



Eighty-fourth session of the Committee on Urban Development, Housing and Land Management

Planning of the Country Profile on Urban Development, Housing, and Land Management of Uzbekistan

5 October 2023

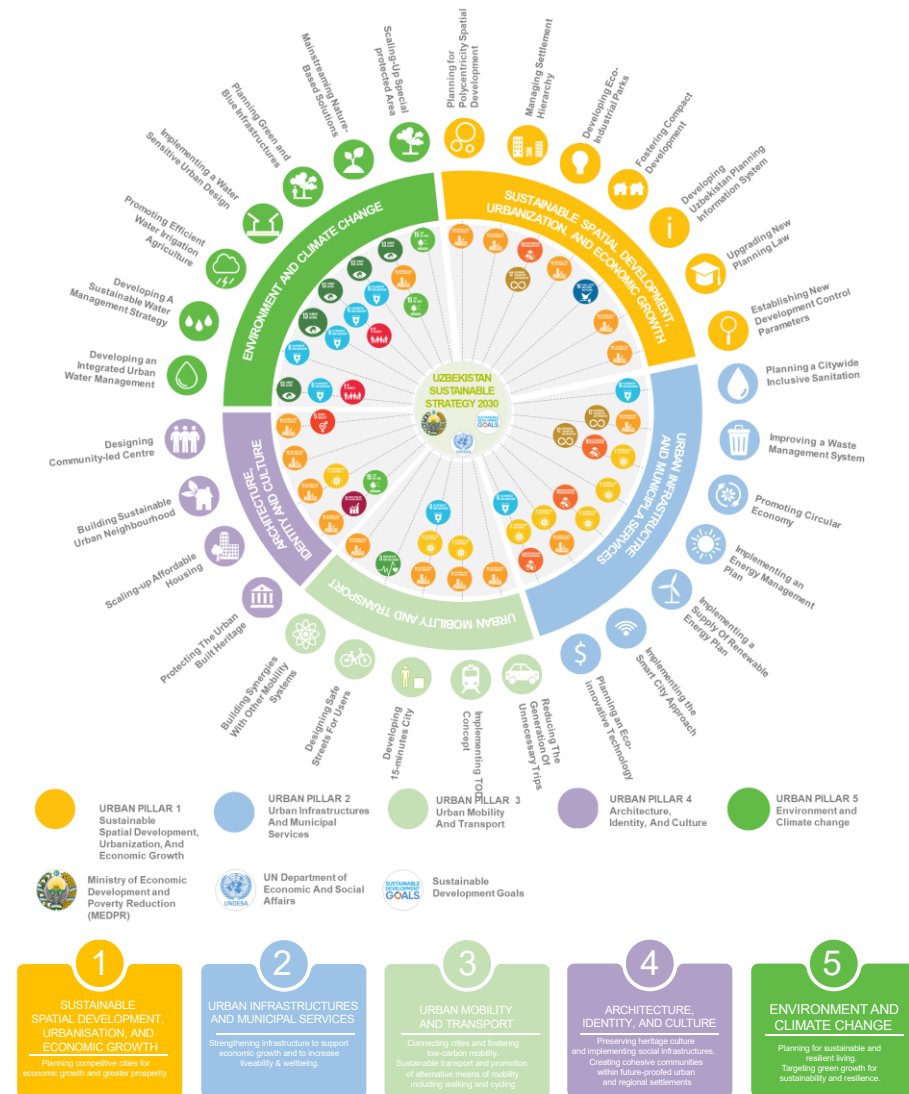
Speaker: Luigi Cipolla

Cities, Climate & Infrastructure: City Planner, Smart and Sustainable Urban Planning Expert

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Uzbekistan Sustainable Strategy to 2030 Policy Strategy Report

- The GOU launched the decentralization reform - **National Development Strategy of Uzbekistan for 2022-2026** - to urbanize 60% of the territory and enhance economic growth among new urban centers.
- **Sustainable Urbanization Strategy to 2030 (SUS 2030)** is a practical policy document to support the GOU to pave the way toward sustainable and resilient urban development. Its focus will be on people, places, and building resilient communities through the national urbanization strategy in line with the UN 2030 Agenda.



