

UN-HABITAT | LAB
urban planning and design

WHAT IS THE URBAN PLANNING AND DESIGN LAB?

The Urban Planning and Design Lab (UPD-LAB) is an initiative from UN-HABITAT to promptly respond to the requests of national and local governments to support sustainable urban development.

The LAB acts as the integrative facility of the Agency in which spatial planning is used as the tool coordinating economic, legal, social and environmental aspects of urban development, translating them into concrete and implementable projects that materialize the normative work of UN-HABITAT. These urban strategies generate value, economic development and jobs.

The UPD-LAB is formed by a multidisciplinary team of urban planners, legal and financial experts providing a holistic proactive approach. Due to this, the UPD-LAB has become the team building facility inside the Agency where different areas of expertise come together to deliver concrete and integrated solutions.

The focus areas of the LAB are:

- Citywide strategies
- Planned city extensions (and new towns)
- Urban infill, densification and renewal
- Planning guidelines and capacity development
- Climate change and urban planning

The LAB is currently working in concrete projects joining international and local expertise in more than 20 countries and 40 cities in Latin America, Africa, the Middle East, Europe and Asia.

The UPD-LAB is also the cornerstone of the Global Network of Planning and Design LAB's, an initiative supported by member states during the 25th Governing Council of UN-Habitat.

The Network promotes the collaboration of international experts working together in different countries with local partners to propose implementable plans.



cities where UPD-LAB is active

WHAT TYPES OF PROJECTS DOES THE LAB WORK ON?

city-wide strategies

are an integrated approach to infrastructure development, urban extension and densification and the rural/agricultural linkages. It creates a strategic framework for decision making and it defines key transformative projects for the short, medium and long term. It links and balances sectorial interventions and generates input for sectorial policies. Furthermore, city-wide strategies create a narrative for city leaders on the future development of their cities.

Relevant projects:

- Spatial Development Framework for Johannesburg 2040, South Africa
- City Wide Strategy of Wuzhou, Guanxi, China
- Integrated Master Plan for Gabiley & Citywide Strategy for Mogadishu, Somalia
- Plan for inclusive and resilient urbanization of the emerging city in the Canaan area of Port au Prince, Haiti
- Implementation strategies for the Nairobi Integrated Development Masterplan, Kenya

planned city extensions (and new towns)

address the pressure for affordable housing and accessible basic services for the growing urban population through the identification and structuring of planned expansion areas that are in proximity to the existing urban fabric and at an adequate scale. In some cases it is not possible to develop extensions contiguous with the existing city. This is particularly relevant when issues of balancing population distribution and expanding the national system of cities are critical. In this case new towns can be an alternative to the extension. Its adoption, however, needs to be evaluated carefully to build on real development dynamics. In establishing a new town, location is crucial to making the most of national development dynamics and opportunities; avoiding interference with the natural environment and guaranteeing the provision of resources for human activities.

Relevant projects:

- Planned City Extension for Bosasso, Somalia
- Planned City Extension for the Ningo-Prampram area, Greater Accra Region, Ghana
- Planned City Extension for Rubavu and Nyagatare, Rwanda
- Planned City Extension for Santa Martha, Colombia
- New Town of Al-Alamein, Egypt
- Planned City Extension for Cagayan de Oro, Silay, Iloilo and Zamboanga, Philippines

urban infill, densification and regeneration

applied to existing urban fabric help to achieve a structure that would minimize transport and service delivery costs, optimize the use of land and support the protection and organization of open spaces. They can provide benefits in terms of street life, economic viability of activities, proximity and walkability.

Types of strategic interventions can include suburban densification, area redevelopment and slum upgrading, brownfield development and transit-oriented developments. Urban infill, densification and renewal can reduce unnecessary consumption of valuable land in the cities' surroundings.

