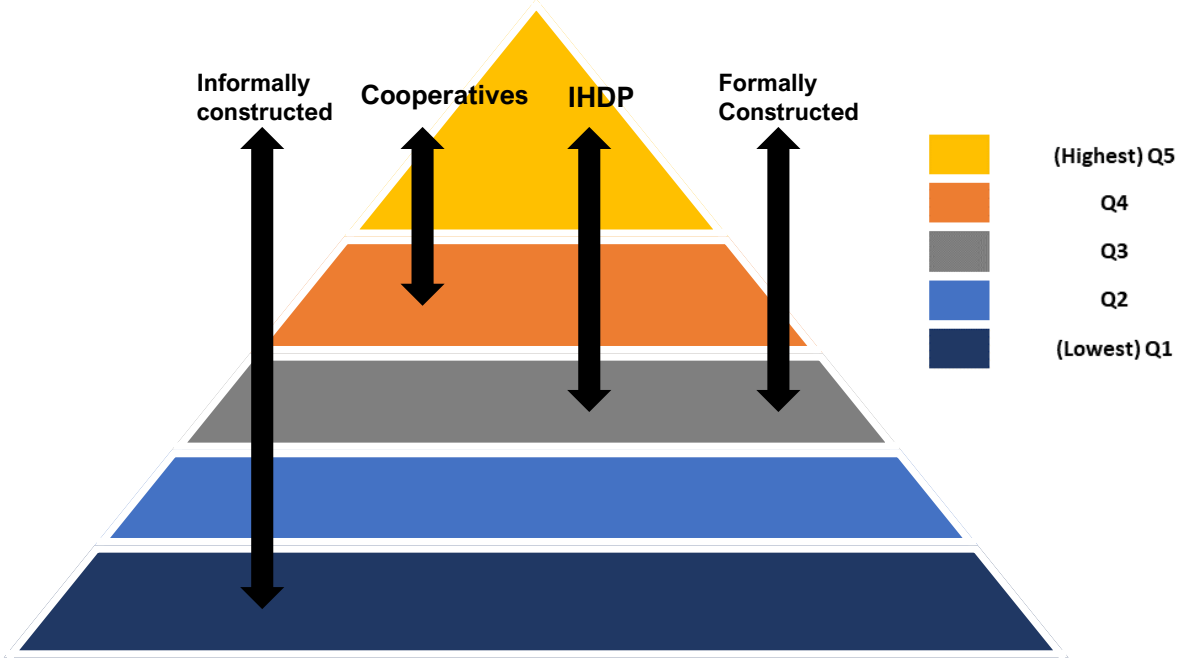
Government-led housing supply is unable to meet demand; formal market is not affordable for the bottom 40%

3.4 Housing – Demand and supply

- **Demand:**
  - ✓ Projected demand of 21k homes/year, in addition to replacement housing
  - ✓ Demand for formal housing is strong, as evidenced by high subscription rates for IHDP and vibrant rental & secondary markets within IHDP blocks
- **Supply[1]:**
  - ✓ **Government**: supply of formal housing through IHDP (207,000 units during 2004-2019), not fully meeting growing middle class demands; government rental housing for government officials (1,718 units 2015-2019)
  - ✓ **Private sector supply**: limited to high-end market with limited role for developers
  - ✓ **Self-built and informally built housing** still dominates the housing stock
  - ✓ The **rental housing market** is large, with many secondary dwellings or extensions on existing plots filling the supply gap

[1] *No data available for the supply of housing*

Housing Typology by household consumption quintile (Illustrative)

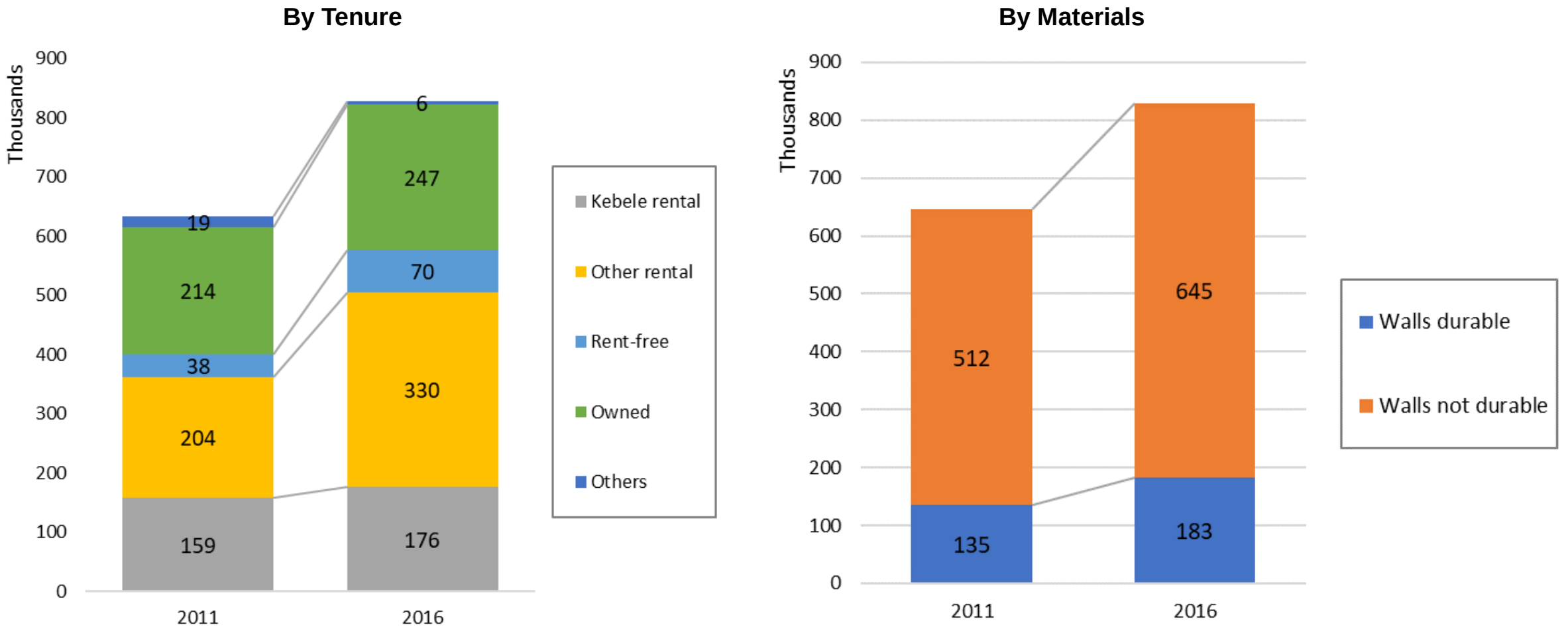


*Size of each pyramid section represents an equal proportion of households
**Arrows extend to the point where the proportion of households by housing typology per quintile exceeds 15%

Source: World Bank (2019d)