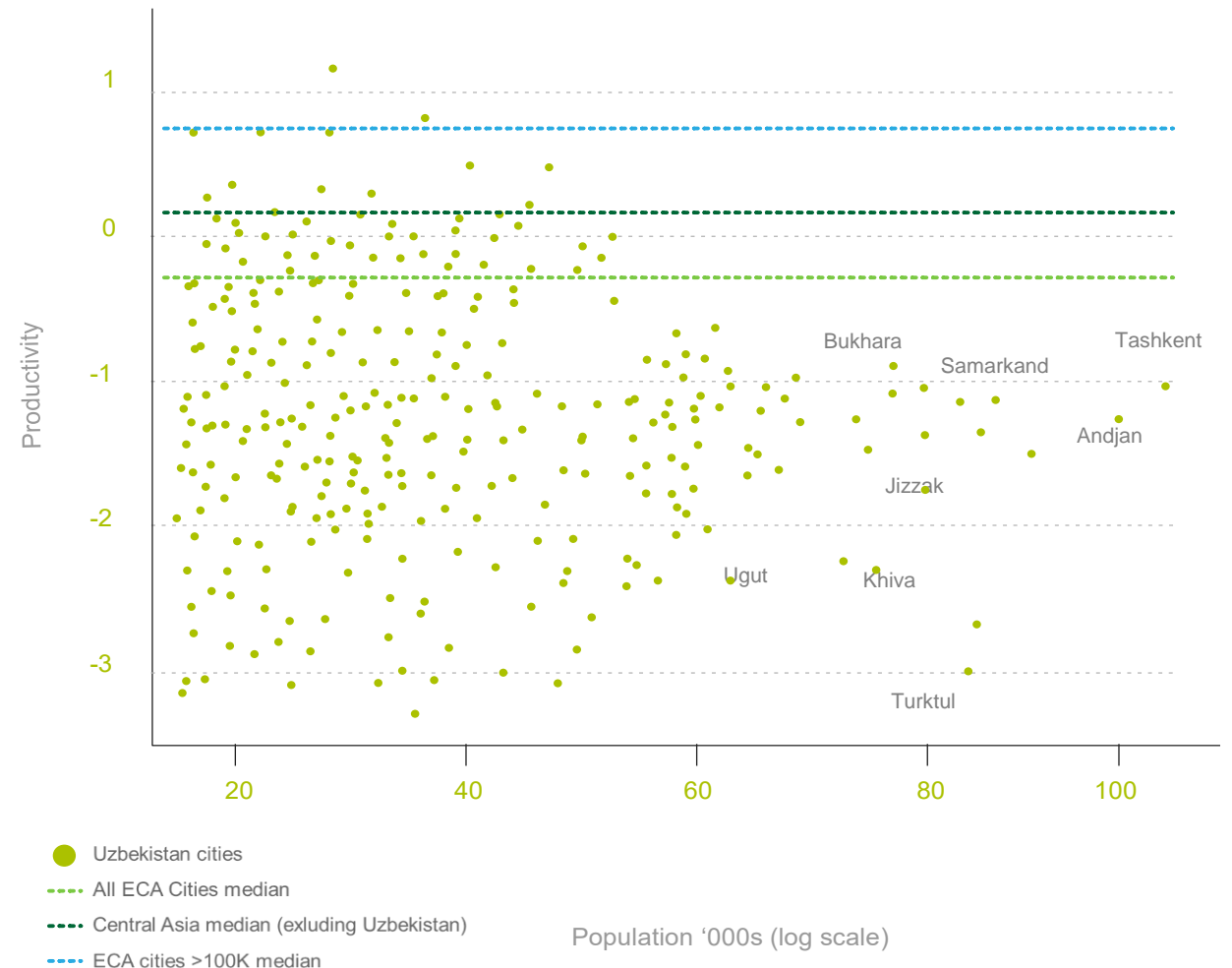
Source: Luigi Cipolla. The five urban pillars and associated goals. Extracted from DESA Sustainable Urbanization Strategy to 2030

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ECONOMIC CLUSTERING

To increase competitiveness among Tashkent and secondary cities (i.e., Samarkand, Namangan, Bukhara, New Andijan) by supporting networks of cities, regional centers, city-to-city cooperation, cluster of creative high-value industries.

- Promoting an integrated polycentric system of regional clusters and city networks.
- Strengthening economic diversification will reinforce the economic role of secondary urban areas such as Samarkand, Bukhara, Namangan, and New Andijan.
- Fostering economic clustering activities SEZs, SMEs, EIP, and R&I centers (e.g., agricultural machinery cluster in Chirchik and a cluster of the automotive industry in Jizzakh region, the Andijan Digital City Technopark).



