# **UN HABITAT** FOR A BETTER URBAN FUTURE



# THE CITY PROSPERITY INITIATIVE

# INFORMATION FOR SUSTAINABLE URBAN DEVELOPMENT

Cities have emerged as the focus for change and the venue where policies are realised. They have been able to forge new linkages among actors and offer innovative solutions, with the potential to be part of national agendas, and to influence regional and global development.(1) Cities have been catalysts of productivity, technology and infrastructure development, including institutional arrangements that contribute to the enhancement of equity, social inclusion and quality of life.

The outcome document of the United Nations Conference on Sustainable Development, entitled "**The future we want**", recognizes that if well planned and developed, cities can promote economically, socially and environmentally sustainable societies.(2)

However, poor planning, the absence of effective governance and legal frameworks, fragile institutions, low capacity of local authorities, and the lack of a sound monitoring mechanism, diminishes the possibility to promote long-term sustainable urban development. Evidently, there is an urgent need to put in place a global monitoring mechanism, which is adaptable to national and local levels. This would provide a general framework that allows cities, countries, and the international community to measure progress and identify possible constraints, thus pre-empting unintended development.(3) As the Report of the Sustainable Development Solutions Network that supports the Sustainable Development Goals indicates "data and metrics are essential for development goals to be met".(4) They enable cities to make correct decisions on the best policies to adopt, and assist in tracking changes, whilst systematically documenting their performance at the outcome level. This is fundamental towards achieving higher levels of urban prosperity and sustainable urban development for all.

"Data needs improving" – stresses the report A World that Counts, prepared as part of the Data Revolution efforts of the UN system.(5) Despite considerable progress in recent years, whole groups of people are not being counted and important aspects of people's lives and city conditions are still not measured.(6) For people, this can lead to the denial of basic rights, and for the city, the likelihood that they are not taking full advantage of the transformative potential which urbanization offers.

Too often, existing city data is not adequately detailed, documented and harmonized, or worse, it simply is not available for a whole host of critical issues relating to urban growth and development. This obviously greatly impacts the quality of decision-making. However, cities can and must do better than this.



- 1. UN-Habitat (2012), State of the World's Cities Report 2012: Prosperity of Cities.
- 2. United Nations (2012), The Future We Want.
- 3. UN-Habitat (2014), Urbanization and Sustainable Development: Towards a New Urban Agenda
- 4. Sustainable Development Solutions Network (2014), Indicators and a monitoring framework for SDGs: Launching a data revolution.
- 5. UN (2014) A World that Counts: Mobilizing the data revolution for sustainable development, www.undatarevolution.org
- 6. Text adjusted from the same report.-

# THE CITY PROSPERITY INITIATIVE A TOOL TO MEASURE SUSTAINABLE URBAN DEVELOPMENT

In 2012, UN-Habitat created a tool to measure the sustainability of cities. This tool known as The City Prosperity Index was accompanied by a conceptual matrix, the Wheel of Urban Prosperity. In 2013, UN- Habitat received numerous requests from local authorities and central governments to estimate their respective prosperity indexes. Mayors and other decisionmakers wanted to know how their cities feature in comparison with other cities. This included knowledge on how to improve ratings and measurements of cities towards the prosperity path, including gaining critical insights in to which programmes and policies work, and the possible impacts these actions may have.

As a result of these demands, UN-Habitat transformed the City Prosperity Index into a global initiative known as the City Prosperity Initiative. This initiative is both a metric and a policy dialogue, which offers cities from developed and developing countries the possibility to create indicators and baseline information, often for the first time. It also serves to define targets and goals that can support the formulation of evidence-based policies, including the definition of city-visions and long-term plans that are both ambitious, and measurable. UN-Habitat's City Prosperity Initiative (CPI) is an integral part of the Data Revolution for Sustainable Development. It not olny aims at the integration of new sources of data and the increase in the usefulness of data, but also enables city authorities, as well as local and national stakeholders, to identify opportunities and potential areas of intervention for their cities to become more prosperous.

