### **Urbanisation-Sensitive Programming (USP)**

### Instructions for Card Deck

Version 1 (July 2024)

### The intention & purpose of this Card Deck:

This card deck is a tool to introduce the model and its 10 dimensions to a new audience in a communicative, engaging and collaborative way. It can be used in the context of a training event, a strategy or planning workshop or similar.

### Printing and Preparing the Card Deck

Print the file double-sided, ideally on a more sturdy paper. Make sure the duplex unit is set to long-edge binding.

Cut sheets with pages 3-8 into 12 cards with format A6. Dispose of the 2 blank cards and keep 10. Cut the sheets with pages 9-16 into 32 cards with format A7. Dispose of the 2 blank cards and keep 30. Keep the two card types in two separate decks.

### Using the Card Deck

There is no definite way to use the card deck, but here is a suggestion:

Number of participants: 3-15 Total duration: approx. 1 hour

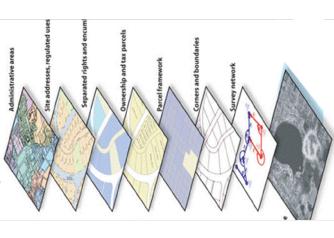
Material needed:

- 1 card deck (10 cards A6 with dimensions, 32 cards A7 with factors)
- [optional] 1 large sheet of paper and a few marker pens

### Instructions

- 1. Hand out the cards A6 with the description of the 10 dimensions to participants. Animate a conversation about what each dimension means until everybody has gained a solid understanding of the same.
- 2. [optional] Lay them all out on the table covered with 2 a large sheet of paper (2-3 flipchart sheets); ask participants to draw connections between the different dimensions, and label them, explaining how the different dimensions relate to each other.
- 3. Ask the participants to build pairs; shuffle the cards A7 with the factors and randomly distribute all of them to the pairs; make sure that the large caption of the dimension remains covered and prompt them not to peek.
- 4. Ask the participants to guess which dimension each factor belongs to and lay the card next to the dimension card. Do not yet flip them around.
- 5. Once all pairs have distributed their cards, flip them all around at once and identify which have been correctly or wrongly attributed.
- 6. Engage participants in a conversation on why a factor is part to a specific dimension; wrongly attributed cards are often a hint for connections between dimensions as drawn in step 2. Discuss and possibly complete this image.



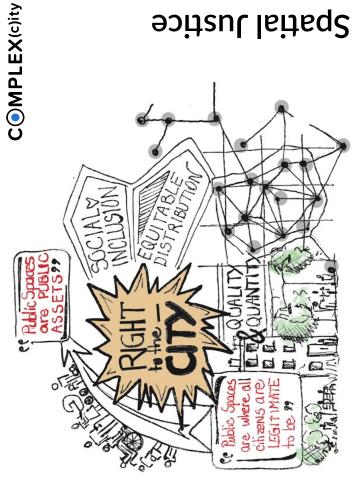


## Information Spatial Data &



# Intensification

Spatial Justice



## **Engine Economic**

Urban centres show agglomeration effects, leading to endogenous growth and yielding an urban dividend, i.e. creating new values and assets and therefore funds to further sustain the function and evolution of the urban centres.

V1.5 (March 24)

V1.5 (March 24)

Urban systems manage (facilitate or prevent) the participation of communities and people in their spaces' social, political and economic life (incl. public spaces, services, amenities and opportunities), thus increasing or reducing marginalisation.

Granular spatialised data/ information is a key to understand the specific features (= morphology) and dynamics of a location (→ context) and its generation, interpretation and management is essential for empowerment and rational choice making.

Urban growth leads to higher densities and frequencies on every level, i.e. in terms of people in an area, its built environment, social and economic interaction, which increase efficiency on the one side but leads to competition and conflict as well as higher stress, congestion and elimination of natural resources on the other side.