Relevant projects:

- Urban Design and Renewal Strategy for the deprived 'La Candelaria' neighbourhood in Medellin, Colombia
- Infill, densification and renewal strategy for Greater Accra, Ghana
- Expert Group Meeting on Urban Renewal in Mexico City, Mexico
- Lakefront Development Plan for Kisumu, Kenya

planning guidelines and capacity building

seeks to improve knowledge on urban issues and to build capacity in dealing with urbanization at local, national, and global levels. The Lab has a 'learning-by-doing' approach in which local planners engage in concrete planning exercises in their cities. As such UN-Habitat's principles can be contextualized. From these interventions local or national guidelines for planning can be disseminated and multiplied.

Relevant projects:

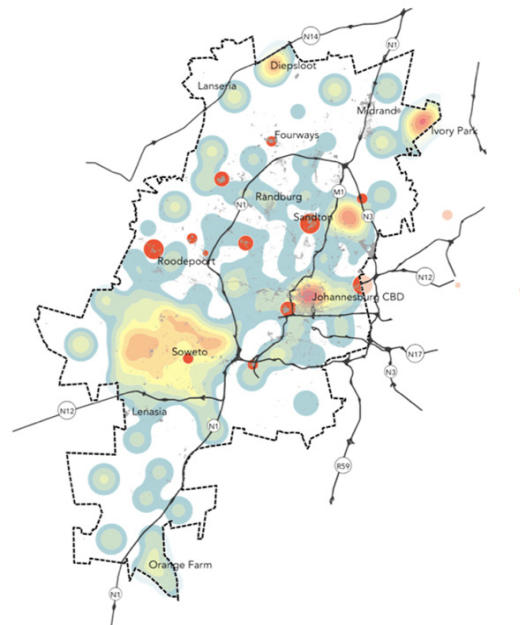
- Improving city plans Kalay, Pyay and deducing 'Guidelines for Urban Planning' in Myanmar
- Developing the Master Plan for Gabiley, Somalia and deducing 'Handbook for Planning'.

climate change and planning

provides practical tools for addressing climate change through assessing the impact of urban planning options in a city, applying mitigation and adaptation strategies in order to reduce Green House Gas emissions and to reduce the risks of natural disasters and climate change.

Relevant project include:

- A responsive urban planning and climate change strategy for the coastal area of Cote d'Ivoire.
- A resilient masterplan for the capital of Belize, Belmopan, the Caribbean.
- Climate Change and Planning interventions for several cities in India



*mismatch of people density and job density,
Spatial Development Framework 2040,
Johannesburg*

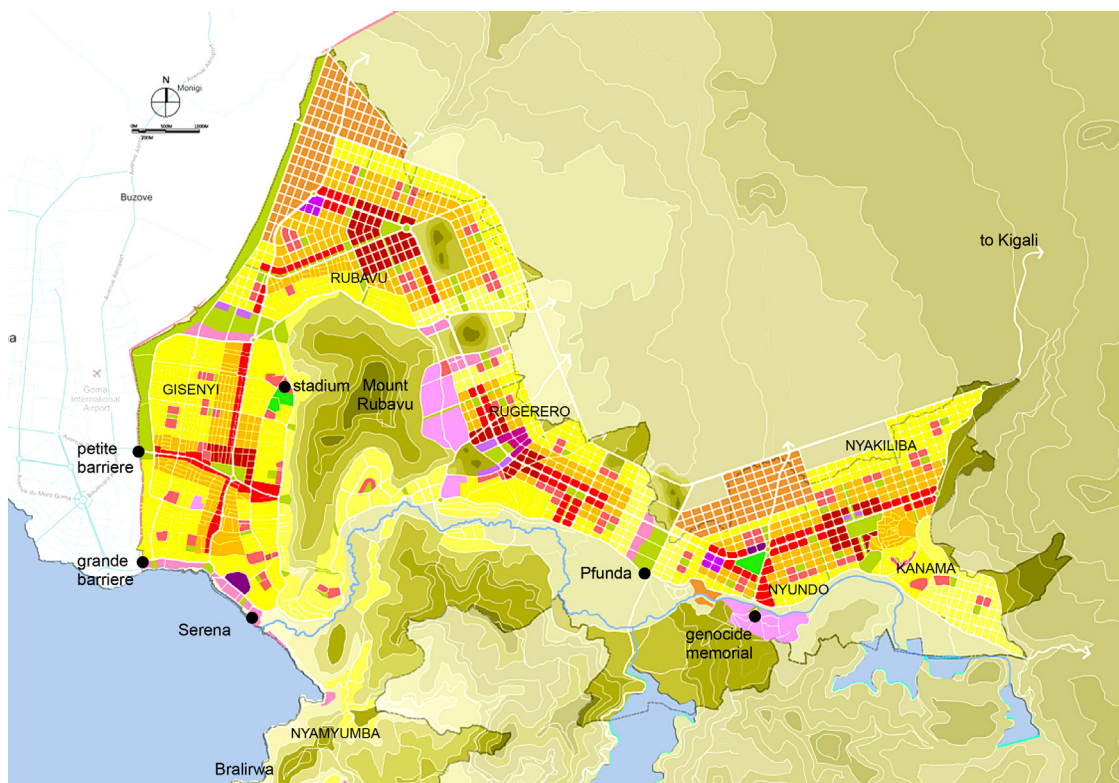
HOW DO WE WORK ?