The majority of new housing units in Addis are low-quality private rentals

3.4 Housing – Ownership and quality



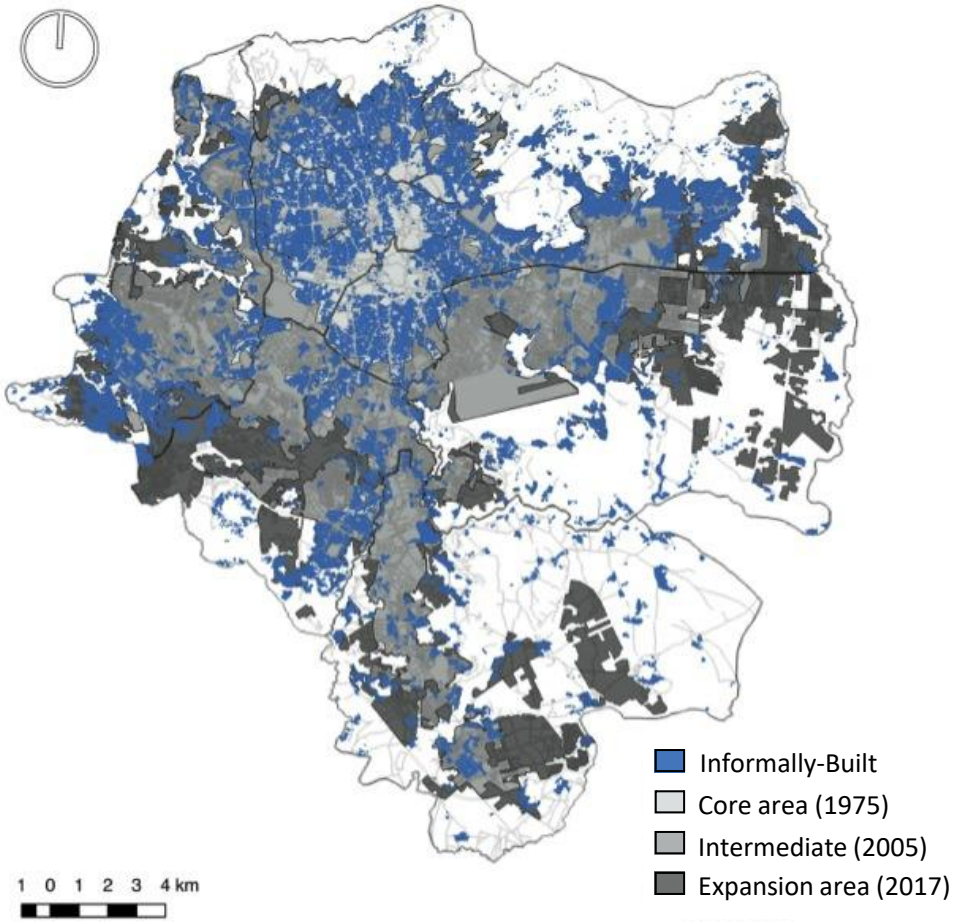
Change in Addis Housing Stock, 2011/12-2015/16

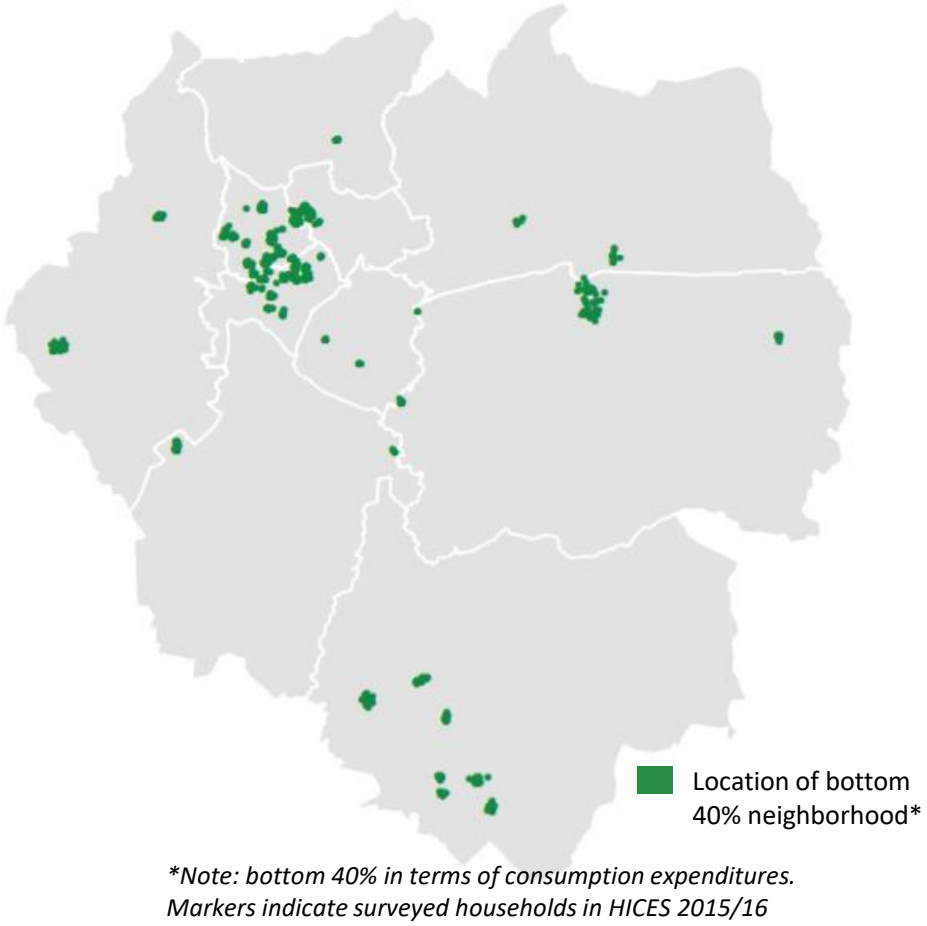
Source: (Left/Right) World Bank (2019d)

52% of settlements is informally constructed both inner & outer city; this corresponds to low-income households

3.4 Housing – High informality

Challenges in coordination of housing with Infrastructure investments and service provision





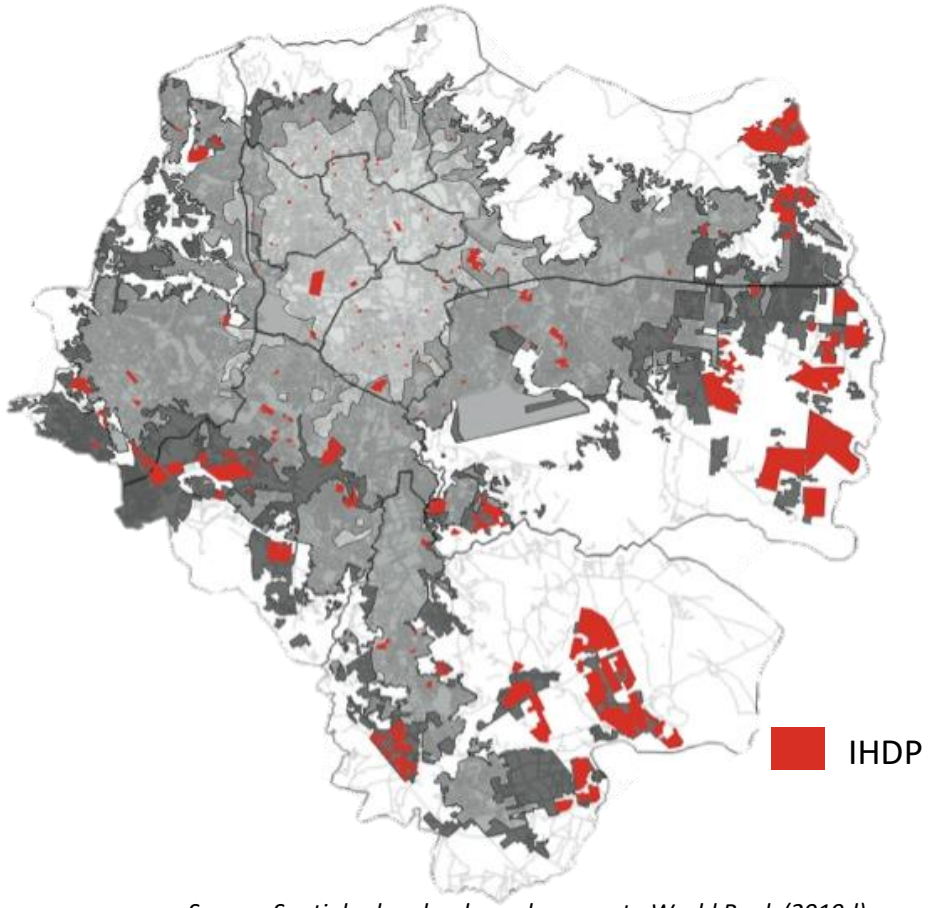
**Note: bottom 40% in terms of consumption expenditures. Markers indicate surveyed households in HICES 2015/16*