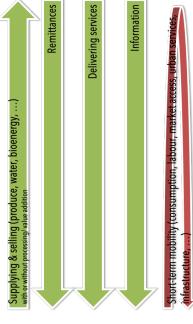
V1.5 (March 24) V1.5 (March 24) instantly & flexibly to situational

Turn voids/gaps in systems into opportunities

change

Respond

# CoMPLEX(c)ity



Change

Land Right

Vulnerability 🤦

Mobility JV

Settlements

Jpgrading

Spaces

Master

✓ Green

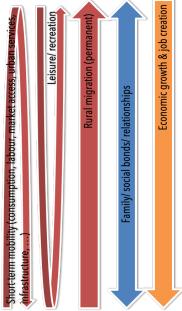
Resilience

Risk Mngt

Service Delivery

Infrastructure

Disaster



rand

Development Enterprise

Financial Markets

Access to

Revenue

Fiscal

Investments

Land Value Capture

Private

## Systems Inmrofnl

Accumulate marginal profits/

benefits

Aploit marginal space to manoeuvre

Systems nformal

> Feed on nea, subsistence levels of "productivity"/ livelihoods

Transaction

In the absence of formal systems, informal systems are the only yet valid substitution, filling the void, often constituting the prodigious majority of urban society.

V1.5 (March 24)

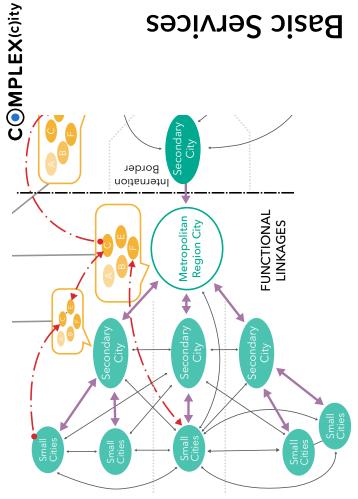
V1.5 (March 24)

Diverse and many transactions (like transportation, trade, commodity chains, service systems, resource sharing, ...) across urban systems are the key to value generation and efficiency; the creation and leveraging of opportunities make urban systems more productive, functional & efficient.

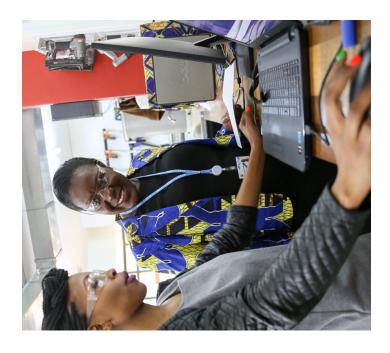
In urban systems, accessibility depends on physical connectivity, the form of land use and mobility, which all are determined by social policy, transportation policy and urban planning.

The importance and value of land transform in urban systems, sustained and harnessed through active management of land rights, tenure, security and registration.

V1.5 (March 24) V1.5 (March 24)





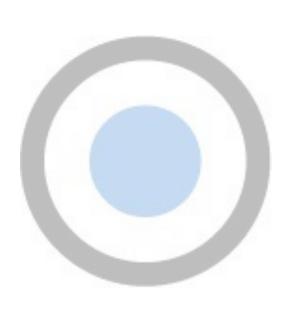


Innovation (e.g. green technologies, digital tools and technologies, etc.) is a byproduct of urban growth, which can be harnessed to drive economic growth (entrepreneurship), participation, political transparency & accountability, eco-management, etc.

Basic services become increasingly complex, interdependent and their efficiency becomes dependent on the alignment with the underlying structure of the urban system and the consideration of growing demand.







V1.5 (March 24)

# Spatial Data/ Information

Spatial Data/ Information

C MPLEX(c)ity

C MPLEX(c)ity

Intensification

Spatial Data/ Information

C MPLEX(c)ity

C MPLEX(c)ity

Intensification

Intensification

CoMPLEX(c)ity

C MPLEX(c)ity

Economic Engine

Economic Engine

Complex(c)ity

An accurate understanding of any situation and context requires "geo-referenced" information and analysis, because all development is location-based or somehow refers to a specific place (space)

The competent interpretation of data is key to controlling development, making deliberate decisions, creating transparency and holding institutions accountable.

Spatial data & information requires its own management structures, and regulating control of and access to the same has a profound influence on the exertion of power and control on social, economic and political levels.

Increasing numbers of urban dwellers and people depending on urban centres cause deficits in infrastructure (housing, transportation, utilities, etc.) and basic services (eduction, health, etc.), increasing stress, congestion, and competition.

As an immediate and unavoidable consequence of urban growth and migration, growing infrastructure, populations and their activities densify and cause growing pressure on and competition for restraint land, resulting in rising land costs.

Urbanisation is rapidly changing the natural habitat and environment, consuming natural resources and impacting the natural environmental system.

Urban centres drive concentrations and diversification of economic activities, including the exchange of commodities, the offering of services, work & jobs, crossfertilisation of knowledge & ideas, etc.