Growing and ever more complex cities and their inhabitants no longer have the option of making decisions without the benefit of international validated data and indices. This kind of informed decision-making is a pre- requisite to deciding:

- Which policies to implement?
- Where to allocate public and private resources?
- How to identify setbacks and opportunities?
- How to measure what has changed?

In short, we live in a world that requires choosing the best and most sustainable options. The CPI can play a vital role in this process.

# A METRIC AND POLICY DIALOGUE



# MEASURE

by producing critical mass of data and information

# UNDERSTAND

the factors that generate or inhibit prosperity

# CHANGE

by formulating policies, strategies and actions

INFLUENCE

the nationals developments of policies

# WHAT IS DIFFERENT IN THE CPI FRAMEWORK

Most indexes have been designed for national governments using country aggregates, many of which are sectoral in nature, focusing on particular dimensions of development (environment, competitiveness, governance, corruption, etc.). The CPI offers a unique and holistic view of sustainable urban development, articulating the different dimensions of city growth, in four unique ways:

# **1. A FLEXIBLE MONITORING FRAMEWORK**

The CPI takes into account the contextual needs and particularities of cities. Although it promotes a new urbanization model that is universal (cities that are compact, resilient, socially diverse, energy efficient and economically sustainable), it recognizes the need to be adaptable to different city and country circumstances, according to diverse urbanization challenges and opportunities.

# 2. A FRAMEWORK THAT PROMOTE INTEGRATION

The CPI promotes integration in the implementation of a more sustainable urbanization model, in order to address the environmental, social and economic objectives of sustainability. This integration looks at the mutually reinforcing aspects of the different components of the urbanization process.

### 3. AN INNOVATIVE TOOL BASED ON SPATIAL ANALYSIS

The CPI structure provides a wealth of new analytical tools based on spatial indicators. New indicators such as street connectivity, public space, agglomeration economies provide clear spatial distributions that help increase value judgment and support decision- making.

# 4. A MULTI-SCALE DECISION-MAKING TOOL

The CPI's objective is to support decision-making for multi-scale levels of government ranging from national urban policies to regional and metropolitan strategies; and city-wide interventions to sub-city districts or neighborhoods. The CPI gives decision-makers the ability to make adequate and evidencebased decisions from a territorial perspective, thus articulating different tiers of government and sectoral interventions in urban areas.

# CONCEPTUALIZING PROSPERITY



### Productivity

A prosperous city contributes to economic growth and development, generating income, employment and equal opportunities that further provide adequate living standards for the entire population.



### Infrastructure

A prosperous city deploys the infrastructure, physical assets and amenities – adequate water, sanitation, power supply, road network, information and communications technology, etc. – required to sustain both the population and the economy, and provide better quality of life.



### Quality of Life

Prosperous cities provide amenities such as social services, education, health, recreation, safety and security required for improved living standards, enabling the population to maximize individual potential and to lead fulfilling lives.



### Equity and inclusion

A city is only prosperous to the extent that poverty and inequalities are minimal. No city can claim to be prosperous when large segments of the population live in abject poverty and deprivation. This involves reducing the incidence of slums and new forms of poverty and marginalization.



# Environmental sustainability

The growth of cities and their economic development do not destroy or degrade the environment; instead, the city's natural assets are preserved for the sake of sustainable urbanization.



### Governance and legislation

Cities are best able to combine sustainability and shared prosperity through effective urban governance and transformational leadership, deploying appropriate and effective policies, laws and regulations, and creating adequate institutional frameworks with strong local institutions and sound institutional arragements.