The approach of the Lab is derived from the experience of the Spanish funded programme “Achieving Sustainable Urban Development”. The programme successfully applied a three pronged approach of planning, legislation and economy to trigger sustainable development in cities in Rwanda, Mozambique, the Philippines, Colombia and Egypt.

In the LAB methodology, planning is applied as an iterative process. As a fruit of the interaction and multi-stakeholder engagement, planning becomes the means to influence and accomplish complex governmental agendas, impacting economic prosperity, poverty reduction, social cohesion, inclusion, political stability and conflict prevention, while touching upon cross-cutting issues such as climate change and human rights.

The LAB promotes to integrate design throughout the whole planning process, since design explorations can actually also contribute to problem definition and the formulation of goals. Doing so, it replaces the sequential planning process with an iterative planning process in which plans are developed, tested and improved. This provides space for all sorts of stakeholders to contribute and participate in a process focused on implementation.

The “hands on work” methodology of the LAB allows UN-Habitat to transfer knowledge into practice, applying, promoting and piloting UN-Habitat principles for Sustainable Urban Development. Within the Lab and the Network of Labs, groups of experts are deployed in international assignments to provide long-term support and develop concrete proposals.



planned city extension Rubavu, Rwanda

A THREE-PRONGED APPROACH

the approach

In order to support cities overcome the challenges, and enhance sustainable urban development, UN Habitat has adopted a more strategic and integrated approach to addressing the challenges and opportunities in twenty-first century human settlements that addresses urbanization as a key factor of sustainable development.

This new approach incorporates three essential urban elements that inform an integrated working methodology. These three essential elements are: Urban Legislation, Urban Planning and Design and Urban Finance, and they are used as a three-legged strategy in order to advance sustainable urbanization.

This strategic and integrated approach adopted by UN-Habitat is therefore more systemic, and goes beyond addressing only the symptoms of malfunctioning urbanization. The approach is, instead, integrated, rather than sectoral, transformative rather than fragmentary, and links urbanization and human settlements to sustainable development by focusing on prosperity, quality of life, urban economy and employment.

I. urban legislation

The first prong of UN Habitat's approach for effective urbanization can be achieved through emphasis on the establishment of a system of rules and regulations that provide a solid and predictable long-term legal framework for urban development. Special attention should be paid to the areas of accountability, implementability and the capacity to enforce the legal framework where applicable