Source: (Left) Spatial urban land supply annex to World Bank (2019d); (Right) World Bank (2020), CSA (2016b)

IHDP takes up 16% of Addis settlement areas, but the majority is not connected, serviced, nor affordable

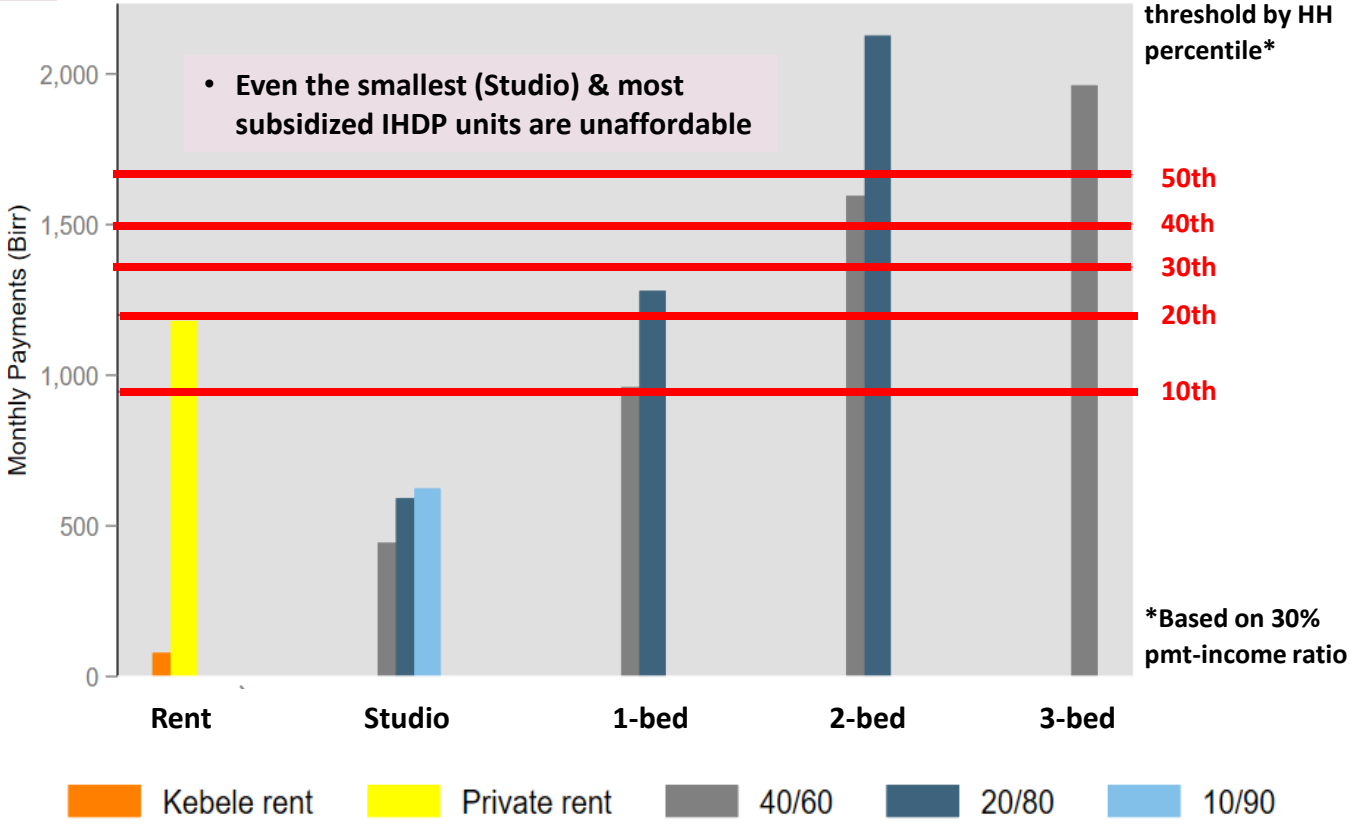
3.4 Housing – IHDP

- **Inadequate basic infra and services in IHDP**
- **Lack of accessibility/connectivity in IHDP located in periphery**



Source: Spatial urban land supply annex to World Bank (2019d)

Estimated monthly payments of rent & IHDP mortgages in Addis Ababa (2016/2017)



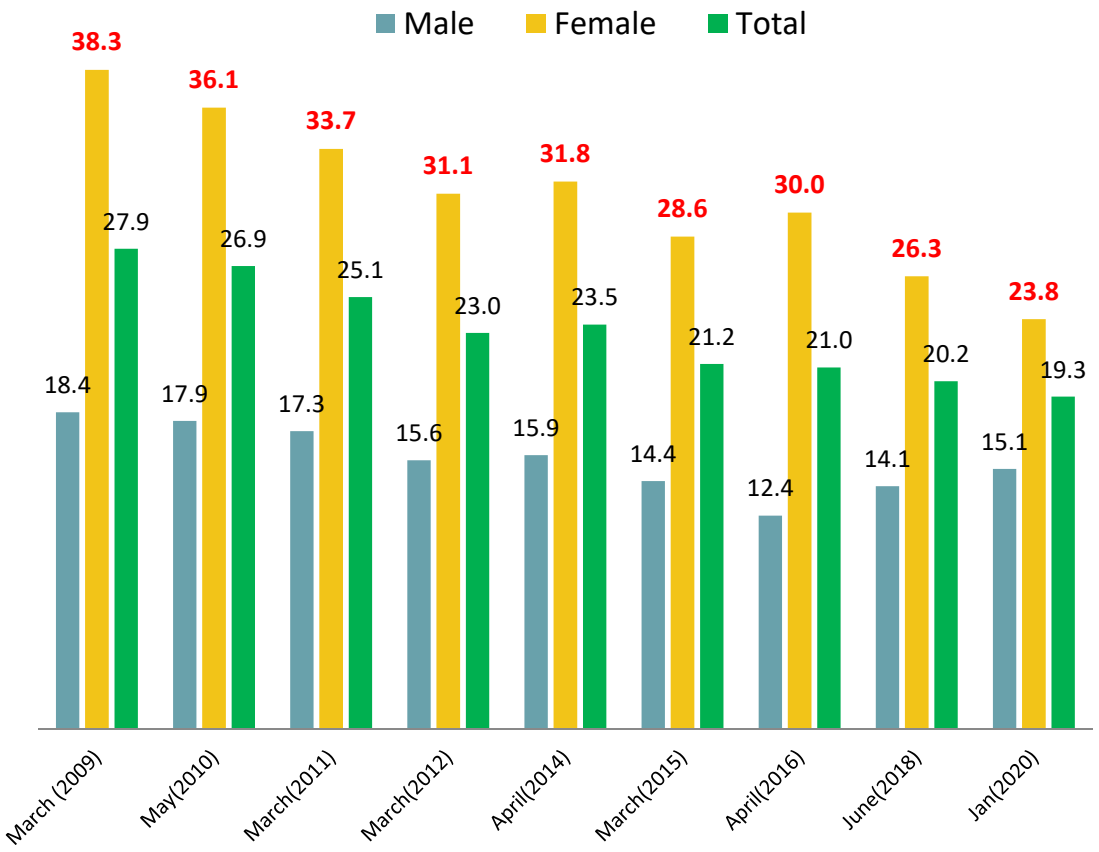
Note: Down payment requirement of 40/60 scheme is large, rending it not affordable to many.