# **1. A FLEXIBLE MONITORING FRAMEWORK**

The CPI is not a rigid blueprint; it is a living framework – one that intentionally leaves room for cities to respond to contextual needs, and to move creatively according to their possibilities, challenges and opportunities. As part of this flexible approach, the CPI has a double function. Firstly, it serves as a platform for global comparability in which cities can assess their situation, and compare their rate and present performance with other cities worldwide. Secondly, it acts as a strategic policy tool where the data and information is adapted to local or contextual needs, and used to measure progress and identify deficiencies in the different dimensions of prosperity.

Consequently, the CPI is constructed incrementally favouring, at the basic level, the regional or global comparison and at the advanced level providing the possibility to integrate contextual aspects of cities. This incremental approach includes the potential to understand and measure cities comparative advantages, as well as policies and actions which the CPI is intended to assess. The City Prosperity Index uses a set of commonly available indicators that exist amongst all cities, acting as a platform for regional/global benchmarking and for comparision purposes. It is useful for cities that want to compare their level of development and overall performance with regards to prosperity ratings, with other cities in the regional and global arena.

The availability of local information and the particular characteristics of the city can also determine the profusion of the indicators to use. Most of the indicators are strictly urban in nature and various have a spatial component, such as the use of public space, the economic agglomeration index and the street connectivity index. A more extended version of the Index allows for a more detailed political and technical dialogue that is essential for the development of more informed public policies and allows to document performance of the cities at the outcome level. It also plays a role as a performance measurement. Its primary functions is to monitor local initiatives and projects that are needed to implement the city's vision in order to achieve shared prosperity and sustainable development.



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# 2. A FRAMEWORK THAT PROMOTES INTEGRATION

In efforts towards improving economic productivity or providing infrastructure, some cities may further exacerbate inequalities or negatively impact environmental conditions. Conversely, other cities can have unintended results in the quality of life, while implementing specific programmes and policies.

The CPI looks at these interactions and measures inter-sectoral relationships, and attempts to reinforce them. By conducting policy simulations, the CPI assesses the possible effects of specific policies on the different dimensions of prosperity. Using regression and correlation analysis and association of variables, the CPI can accurately determine the positive impact of a selected policy on city growth.

The possibility of linking policy decisions to ex-ante impact assessments favors the adoption of multi-sectoral, integrated actions that can increase the likelihood of better prosperity outcomes for the whole city. The CPI allows cities to define targets and goals that can support the formulation of evidence-based policies and measurable long term plans. The compiled data of the CPI indicators facilitate the analysis of trends and patterns of cities with similar prosperity indexes.

At the same time UN-Habitat Best Practices database set up the comparison among a selection of specific policies that have shown similar results to those that would be desired in implementation of a more prosperous city.

Finally thank to the policy simulation is possible to predict the impact of the alternative policies on the overall Urban Prosperity level. UN-Habitat is working with the University of Sydney to develop an automatized selection and use of best practices for policy pourposes.



### Data Analysis

As part of a broader worldwide initiative, the CPI does not only provides a deep insight of the prosperity level of the city analysed, but also allows a performances comparison at the level of dimensions, subdimensions or individual indicators, within multiple cities of the same world region or with similar CPI prosperity indexes. The City Prosperity Initiative through the collection of city-level information generates an unique bank of urban knowledge.

### **Best Practices**

The CPI is developing a system based on artificial intelligence to help identifying areas of intervention, methods of implementation and expected outcomes in order to achieve a more prosperous city. Through a methodical analysis of a database of best practices, examples of policy components and existing case studies will be provided in order to meet the city needs identified by the CPI.

# **Ex Ante Policy Evaluation**

The strong integration and connection between the different dimensions of the CPI allows an ex ante policy evaluation. In fact, after the identification of interrelated dimensions and sub-dimensions, supported by the analysis of trends and patterns of a wide sample of cities, is possible to anticipate the impact of a positive improvement on a wider range of indicators and corresponding dimensions of the CPI.