Source: Productivity of cities in Uzbekistan Elaborated from WB 2022

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SMART URBAN GROWTH

To tackle urban sprawl by fostering compact development through the regeneration of existing urban areas, enabling the creation of green buffer and environmentally sensitive areas.

- **Smart Growth:** Using urban rezoning for brownfield areas through land conversion and changing zoning by-laws. By using the density bonus as a tool to capture the increased land value created in growth areas.
- **Compact Development:** Establishing efficient density restrictions lead to more compact and less car-dependent cities (e.g., BRT, LRT, and TOD)
- **Urban Growth Boundary:** An enforced Urban Growth Boundary (UGB) indicates the long-term urban growth limits.
- **Inclusive Zoning:** By making it mandatory, the developers should provide at least 10% of land to build affordable housing for “domiciled citizens.”



33%

Total Population
secondary cities



35%

Secondary Cities
produce 35% GDP



79%

UTS 50 km of a city with a
population larger than
100,000 people

Urban sprawl would cost an extra US\$1.2 billion in basic infrastructure over the next 30 years in just 10 major cities of Uzbekistan (WB, 2022)



To shift to a more compact model of growth and improved land management system to be reallocated for its most productive and efficient uses

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PUBLIC TRANSPORT

To foster smart urban development and compact, dense urban areas while taking advantage of the TOD approach to reduce socio-spatial segregation and enhance urban regeneration (AVOID)

- Facilitate investment in public transportation systems by adopting THE PEP approach “**Avoid-Shift-Improve**” to support the achievement of the 2030 Agenda.
- Plan urban areas through an integrative **TOD development approach** to land use distribution, supporting mixed-use development, and small block design.
- Corridors should have a floor area ratio (FAR) that is at least 50% higher than the district average.
- Design, plan, and develop **15-min cities**, to respond to the needs of vulnerable users, particularly people with reduced mobility (e.g., elderly and people with disabilities).



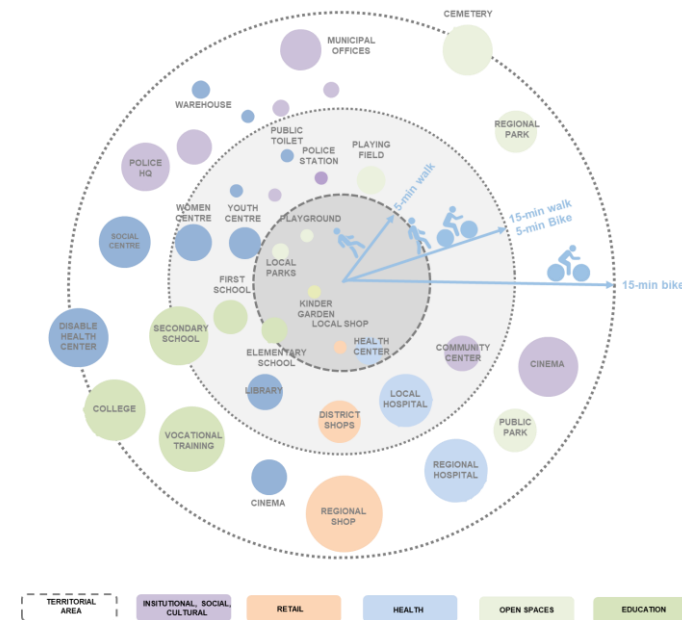
11.7% of passengers using public transport



Road fatalities account for 11.42 accidents/ 100,000 inhabitants GER (4.1) SWI (2.7).



16% of the transport related GHG emissions



Source: Luigi Cipolla. The 15-minutes cities. Extracted from DESA Sustainable Urbanization Strategy to 2030

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LAND VALUE CAPTURE AND TRANSPORT INFRASTRUCTURE



LVC Tool Features

Policy Mechanism/Strategy

INFRASTRUCTURE AND DEVELOPMENT LEVIES / PROPERTY TAXES

- Increased tax and license revenue stream because of the new development (e.g., city share of property and business taxes).
- Developers pay development levies at the time of permit approvals to help pay for the cost of municipal services infrastructure.