Source: CSA (2016b, 2016c)

Despite the decrease in overall unemployment rate in the city, youth and female unemployment rates are still high

3.5 Urban Economy – Unemployment

Addis Ababa unemployment rate



Source: CSA (2009, 2010, 2011, 2012b, 2014, 2015, 2016a, 2018, 2020)

- Heavy domestic duties, pregnancy and discrimination are some of the reasons for female unemployment.
- Higher youth unemployment is due to large youth bulge entering the labor market and the absence of decent and sustainable job creation

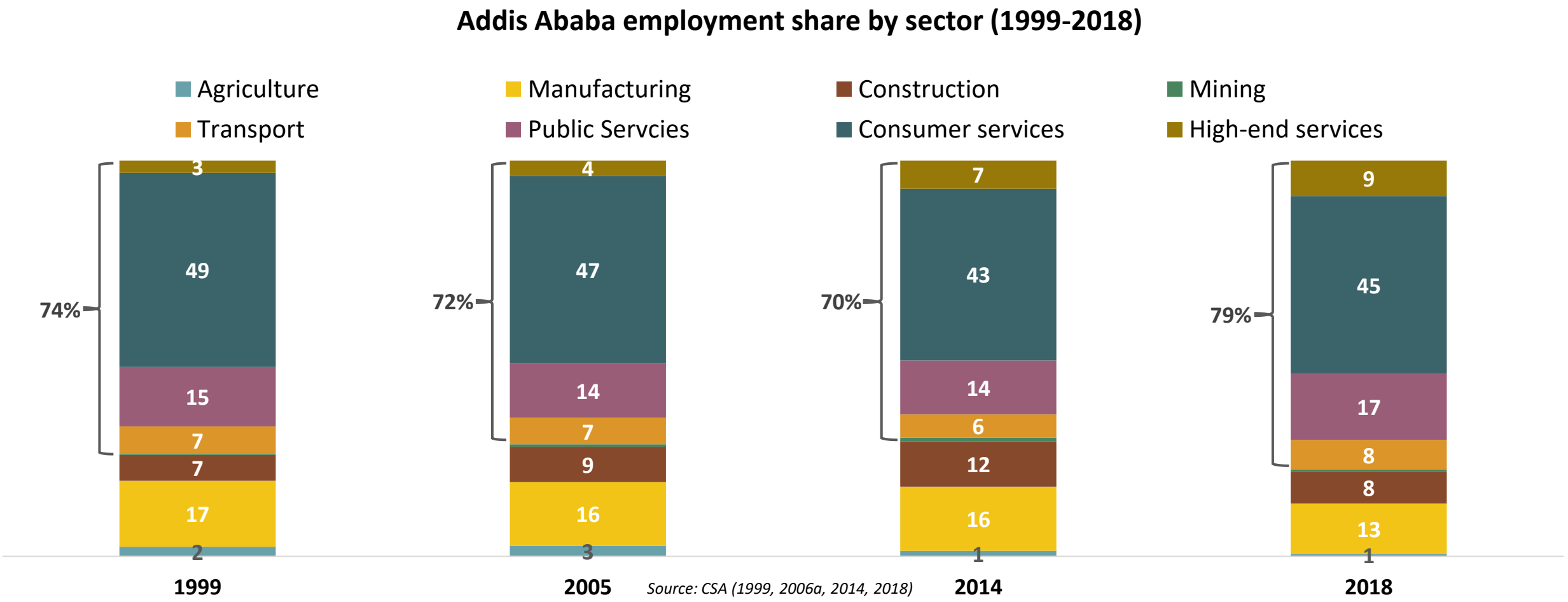
Key labor market indicators, percentage (youth vs adults) in 2013

	Labor force participation		Unemployment rate		Underemployment rate		Low-earnings rate (waged workers)		Working hours (median)	
	15-29	30-64	15-29	30-64	15-29	30-64	15-29	30-64	15-29	30-64
National	81.9	89.6	6.9	3.5	22.5	21.8	28.7	13.3	31	33
Addis Ababa	64.6	81	**28**	21	5.9	5.8	**24.4**	6	48	48

Source: World Bank (2017b)

No big changes in the economic structure of Addis Ababa: Service sector has dominated the city economy

3.5 Urban Economy – Service: dominant sector



Ababa Ababa has comparative advantages in medium-value-added industries but its competitiveness is declining

3.5 Urban Economy – Manufacturing: preeminent but decreasing

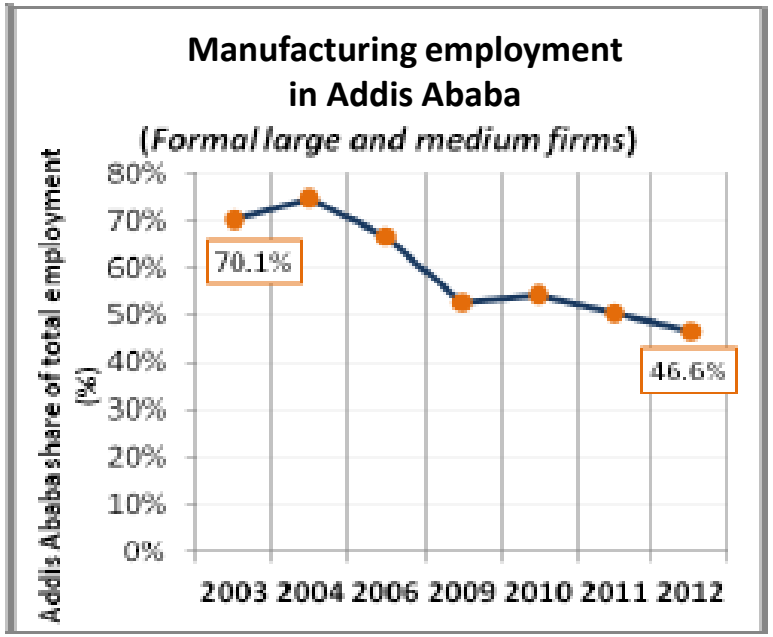
- **Decrease in Addis's employment share of manufacturing sector**
- **Comparative advantage**: Agro-processing, publishing, textiles and clothing, leather and footwear, furniture, metals, and plastics
- **Declining competitiveness**
  - ✓ Recent policy change in 2015: restricting the growth of medium tech manufacturing, in favor of supporting the growth of higher value-added manufacturing/services
  - ✓ Decentralizing industrial development in secondary cities – e.g. Adwa, Sebeta, Bishoftu, Adama, Hawassa, and Mekele

Table 3.2: Addis Ababa Is Currently Specialized in Agro-Processing, Publishing, Textiles and Clothing, Leather and Footwear, Furniture, Metals, and Plastics

Subsector	Share of labor	Location quotient
Manufacture of wine	6%	3.15
Publishing and printing services	7%	2.53
Manufacture of wearing apparel except fur	8%	1.92
Tanning and dressing of leather	6%	1.63
Manufacture of furniture	7%	1.63
Bakery	5%	1.50
Manufacture of structural metal products, tanks, reservoirs, and containers of metal	9%	1.47
Manufacture of footwear	6%	1.29
Manufacture of plastics	10%	1.29

Source: WB calculations based on Ethiopia's Large and Medium Manufacturing and Electricity Industries Surveys.
Note: A location quotient of more than 1 indicates specialization.