**CPI POLICY SIMULATION** 

# 3. AN INNOVATIVE TOOL BASED ON SPATIAL ANALYSIS

The form, planning and structure of the city can conspire against prosperity or act together to boost it. Concerned by the need to produce accurate, reliable, timely and disaggregated data, UN-Habitat has created an important innovation in the CPI by integrating spatial indicators and analysis in the different dimensions of prosperity.

When spatial indicators are combined with socio economic indicators disaggregated at intra-city level, they can address the challenge of 'invisibility' and 'inequality' on data coverage.

UN-Habitat has shown that 'the expansion of cities has been accompanied by changes in land use, both in terms of form as well as structure'. Cities with endless peripheries, low residential densities, poor economies of agglomeration, insufficient land to street development and poor provision of public areas are unsustainable in their form and functionality. Innovative spatial indicators of the CPI aim to measure these transformations in order to address them with reinvigorated urban planning and design, adequate laws and institutions and local economic development solutions. According to UN-Habitat, adequate provisioning of streets and public spaces are associated with urban prosperity. Typically, more efficient and productive cities, with better quality of life and environmental indicators are often cities with better streetconnectivity. In contrast, slums and poor neighborhoods have on average half the proportion of streets compared to consolidated areas of the city. In order to measure this fundamental dimension of the urban form, UN-Habitat has created a composite indicator made of three variables – land allocated to streets, street density and intersection density.

In order to provide 'the right information on the right things and at the right time', there is a need of geospatial data, adequate technology and management systems to complement high-quality official statistics. Spatially disaggregated data provides relevant information for policy makers to decide on local-level allocation of resources and the monitoring of equitable outcomes across and within cities and human settlements. Geospatial information needs to be available quickly enough to ensure that the data cycle matches the decision cycle.

# **CPI STREET CONNECTIVITY**

Street connectivity along with other spatial indicators repre- sents an important innovation in data collection and analysis. The CPI is a unique tool that associates urban form, planning and the structure of the city to the notion of prosperity. A database of more than 130 cities provides an exceptional innovation in infrastructure development and the layout of the cities with findings that pave way for state-of-the-art analysis on the relationship of public space, economies of agglomera- tion, including residential and infrastructure densities.





Tabuk city, formal subdivisions



Jeddah, atomistic development







Riyadh, Mass housing projects

# 4. A MULTI-SCALE DECISION-MAKING TOOL

The CPI provides national and state/provincial governments, and local authorities with the necessary data and information to articulate various territorial levels for higher coordination of roles and responsibilities. This articulation functions according to the principle of active subsidiarity and institutional collaboration.

In some cases, the CPI supports the development and implementation of integrated national urban policies. Decisionmakers are provided with the knowledge to make opportune decisions about their cities – small, medium or large – as part of a national system of cities. This helps to amalgamate the dispersed energy and potential of urban centers, establishing a synergetic connection between urbanization and national development. In other cases, the CPI provides information at the regional and metropolitan levels building linkages between municipal governments, articulating responses that contemplate city regional development and better integration of sectors. The Metropolitan CPI can detect which municipalities or districts are more advanced in the prosperity path, proposing solutions for a more harmonious urban development.

Overall, the CPI produces information at city level, and when data allows, at sub-city level. This information is critical to support local decision-making in key priority areas of development, such as the strengthening of urban legislation and systems of governance, harnessing the urban economy and creating employment opportunities for all, reinforcing municipal finance, and improving basic service delivery and housing.

# SCALING THE CPI

# NATIONAL

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# METROPOLITAN

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### CITY

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Global Monitoring Instrument

National Initiative

Metropolitan Strategies

City level policies



# THE CPI AND THE 3-LEGGED APPROACH

The CPI proposes a limited number of key, transformational, interventions, which are designed using the essence of the New Urban Agenda main components: the UN-Habitat's 3 legged approach - urban legislation, urban economy and urban planning. CPI + 3 legged approach are part of the equation of sustainable solutions.