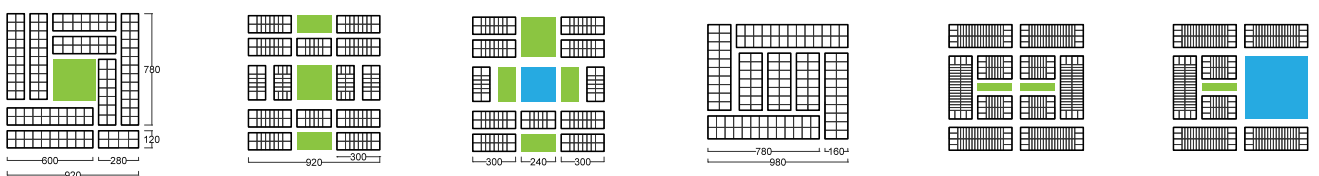
II. urban planning+design

The next prong focuses specific attention on the design of the common space, since it is one of the main contributors to urban value generation, with provisions for appropriate street patterns and connectivity and the allocation of open spaces. Equally important to the design of common space is clarity in the layout of the buildable blocks and plots, including appropriate compactness and consideration for the mixed economic use of the built area, so that mobility needs and service delivery costs per capita can be reduced. Finally, the design should facilitate the strengthening of the social mix and interaction as well as the cultural aspects of the city.

III. urban finance

The final prong of UN-Habitat's urbanization plan addresses the need for strong and effective urban finance. This successful implementation depends on its sound financial basis, including the ability of initial public investments to generate economic and financial benefits and to cover the running costs. Financial plans should contain a realistic income plan, including the sharing of urban value between all stakeholders, and an expenditure provision to address the requirements of the urban plan.

Ultimately, these three components should be balanced in order to ensure positive and achievable urban outcomes. This balance should lead to increased cross-sectorial synergies, delivery-focused partnerships as well as streamlined and effective procedures.



urban block improvements Myanmar

THE LAB'S VISION FOR SUSTAINABLE URBAN DEVELOPMENT

UN-Habitat supports countries to develop urban planning methods and systems to address current urbanization challenges such as population growth, urban sprawl, poverty, inequality, pollution, congestion, as well as urban biodiversity, urban mobility and energy, by promoting its vision at the national, regional and city scales, to achieve more compact, better integrated and connected cities which are socially inclusive and resilient to climate change.

more compact

Places emphasis on a sustainable urban form (shape, density and land use) that reduces the over exploitation of natural resources, promotes economic viability, livability, environmental quality and social equity. Urban compaction aims to increase built area and residential population densities; to intensify urban economic, social and cultural activities and to manipulate urban size, form, structure and settlement systems in search of the environmental, social and global sustainability benefits, which can be derived from concentration of urban functions.

better integrated

Holistic approach to urban development that interlinks various dimensions of urban life; social, economic, environmental, political and cultural. Emphasis is placed on the linkage of spatial aspects of urban development with economic, social, environmental components, in particular to achieve both mixed use and social mix. Both vertical and horizontal integration also constitute the crucial components of the integrated approach. Vertical is in terms of the early integration and involvement of the various players of government, administration and non-government players involved in urban development. Horizontal, on one hand, is in terms of integrating the various sectorial policies, and actions of the public and also private sector for sustainable development.

better connected

Involving the development of policies, plans and designs that offer better physical, social and virtual connectivity among people living in different locations and urban areas. It regards cities as entities connected to neighboring settlements, surrounding regions and hinterland, with which they share resources and opportunities. It also includes national and regional strategies such as the development of networks and corridors to address transportation-related needs based on a full understanding of the dynamics of human and goods flows and all interacting influences including national and international trade. Connectivity fosters innovation in business, government and education, allowing interlinked cities to gain from complementariness in their production structures and service structures.

socially inclusive

Conferring certain rights to individuals and groups in a society, recognizing diversity and promotes equality by giving attention to those whose voice has often not been heard in conventional public policy. It promotes the concept of participatory planning which is not limited to the integration of stakeholders with more influence, but also the integration of all stakeholders with a particular focus on the needs of women and those who are most vulnerable, including, inter alia, children and youth, older persons, persons with disabilities, the poor, the landless, rural to urban migrants, internally displaced people and indigenous peoples in the plan making process so to effectively impact their lives.

resilient to climate change

Recognizing the role of cities in Climate Change Mitigation and Adaptation, as well as the potential role cities play as centers of innovation, development and application of new technologies and solutions in the effort to curb, halt, reverse and adapt to global climate change. Human activities in cities are major contributors to climate change and the source of a considerable portion of global Greenhouse Gas (GHG) emissions, especially CO₂. Resilience to Climate Change therefore includes policies, strategies, frameworks, plans and designs that promote both, the adaptation to climate change and mitigation of GHG emissions.