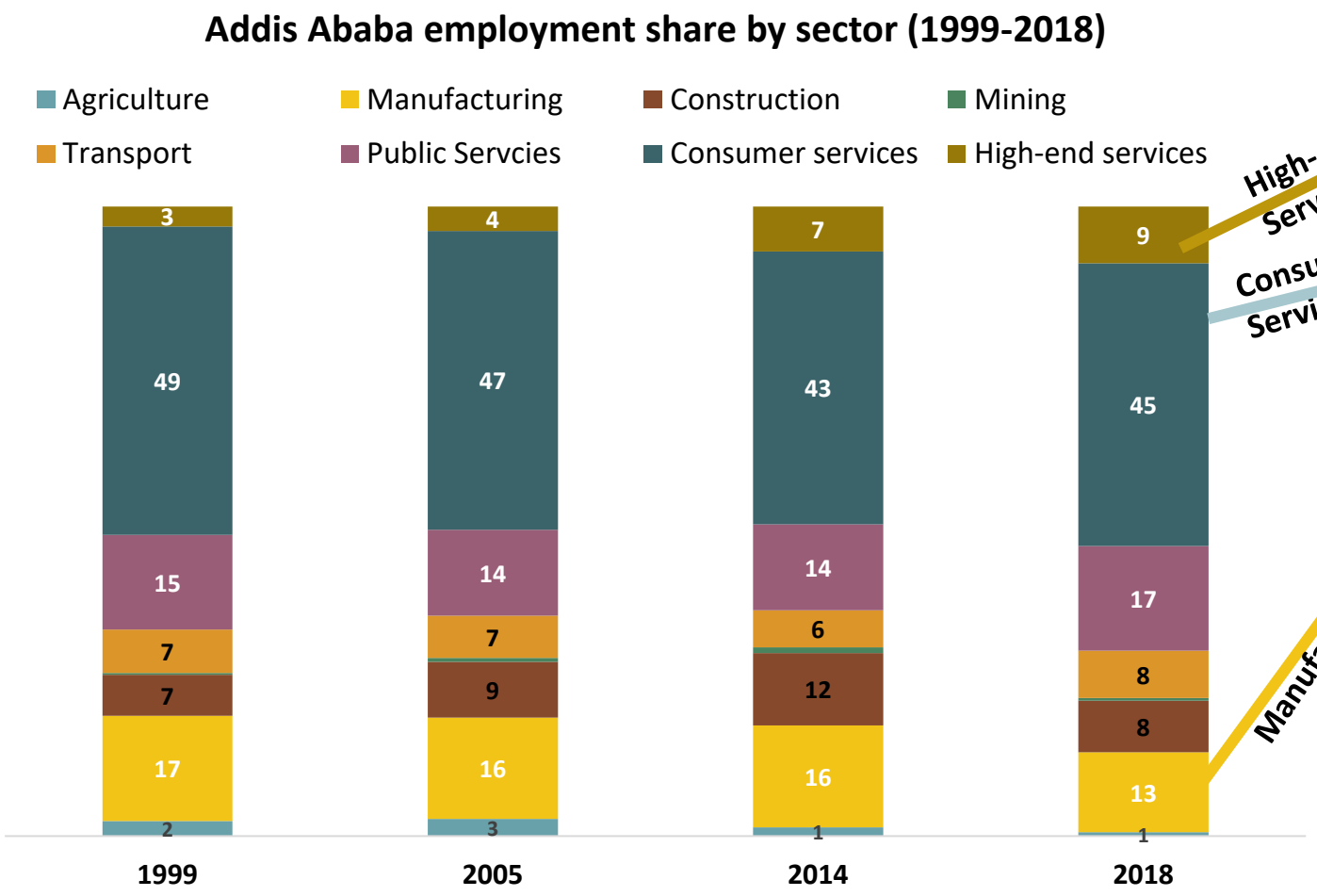
Source: World Bank (2018)



Source: World Bank (2015d, pp.18, figure. 8)

Economic transition is slow to the next stages of job creation: Towards high-value-added services and manufacturing

3.5 Urban Economy – Economic transition



Source: CSA (1999, 2006a, 2014, 2018)

Increasing high-value added services:

- Employment in **high-value-added services** increasing 3% in 1999 → 9% in 2018
- Still high wholesale and retail trade employment share (20%)

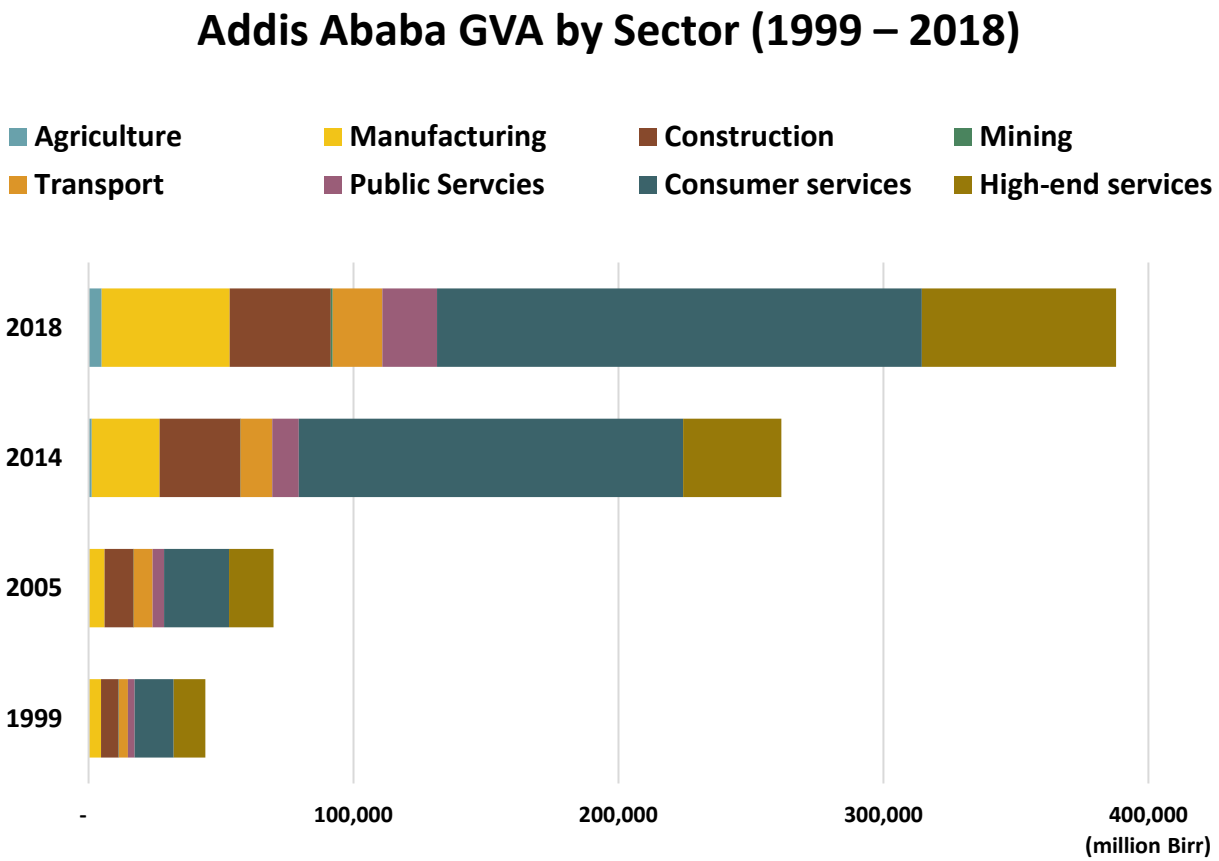
Nascent high-value added manufacturing:

- Employment in Addis's specialized medium-value-added manufacturing subsectors are decreasing (moving to outside Addis)
- Not ready for **high-value-added manufacturing**: Still nascent 0.16% of the Addis labor force in 2018

Source: World Bank (2018)

Economic transition is ongoing and the GVA increases over time; More people work for high-end services and public services and their GVA shares increased

3.5 Urban Economy – Sector employment and productivity



Sectors	Employment Share (%)			GVA Share (%)		
	2014	2018		2014	2018	
High-end services	7	9	↑	14	19	↑
Consumer services	42	44	↑	55	47	↓
Public Services	15	18	↑	3.8	5.3	↑
Transport	6	8	↑	4.6	4.8	–
Mining	0.9	0.4	↓	0.01	0.2	↑
Construction	12	8	↓	12	10	↓
Manufacturing	16	13	↓	10	12	↑
Agriculture	1.4	0.6	↓	0.5	1.3	↑

Note: GVA share (%) is only indicative, calculated using the values rebased at the disaggregated sub-sector level which does not sum up to the total sector value (base year of 2015/2016).

Source: AACA data, CSA (2014, 2018)

High-value-added manufacturing and services are nascent

3.5 Urban Economy – Potential

Small high-value-added manufacturing

- **0.16% of Addis employment in 2018**
- **Sub-sectors:**
  - ✓ Pharmaceuticals (1,311 people)
  - ✓ Computer, electronic and optical products (1,334 people)

Growing high-value-added services

- **9% of Addis employment in2018 (7% in 2016)**
- **Sub-sectors:**
  - ✓ Financial services and insurance (65,000people)
  - ✓ Professional consulting, scientific and technical activities (47,000 people)
  - ✓ Information and communication (28,000 people)
  - ✓ Real estate activities (2,600people)

Emerging potentials in pharmaceuticals and travel services for export

Source: World Bank (2018) and CSA (2018)

Compared to comparator cities, Addis Ababa performs best on security levels and worse on corruption, infrastructure services and the regulatory environment

3.6 Enabling environment – Firm-level constraints

	Addis Ababa	Dar es Salaam	Kampala	Kigali	Johannes-burg	Nairobi	Tamil Nadu State	Red River Delta	Wenzhou
Country	*ETH*	*TZA*	*UGA*	*RWA*	*ZAF*	*KEN*	*IND*	*VNM*	*CHN*
Year	*2015*	*2014*	*2013*	*2015*	*2007*	*2013*	*2011*	*2013*	*2012*
Productive infrastructure and services									
X Experienced power outages (%)	80.4	89.5	83.4	61.9	56.3	91.3	77.4	15.2	49.4
X Experienced insufficient water (%)	29.2	9.6	29.7	5.6	7.1	14.5	16.3	32.3	1.8
Share of sales spent on security (%)	2.0	5.8	10.8	9.8	3.2	4.5	2.6	7.8	1.2
Connective infrastructure									
Ranked transportation as major obstacle (%)	7.5	37.4	13.9	26.9	3.5	26.5	21.9	5.5	9.6
Land									
Days to obtain construction permit	43.5	34.4	12.7	58.0	123.9	32.9	54.1	19.3	25.2
Access to finance									
Firms with overdraft facility (%)	24.6	9.2	2.0	44.4	50.5	34.7	64.6	9.9	34.9
Sales paid for after delivery (%)	26.6	10.8	14.2	34.5	41.3	40.6	29.3	52.0	53.5
Regulation									
X Manager's time dealing with gov't regulation (%	13.8	4.6	7.3	7.2	7.3	8.7	1.9	3.2	1.9
Days to obtain import license	11.5	20.7	19.5	6.2	30.3	12.1	15.3	18.4	
Days to obtain operating licenses	4.8	15.8	10.5	11.2	41.0	18.7	34.4	8.2	13.1
Corruption									
Gift expected for electrical connection (%)	18.1	22.6	37.9	0.0	6.1	25.4	46.2	11.5	0.3
Gift expected for tax auditors (%)	17.5	12.4	6.2	4.6	3.2	22.5	16.8	12.8	0.0
X Gift expected for construction permit (%)	55.9	6.3	0.8	14.2	0.0	47.6	30.0	30.9	0.0

Source: World Bank staff illustration based on World Bank Enterprise Survey Data. Responses are representative of all nonagricultural firms in the private sector. Blue indicates the favorable end of the distribution among cities; red indicates the less favorable end.
Note: As the Enterprise Surveys in Vietnam and India were undertaken at the regional level, the results for the broader regions containing the comparator cities, Hanoi and Coimbatore, are presented in the table.

Source: World Bank (2018)

Costly and time-consuming process and access to land and finance are the main barriers to the entry