### 1. Planning and Urban Design

A reinvigorated planning involves political choices and commitments, which must be turned into tools and sustainable technical solutions. The City Prosperity Initiative identifies a number of these interventions that can help cities to move on the prosperity path, such as plan infill development and guided city expansions, multimodal mobility development strategies, neighborhood planning for enhanced social diversity and mixed-land uses, etc.

### 2. Urban legislation and governance

Laws and institutions provide the normative and organizational underpinnings of urban change and the power and rigor for enabling action, granting authority, defining relations and generally sustaining continuity or triggering change. The City Prosperity Initiative identifies transformati- ve actions in areas such as the reform of urban legal systems, regulations on urban planning, building regulations and zoning laws, and participatory and inclusive land readjustments.

### 3. Urban economy and municipal finance

The City Prosperity Initiative identifies transformative actions that can help local and national governments develop revenue enhancement plans which can leverage innovative tools and simple, transparent revenue collection mechanisms. These mechanisms can harness and support growth while garnering community buy-in for public sector revenue collection efforts.





# A GLOBAL MONITORING FRAMEWORK FOR **SDG GOAL 11** AND **THE NEW URBAN AGENDA**

The CPI has the potential to be a global framework for indicators and targets of Goal 11 – The CPI framework is built based on a sound statistical approach that integrates various indicators to the different dimensions of shared prosperity and sustainability.

Once that the final indicators of the SDGs will be agreed, UN-Habitat and partners can initiate an exercise to adjust the CPI to the SDGs structure. This new CPI framework can integrate all indicators of Goal 11 and a selected number of other SDG indicators that have an urban component. The convergence is already very high and the exercise will be relatively simple.

The CPI is a monitoring framework firmly grounded on established principles and sound statistical practices that enables the tracking of progress and ensures accountability towards the implementation of the 2030 development agenda. Countries that decide to use the CPI will be able to identify, quantify, evaluate, monitor and report on progress made by cities and countries, towards SDG Goal 11 in a more structure manner. UN-Habitat will provide technical assistance as needed.



# **CPI FRAMEWORK ADDED VALUE**

# 1. Adopt a systemic approach of the city.

The CPI offers a holistic view of sustainable urban development. It allows the establishment and understanding of the interrelations of the different dimensions of city development. By using this global framework it is possible to ensure that different SDGs targets and indicators can have a mutually reinforcing effect.

# 2. Provide a single value of the state of the city.

As a composite index, the CPI allows the understanding of the state of the city's development in a more integrated manner. This helps local and national governments to visualize how inclusive, safe, resilient and sustainable cities and human settlements are. At the same time, SDGs targets and indicators can be separated in specific metrics and values.

# 3. Establish benchmarks for local, national and global monitoring.

The CPI methodology has created specific benchmarks with sound techniques of standardization that enable comparisons among different indicators. This is crucial for the creation of a global monitoring mechanism. National governments can adjust them to specific needs and requirements.

# 4. Create baseline data and information.

The adoption of the CPI enables cities to create baseline data and information, which is extremely important to (re) define local targets, propose strategies for improvement, identify setbacks and monitor progress over time.

# 5. Establish a global platform for comparability.

The CPI offers a global platform for the comparability of cities from developed and developing countries. This is achieved through the use of indicators that are homologated and grouped by targets.

# 6. Identify priorities of sustainable urban development.

The CPI allows disaggregating of the different components of sustainable urban development, making it possible to identify progress or lack of it in the different components of the Goal (inclusion, safety, resilience and sustainability). By isolating targets and components or grouping them, it is possible to adopt appropriate policies and corrective measures.

# 7. Provides evidence-based for policy-making and accountability.

The CPI is not only a metric; it is also a policy dialogue that is key to support the formulation of better-informed policies and actions, based on accurate data and diagnostics.