HOW PLANNING AND DESIGN IMPACT CITIZENS AND GOVERNMENTS

The transformative power of urban planning and design can unlock:

economic prosperity

Urban development and adequate design of neighborhoods, public spaces, streets and roads network facilitates trade and fosters international competitiveness of cities, being a growth platform for agricultural, industrial and service businesses. Cities currently generate 80% of the global GDP while accommodating over 50% of the world population, however, deficient planning and infrastructure can reduce business productivity by as much as 40 per cent.

poverty reduction

Through a consultative and community-based approach, urban planning and design has the potential to enhance livelihoods by giving people access to services, amenities and economic opportunities, empowering communities to decide about their future.

Social integration, inclusion and cohesion can be promoted through urban planning and design measures at different scales, including national spatial frameworks, regional planning, city-wide planning, neighborhood design and public space design. Neighborhood design, affordable housing, provision of a variety of housing typologies for different social and income groups, access to public transport and basic service are specific planning variables that affect social cohesion.

political stability

Planning can contribute to stable urban governance by setting up institutional structures and common objectives that can generate political consensus and shared agendas for long-term development. Inter-regional and municipal cooperation can be achieved under the framework of concrete strategic urban plans that bring together different political leaders to achieve a larger common benefit. Planning is a powerful tool to prevent segregation in cities and as such, can shape inclusive and more equal cities that through citizen engagement prevent negative social movements such as turmoil and riots.

climate change

Climate-related factors are seriously affecting cities. Change in precipitation, sea level rise and temperature increase are causing floods, sea level rise, heat waves and wind and rain storms. Specific urban planning and design solutions such as land use and zoning allocation, protection of green areas and creation of public space, control of urban and building shape and provision of public transport amongst many others, can have a strong impact in adapting cities and mitigating climate change related effects. Urban form has also a strong impact on Greenhouse Gas Emissions. For each one percent of growth that occurs in the city-core instead of in the suburbs, approximately 5 Million Mt of CO₂ per capita are avoided.

conflict prevention and resolution

Central government measures such as forced evictions and demolitions, pose the possibility of sparking widespread conflict in settlements. Planning in advance, aligning government and communities expectations and increasing the capacity of communities to represent themselves and participate through planning mechanisms in shaping cities has the potential to prevent and solve complex urban development processes.

women and youth empowerment

The planning and design of compact, socially diverse, multi-use spaces in cities that are safe and accessible through different transportation modes enables vulnerable groups to tap into the economic and cultural resources of the city. Urban planning has a key role understanding how vulnerable groups relate to the city in order to plan cities that enable empowerment.

IMPACTS

ghana

The LAB, in collaboration with the Local Government of Ningo-Prampam District, launched a vision and an urban concept for the Planned City Extension of Ningo-Prampam. With an initial seed capital of 100,000 USD, this joint effort brought together national government and state agencies, private investors, local chiefs and communities to discuss and agree on the future of Ningo-Prampam. As a result, this initiative has been welcomed by the Ministries and the National Development Planning Corporation, and it is now one of several National Priority Projects with Presidential support and a budget allocation for development and implementation from 2016 onward. This case demonstrates how a common vision for an urban planning concept can bring together various stakeholders and push forward a political agenda that will strengthen government institutions as well as promote sustainability and prosperity for a large part of the Ghanaian population.

south africa

The LAB, in collaboration with the city of Johannesburg is developing a concerted Spatial Development Framework for the population of Johannesburg which is estimated to reach 7 million residents in 2040. In an effort to build a compact, connected and socially inclusive city and ensure a post-apartheid democratic planning process, the LAB facilitated a participatory design process involving all stakeholders – politicians, real estate developers, investors, designers, and communities.