DEVELOPMENT-BASED MECHANISMS

- The City can increase **permissible FAR** (e.g., additional building height, required on-site open space reduction) to favor market appetite in key areas.
- Developers can benefit from the **LVC mechanism** through the density grant and bonuses. These provide additional social facilities (e.g., affordable housing, sidewalk upgrades, and heritage preservation) for increased density.

ZONING

- The City can establish a new **TOD zoning designation that promotes complementary mixed-use** (e.g., 30–50% for residential, 30–50% for retail, and 10–15% for public facilities).

LAND CONSOLIDATION

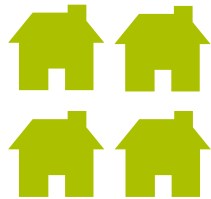
- The city administration can facilitate the consolidation of urban development through the **land readjustment** approach to land sale/lease portfolio.
- Land value uplift is captured when land is sold to developers for an upfront payment, leasehold charge, or annual land rent payments.

Source: Extracted from the WB 2022. Developing integrated passenger terminal with transit-oriented development and public-private partnership.

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LAND MANAGEMENT AND HOUSING

To ensure that 10% of the residential development is allocated to affordable housing. By 2030, reduce building heat losses by 20% through energy-efficient, advanced technologies and standards.



MHCS aims to build 100,000 yearly housing units up to 2040



Around 30% of the current housing stock is over 50 years old



The FAR pc increased from 15 m2 to 16 m2 between 2012 and 2019. VIE 22.6 m2 and the EU 42.56 m2 pc

Policy	Objectives
Property taxes or vacant urban land taxes	Incentivize property ownership while reducing land speculation
Impact fees	Charging developers/landowners for their developments to recover the social cost of conversion to housing
UGBs and Greenbelt	Contain sprawling housing development by physically limiting developable fringe areas and designates areas of open space surrounding urban areas
Incentives for higher density or accessibility	Provide subsidies to housing development with higher density/floor-to-area ratio. To be used for densification (e.g., near public transit infrastructure).
Inclusionary zoning	Ensure access to affordable housing by reserving new housing to be rented at below-market-price levels (often for certain periods, e.g., 20 years)
Rental allowances	housing Strengthen the rental housing market to ensure adequate tenure protection to facilitate residential mobility.
Subsidies or tax incentives for affordable housing	Use tools like inclusive zoning and tax breaks for developers to promote the private rental housing market and increase multi-family housing share.

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PUBLIC SPACE AND GREEN AREAS

To build a network of green and blue infrastructure that provides functional green spaces per capita to a minimum of 12 m² and Gross Urban Green Space (UGS) to 50 m² per inhabitant.

- To adopt a **“City Garden Approach”** which regenerates urban areas and enriches ecosystem services, well-being, and human health (UNESCO Man and Biosphere Program -MAB).
- To establish a network of green space in relation to city area and/or population size (i.e., 300 - 800 m distance and 0.5-1.0 HA per 1000pp, and community park at 1.5 – 3.0 km distance).
- To provide policy for 20% of all new flat surfaces on government buildings and **10% of all flat roofs** on private dwellings.
- To use **windbreak buffer areas** to improve the microclimate of buildings, reducing both **Surface Heat Islands and Atmospheric Heat Islands**.

Uzbek City	Bukhara (Uzbekistan)	Utrecht (Netherlands)	Chengdu (China)	Singapore	Yangiyul (Uzbekistan)
Green space pc (m ²)	**6.17 m ²	*114.6 m ²	*106.3 m ²	*28 m ²	** 0.8 m ²
Total urban population	725,800	558,802	9,305,116	5,940,679	60,000

Source: General Plans of the cities.

Note: * <https://www.hugsi.green/city> ** General Plans of Cities



Green roof reduces heat gain by 15.53 (37%) and 13.14 (31%) KWh/m² electricity demand.



Green Spaces
12 sqm per person
Gross Urban Green Space (UGS) to 50 m²

Source: Yang et Al. Green and Cool Roofs' Urban Heat Island Mitigation Potential in Tropical Climate,