# 8. Create local/national monitoring mechanisms.

The CPI framework offers the possibility for local and national governments to establish their own monitoring mechanisms, empowering them to monitor and report in a more systematic manner. At the same time, the CPI remains a global monito ring mechanism that allows aggregate data for regional and global reporting.

# MORE THAN 300 CITIES AROUND THE WORLD

### SAUDI ARABIA

Measuring urban form through the CPI in 17 cities

By implementing the City Prosperity Initiative - with a strong focus on spatial analysis and urban planning support - Saudi Arabian authorities will be able to identify opportunities and potential areas of intervention for their cities to become more prosperous. Innovative spatial indicators of the CPI aim to measure these transformations in order to address them with reinvigorated urban planning and design, adequate laws and institutions and local economic development solutions.

The main outcomes were:

- A spatial capital analysis that combines population densities with street connectivity

- A strong correlation between the density of streets and the proportion of the city that has high built-up densities

- The analysis of different types of built-up areas (low, medium and high) against standard values of the Street Connectivity Index

### MEXICO

Implementation of the CPI for 130 cities

The Mexican Housing Bank (INFONAVIT) and UN-Habitat committed to implement the Urban Prosperity Initiative in Mexico, working on the implementation of the CPI for 130 municipalities, where most of the mortgage loans are generated. The CPI was used as a strategy to evaluate how the housing sector can impact on urban prosperity and contribute to design more integrated housing policies. The main outcomes were:

- Better Infrastructure: urban mobility and public spaces will be improved and welfare will be increased by a new integrated approach.

- Improved Urban Services: Urban services will improve its efficiency and an enhanced public policies framework will allow local managers to be more effective in decision making.

- Improved Monitoring Data: Improved data will be available for housing developers, urban planners and local authorities, in order to define proper location for new housing developments that make cities more compact, socially diverse and functional.

# **CPI CITIES MAP**

The CPI has already been proven in more than 400 cities across the world and as a monitoring framework it has the potential to become the global architecture platform for the monitoring of SDG Goal 11.



# CITY PROSPERITY INITIATIVE - METROPOLITAN CITIES (CPI-MC)

# AN INITIATIVE FOR METROPOLITAN CITIES

UN-Habitat and International City Leaders (ICL) launched the City Prosperity Initiative for Metropolitan Cities (CPI-MC), which aims to promote innovative approaches to urban governance and management to assist metropolitan leaders in guiding their cities towards economically, socially, politically and environmentally prosperous urban futures.

# **CPI - MC Projects**

The CPI-MC is composed of five main projects:

### 1. Global City Report

The Global City Report is the starting point for the comparison of cities, using a limited number of indicators that are representative of Prosperity and Sustainable Urban Development; it enables city authorities and the general public to identify opportunities and potential areas of intervention for their cities to become more prosperous.

### 2. Best Practices

The "Best Practice" project aims to define criteria for best practice identification and selection in order to create a database on best practices that can contribute to city prosperity implementation.

### 3. Mayoral Fellowship

The Mayoral Fellowship is a new and unique international, both institutional and financial, recognition of the importance of city leaders' innovation and leadership towards city prosperity.

# 4. CPI-MC International Conference

The CPI-MC International Conference will focus on Urban Economy and Municipal Banking to enhance the capacities of city leaders for better financial management in the implementation of action plans developed from the analysis of their City Prosperity Indexes.

### 5. CPI-MC Global Fund

Global Fund for The City Prosperity Initiative will assist CPI member cities in implementing the outputs of the CPI such as policy reforms and action plans. It will also facilitate a deeper dialogue on enhancing municipal financing and banking.

# INTERNATIONAL CITY LEADERS

International City Leaders (ICL) works with partners to build capacity to manage urban growth through strategy development, organizational gap analysis and training and conference design at local, national and global levels. It aims to bridge the knowledge gap between local and central governments, city leaders and academia by creating a space for mayors, elected officials and city leaders to gain knowledge and expertise on a host of innovative developments in the field of sustainable urban development.







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