3.6 Enabling environment – Barriers to the entry

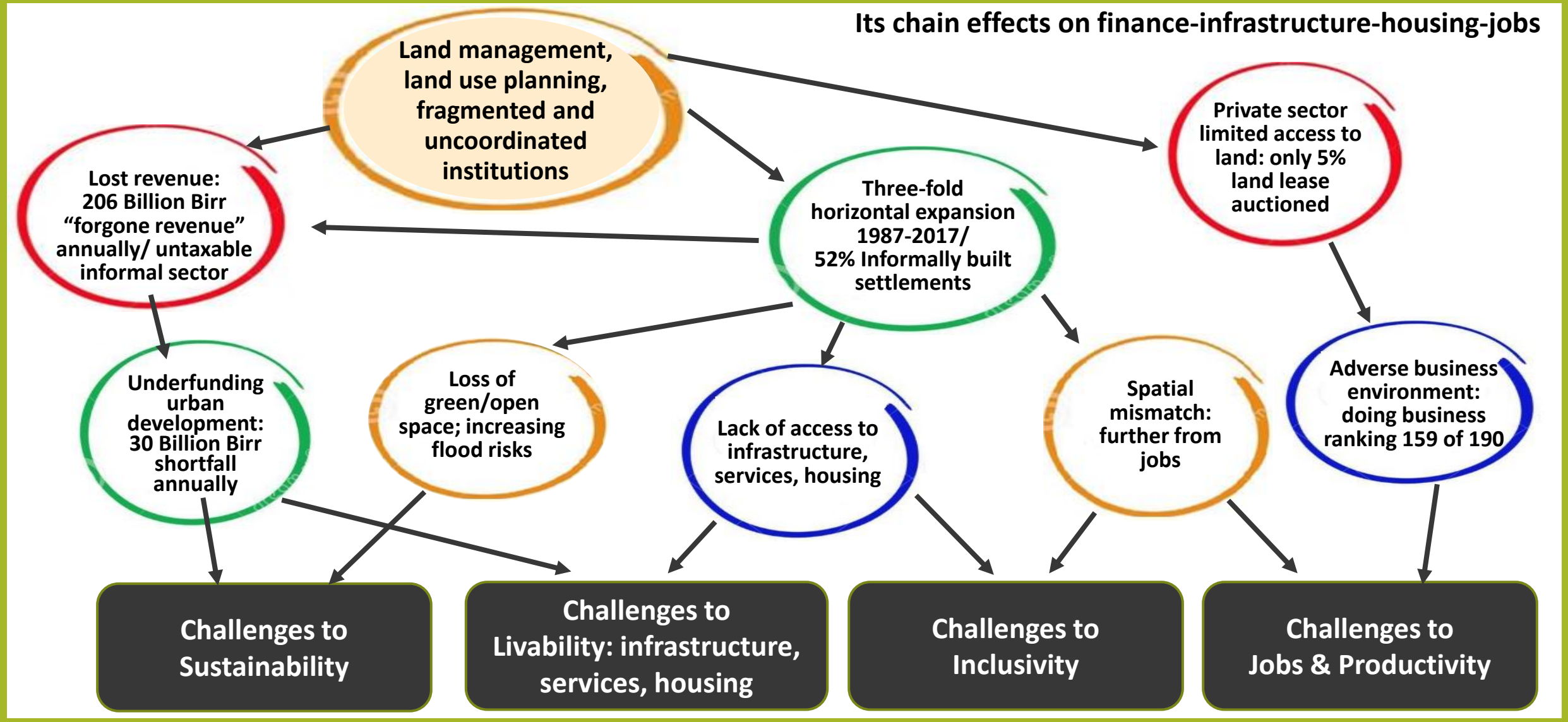
Regulatory environment	Access to land	Access to finance
• **168 out of 190** economies in the area of starting business • **Too many, over specified business licenses** requiring multiple licenses for closely related activities → improved through recent reforms (reduction of business licenses by 30 percent; the requirements of competence certificate by 50 percent) • **Costly process**: 57.8 of GNI per capita for business start-up process	• **Lack of formal land supply** • **Long and often delayed process of land leasing and transfer, accompanied by corruption and rent seeking** (e.g. due to the lack of coordination between the City Administration and the agencies that provide infrastructure and utilities to service the land) • **Low reliability of land administration system** – No digitalization of land records, cadastral plans, no link between property registration data base and cadastral/mapping database, low land dispute resolution measures.	• **Low availability of credit**: only 3% of small business and 23% of medium businesses • **Short-term loans and long and delayed process of loan approval** • **Gender inequality**: 49 percent of female-managed firms identified access to finance as a major constraint, compared with only 19 percent of male-managed firms.

Note: the data mentioned is representing Ethiopia, not necessarily specific to Addis Ababa
Source: World Bank (2019a, 2019b)

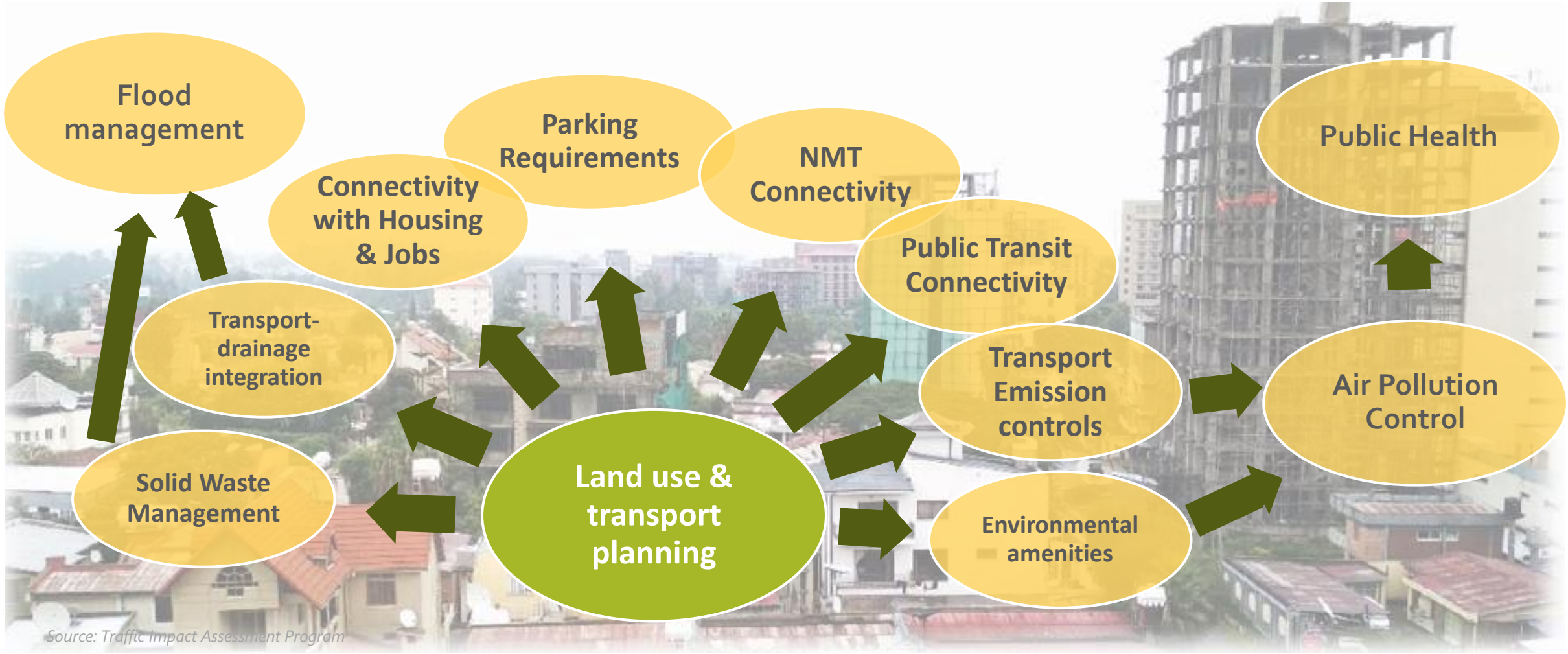
III. Chain Effect and Cross-sectoral constraints

City's functions are interdependent and intricately interacting

Poor land management & planning, uncoordinated institutions are key binding constraints for Addis Ababa