Urban centres accumulate and produce wealth (a "dividend" of urbanisation) that can be leveraged to sustain its functionality (e.g. building infrastructure, providing basic services, etc.).

**Spatial Justice** 

Economic Engine

C MPLEX(c)ity

C MPLEX(c)ity

**Spatial Justice** 

**Spatial Justice** 

C MPLEX(c)ity

C MPLEX(c)ity

Informal Systems Informal Systems

CoMPLEX(c)ity

C MPLEX(c)ity

**Accessibility** 

Informal Systems

C MPLEX(c)ity

Inhabitants & "users" of urban centres on the one side produce services & goods, and on the other side consume those within the urban centre and in exchange with the entire urban system.

The equitable participation in different urban spheres (transportation, services provision, housing, public space, economic activity, leisure, ...) depends on the absence of barriers (i.e. spatial, financial, legal, cultural, institutional, etc.).

Certain urban groups can be neglected, or actively disenfranchised, through economic, legal, cultural and environmental hurdles, stopping active participation in, or receiving of relevant services and opportunities.

The active participation of urban citizens in shaping and influencing the future form and function of the urban system is a key determinant of making them more inclusive and equitable

Where formal systems can't operate efficiently due to benefits/ profits being minimal, informal systems are much more agile and adaptive and hence can reap marginal profits and subsistence levels of productivity.

Informal systems tend to be pushed into the limits of legality because they act in entirely emergent and self-organised manners, without constraints of formal law & order and evading control & taxation.

Due to the absence of state-ordered regulation, administration and oversight, people in informal systems may fall victim to exploitation, predation and lack of accountability.

Lack of access to affordable and adequate transportation leads to socio-economic inequalities and disadvantages.

# Accessibility

Accessibility

C MPLEX(c)ity

C MPLEX(c)ity

Land

Land

C MPLEX(c)ity

C MPLEX(c)ity

**Transactions** 

Land

C MPLEX(c)ity

C

MPLEX(c)ity

**Transactions** 

**Transactions** 

CoMPLEX(c)ity

Social, cultural and legal barriers can prevent access to locations, regardless of their physical reach.

The location and spacing of infrastructure, services, opportunities, etc. determine who can benefit from it and at what terms.

Urbanisation increases the value of land and the competition for it, leading to unaffordability, expulsion of hereditary rights and conflict.

Through new, often public interventions and investments, land value increases, often to the one-sided profits of private interests ("windfall profits").

Unplanned and unmanaged land use falls short of strategic and efficient considerations to optimise spatial dispositions, resulting in a lack of foresight of potential and needs and arrangements for future developments.

Economic transactions (e.g. production & supply chains, trade, service networks) spanning the urban system (rural-urban continuum as well as between urban centres) tie entire rural & urban populations into webs of high interdependency.

Inefficient transactions along the rural-urban continuum, caused by a lack of active management, coordination & harmonisation, create friction costs and miss out on synergies, thus leading to a huge loss in value and a weakening rural-urban continuum.

Horizontal coordination, strategies & plans to manage interdependencies and interactions between adjacent urban centres hold big potential to make urban systems as a whole more efficient and effective by promoting a shared costs & benefits system.

## **Basic Services**

## **Basic Services**

C MPLEX(c)ity

C MPLEX(c)ity

## **Innovation**

**Basic Services** 

C MPLEX(c)ity

C MPLEX(c)ity

## **Innovation**

**Innovation** 

C MPLEX(c)ity

Basic services tend to concentrate in certain spatial areas and neglect others, on the one hand leading to increased efficiencies, wealth accumulation and prosperity in some areas and, on the other hand, to spatial pockets of under-delivery and disenfranchisement, leading to growing disbalances and inequalities.

Efficient and effective basic service delivery relies on the alignment with the underlying urban systems (i.e. the rural-urban continuum and inter-urban connections), with different locations in the system taking on specific functions and making use of higher efficiencies of density and scale.

Effective strategies, plans and delivery systems for basic services depend on the regonition & forecasting of and planning for anticapted urban growth.

Innovation creates new ways to deliver services, increase public participation, transparency and accountability of political, social and economic institutions.

Innovations create opportunity for economic growth and business development, resulting in more wealth creation and accumulation.

Innovation tends to lead to increasing inequality, competition for resources and eventually exclusion from participating in the newly emerging economy.