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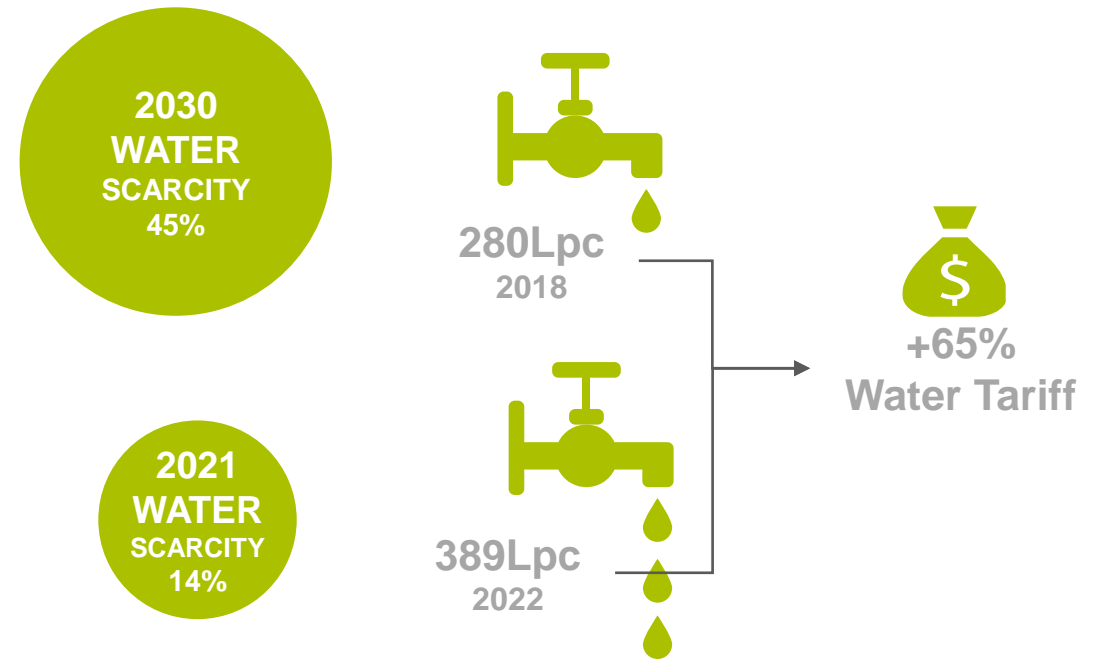
NATURE-BASED SOLUTION

To mainstream nature-based solutions (NbS) in urban planning to address climate change adaptation and mitigation and support sustainable development, biodiversity conservation, and food security.

A GFDRR study of extreme flood events estimates that a flood with a 100-year return period could affect 6% of Uzbekistan's population and 5% of the country's GDP.

- To implement the **WSUD approach** for controlled water drainage system and water supply (e.g., stormwater collection, treatment, and groundwater recharge);
- To **mainstream climate change** adaptation and mitigation measures, within the National Adaptation Plan (NAP).
- To boost the afforestation initiative to combat land desertification, protecting biodiversity and landscapes in urban areas and peri-urban areas.
- To foster the **“Urban Ecological Network”** to integrate PA with the environmental networks and ecological corridors.

Scientific research states that NbS provides 37% of the cost-effective CO2 mitigation needed through 2030.



Source: <http://suvsoz.uz/abonentam/tariffs/>

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A Call for Climate-smart planning and Climate Action

1. To implement a national development vision **robust data** is needed to monitor the progress of national environmental indicators.
2. To accelerate decentralization in secondary cities **capacity building** is needed to **empower local governments** and to be the leaders in the sustainable urbanization process.
3. To enable market-driven urbanization through a new land management system and housing reform is considered the driver to sustainable development in Uzbekistan.
4. To support **urban housing and the supply of urban infrastructure** and municipal services to facilitate residential mobility.
5. To accelerate the transition to a climate-resilient planning approach integrating climate change solutions with actions to reduce GHG emissions, protecting biodiversity through NBS, and equipping businesses, and youth with tools and data.
6. To implement **smart solutions, urban circularity, data-based and resilient approaches** to effectively address the challenges of municipal and efficiency of service delivery.
7. Scaling up international **public finance to climate investments** across sectors and funding sources. A list of funding includes:
 - Global Sustainable Bond Markets: the **UN Global Compact Practical Guidance** to Issue a Blue Bond and Sustainable Ocean Principles; the **Sustainable Blue Economy Finance Principles** the United Nations Environment Programme (UNEP).
 - Carbon trading schemes: environmental taxes, price-based instruments, carbon trading schemes, biodiversity offsets, certification, and fiscal benefits.
 - Grant Mechanism: IUCN acceleration financing for NBS through multiple grant mechanisms, including the Blue Natural Capital Financing Facility, the Subnational Climate Finance initiative, and the Nature+ Accelerator Fund.