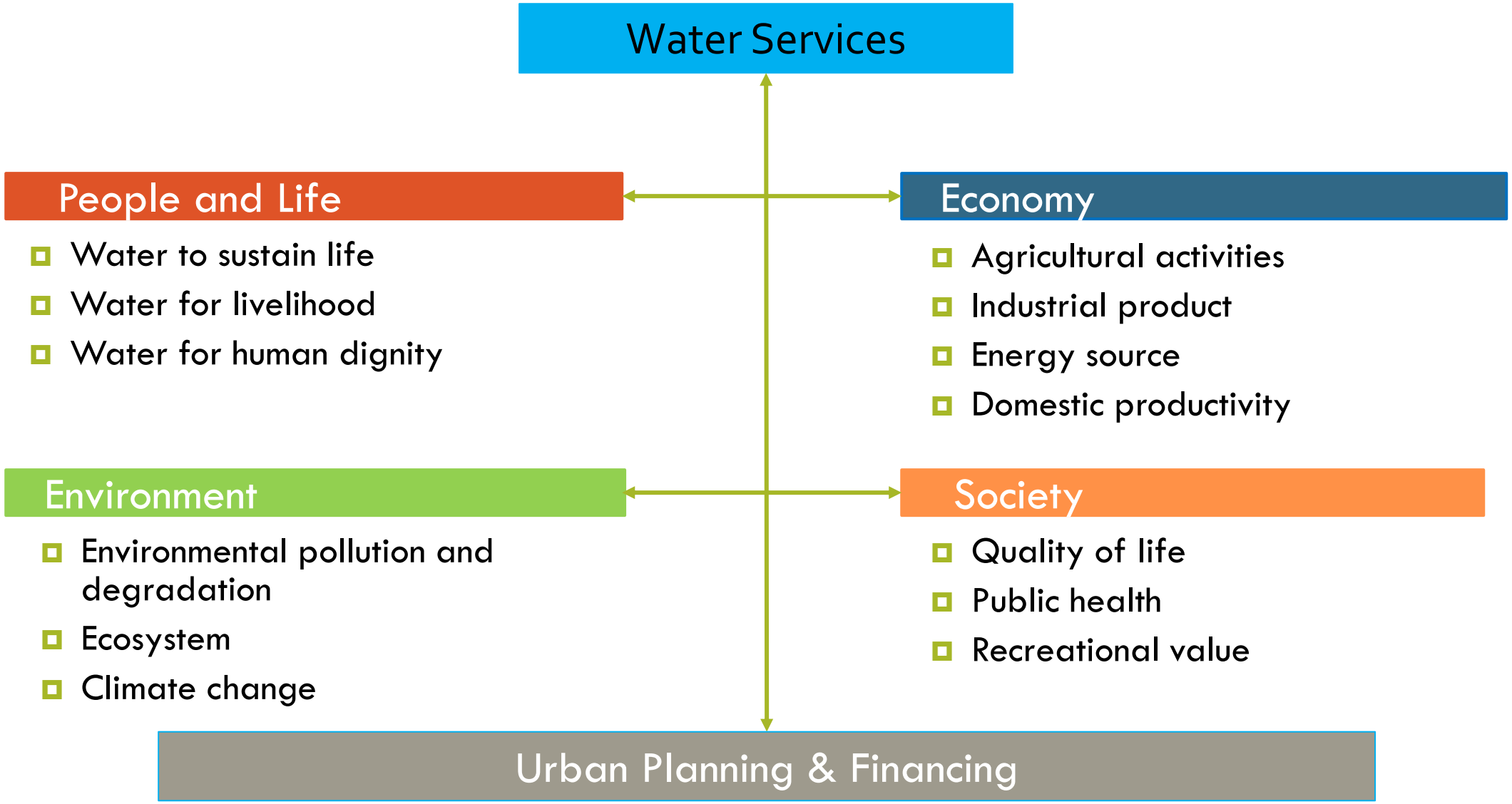


Inter-linkages among land use-transport-environment-health

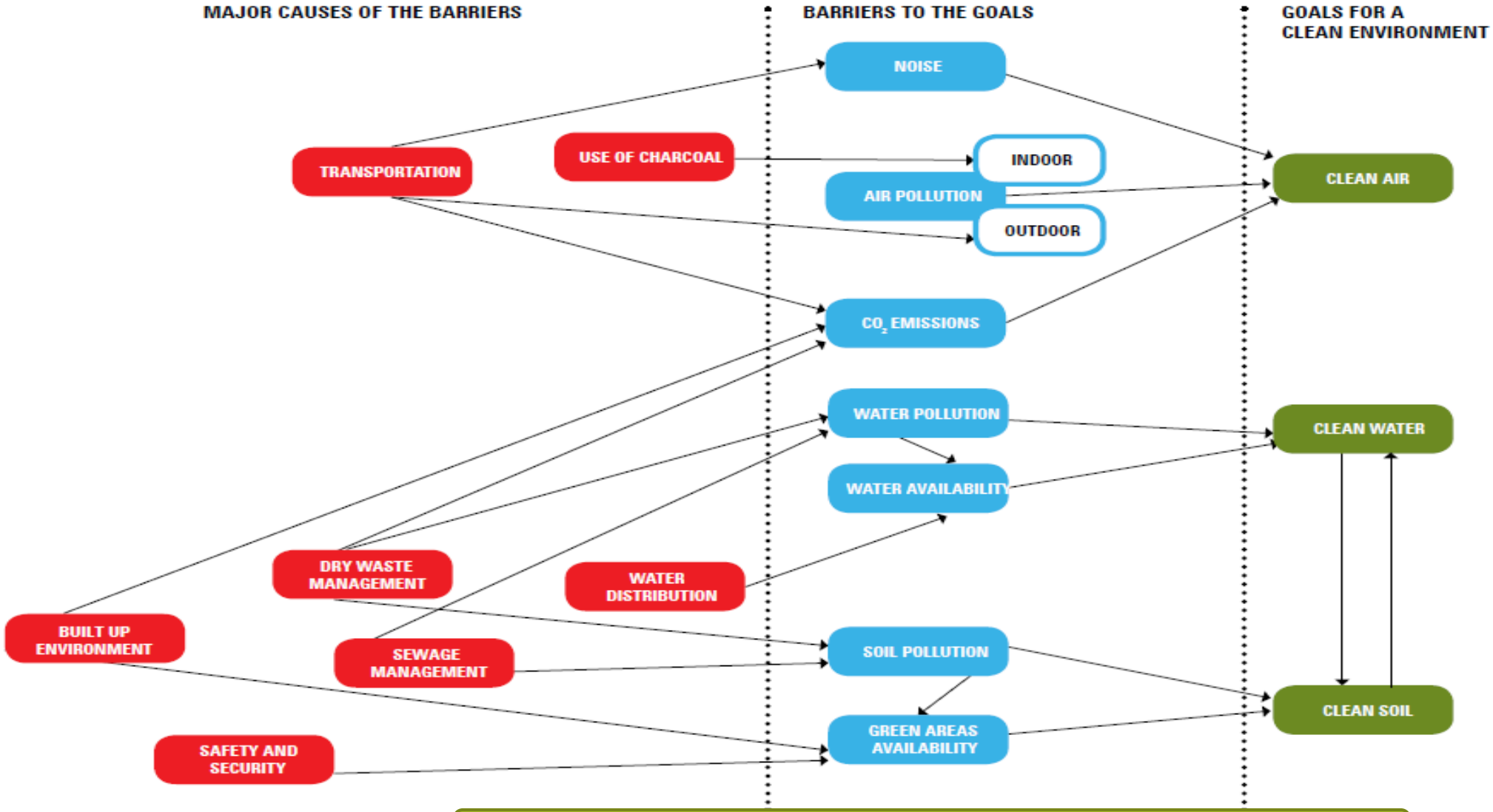


Source: Traffic Impact Assessment Program

Inter-linkages among water services-economy-environment-society



Inter-linkages between services and environment



Climate change adds challenges to all angles of environment

Source: Modified based on UN Habitat (2017, figure. 41)

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