Priority areas of intervention include: spatial inequalities, urban sprawl, exclusion and disconnection due to gated developments, inefficient residential densities and land use patterns. To ensure gradual building and successful implementation, the 25-year plan lays out a clear vision for a sustainable future. It focuses on and prioritizes investments in the identified transformation areas supported by spatial and city-wide policies, as well as site-specific recommendations involving multiple agencies and organizations. This multi-stakeholder informed SDF demonstrates how a comprehensive city plan for a world class African city can be an all-inclusive, empowering and transparent process where the shaping of the plan is directly informed by all actors.

myanmar

The LAB, in collaboration with the Government of Myanmar is currently addressing urgent needs and planning challenges based on UN-Habitat's mission findings to promote sustainable development and climate change resiliency in the country. Focus is on promoting site specific tools and systems, which will enable towns and cities gain leverage over urbanization and ensure sustainable growth by securing public space, effective street networks, and land tenure. UN-Habitat's LAB is assisting the government in developing a national urban policy framework and an all-encompassing capacity development plan. In addition, the LAB is assisting the government by developing Guidelines for Township Urban Development Plans that will be adopted and used by national and local planners to shape future cities. This collaboration between local planners and the LAB establishes a strong planning legacy and a basis of expertise that strengthens local governments by giving them tools for the future.



Launch National Priority Project Ghana

VISION

urban planning and design lab

The Urban Planning and Design LAB is focusing on strengthening its presence and commitment in all developing regions globally, deploying local expertise and promoting sustainable urban development.

The LAB has been successful in starting up projects and multiplying seed money by using the integrative power of the facility to bring together stakeholders, citizens, politicians and specialist around a concrete project.

This multi-stakeholder and participatory process enhances political and stakeholder commitment and generates high visibility and support for projects.

The UPD LAB is currently looking for partners to fund the initiative, which would allow to swiftly respond to countries' and cities' demands with larger flexibility, long-term engagement and continuing to create start-up projects in cities.



global network of urban planning and design labs

The Global Network of Urban Planning and Design Labs is an initiative of UN-Habitat to support local governments in achieving sustainable urban development, by bringing together local and international planners to work on concrete projects.

Welcomed in 2015 by resolution 25/L.6 of the Governing Council of UN-Habitat, the Network's sets up temporarily and permanent Labs as part of or in close collaboration with the government. The network develops capacity of local and international planners with a 'Learning by Doing'-approach and creates as such a global portfolio of practice that is being exchanged in the Network.

The ambition of the network is to grow and to actively support local governments. The network introduces two typologies of lab's: temporary labs around a concrete urgent project, institutionalized labs within the local government. The network looks for funding opportunities to increase the amount of Labs globally in order to generate as much as possible impact.

Funding opportunities could be financial and/or in kind contribution to:

- A specific lab around a specific urban project or challenge
- The set up and operationalization of an institutionalized lab in collaboration with the local government
- A 'sister-city' approach in which a city with a mature planning body can support another local government with either the set-up of a lab or a complex urban challenge

A recent collaboration has been achieved with the Dutch Creative Industries that supports the network with a financial and in kind contribution to deploy experts from the Netherlands in order to form one year long labs in partner countries such as Myanmar, Mexico, Philippines, Palestine and Ghana.

The Global Network of Urban Planning and Design Labs contributes to making the world's cities and human settlements inclusive, safe, resilient and sustainable, an ambition formulated by target 11 of the Sustainable Development Goals (SDG) and as such contributes to shape the New Urban Agenda.

Our aim is to support city, regional and national authorities to implement policies, plans and designs for more compact, better integrated and connected cities that foster equitable sustainable urban development and are resilient to climate change.

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