National Report

HABITAT III: Third United Nations Conference on Housing and Sustainable Urban Development

Nicosia, September 2016
1. URBAN DEMOGRAPHIC ISSUES

1.1. Settlement patterns and demographic trends

Settlement patterns in Cyprus are particularly contrasted and largely influenced by the physical configuration of the country. The population concentrates along the southern and eastern coast as well as in the non-mountainous inland areas around the capital Nicosia. The rapid population decline of inner mountainous areas has contributed to the low population densities that are currently observed in these parts of the island. Population growth is concentrated around the main urban areas, as well as around tourism hotspots at the far eastern end of the southern coast. This demographic polarization between coastal and inland areas occurs even within commuting distance of urban areas, which tends to show that out-migration occurs even when one can access urban labor markets, and that the perceived attractiveness of coastal areas as a living environment is a main determinant of population movements.

Illustration 1: Population densities – the lowest population densities are found in mountainous areas, which also experience the most rapid population decline; conversely, the highest densities are observed around the four urban agglomerations. (Source: ESPON Project GEOSPECS, Alterra, University of Geneva)

Illustration 2: Local demographic trends – polarization with population declining in upland communities, while increasing along the coast and around Nicosia; the four urban agglomerations are visible, with highest growth in the outer suburbs. (Source: ESPON Project GEOSPECS, Alterra, University of Geneva)

1.2. Managing rapid urbanization

In Cyprus there are two medium sized urban agglomerations (Nicosia, Limassol) and two smaller ones (Larnaca, Paphos), centered around each of the island’s four main municipalities. According to the most recent available estimates of 2014, the four urban agglomerations concentrate roughly 70% of the country’s

1 Excerpts from Kai Böhme and Erik Glaersen, “Territorial State and Perspectives of Cyprus within the European Union” in Territorial Cohesion Issues in Europe during the Cyprus Presidency 2012 and beyond, a Study commissioned by the Department of Town Planning and Housing, 2012.
Total population. However, the island’s short distances and good road network imply a much higher percentage of the population participates in the urban areas’ economic activity and social life.

<table>
<thead>
<tr>
<th>Agglomeration</th>
<th>Population</th>
<th>Percentage of region’s population</th>
<th>Percentage of national urban population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicosia</td>
<td>241.000</td>
<td>73</td>
<td>42</td>
</tr>
<tr>
<td>Limassol</td>
<td>180.000</td>
<td>76</td>
<td>32</td>
</tr>
<tr>
<td>Larnaca</td>
<td>84.800</td>
<td>59</td>
<td>15</td>
</tr>
<tr>
<td>Paphos</td>
<td>63.500</td>
<td>70</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL</td>
<td>569.300²</td>
<td>70</td>
<td>100</td>
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Up until 2009, the economy of Cyprus was characterized by high growth rates, with the services sector being the main development engine. Prior to that, the growth of urban areas in Cyprus had been sharply accelerated with the rapid growth of their population due to the influx of internally displaced refugees in the aftermath of the 1974 Turkish invasion and the continuing military occupation of 36% of the territories of the Republic. In the effort for economic reactivation that followed, emphasis was placed on the tourism sector. Consequently, in the period after 1977, pressures and growth trends were created at a scale impossible to be satisfactorily addressed by the urban structure prevailing until then. The diversification of the economy in favor of the tertiary sector at the expense of the primary and secondary sectors led to further intra-regional spatial inequalities by focusing growth in urban centers and coastal areas and the shrinkage of the rural agricultural hinterland.

The lack of adequate development control policy in several areas, as well as its severe limitations elsewhere, did not help provide the necessary conditions for coherent and sustainable growth, nor the adequate protection of the natural and cultural heritage and the island’s landscapes, as part of a comprehensive spatial-urban planning system. Apart from the lack of an appropriate institutional framework until the 1990s, the country’s general economic and social characteristics, including real estate market mechanisms, the fragmentation of land ownership and various social perceptions, contributed to the sprawling proliferation of subdivisions and individual houses on the outskirts of urban centers, bypassing idle land within designated development boundaries.

All urban areas have particular characteristics and advantages, to which their high growth rates during periods of economic boom can be attributed. Nevertheless, the main historic centers of all four urban agglomerations, as well as smaller traditional cores of communities which have over time been incorporated into the agglomerations’ urban fabric, face broad and complex challenges of degradation and socioeconomic lag, similar in nature, albeit more limited in scale, to those observed in inner cities elsewhere. Moreover, the aforementioned historic circumstances and inadequate spatial planning and development control mechanisms have enabled the rapid development of the 1980s to occur irregularly and incoherently in large parts of urbanizing areas, resulting in the following challenges that the planning system now seeks to resolve through a complex mix of strategies, policies and measures:

- **Urban structure:** The radial structure of urban agglomerations has evolved over time without significant planning interventions, based mainly on the traditional road layout. This organization led to

² Total population in government controlled areas, 2014.
overcharging main arteries with commercial and other uses, and was accompanied with congestion and environmental degradation, particularly in urban centers and sensitive coastal areas.

- **Land use**: Prior to the implementation of spatial planning legislation in the 1990s, there was a general lack of emphasis on the appropriate siting of economic activity. As a result, the widespread proximity of incompatible uses adversely affects the quality of residential, work and leisure uses, creating risks to public health and causing dysfunctional urban systems.

- **Urban sprawl**: The dispersion of settlement in the form of urban sprawl renders the provision of infrastructure, services and facilities unsustainable, while seriously degrading the quality of life. Despite this problem’s recognition at the expert level and mainly due to pressures from organized landowners and developer lobbies, development boundaries of spatial plans for urban areas have continued to expand. The debate to support expansion is largely based on the argument that a dwindling supply of land designated for development pushes land prices up, therefore hindering the housing supply side. Expanding development boundaries, it is thus argued, is necessary in order to keep a balance between supply and demand in the real estate market. As a result of these expansions however, the capacity of designated residential areas far exceeds the population projections in each urban area, sometimes by as much as 5 times. To address this issue, spatial development strategy includes policy incentives that encourage residential development within controlled boundaries and is implemented alongside policies to discourage dispersion in areas other than those designated.

- **Tourism development**: The rapid development of intensive tourism and resort land uses in coastal areas without the necessary urban infrastructure or adequate respect for the local character and landscape has become a challenge both in relation to environmental considerations and with regards to the free access and enjoyment of the seafront by all.

- **Port-related and industrial development**: Problems associated with the operation, service provision, accessibility, environmental pollution and visual clutter of ports, industrial sites and surrounding areas, have degraded extensive significant central areas in all urban agglomerations, particularly those of Limassol and Larnaca, where brownfield sites adjacent to the seafront hinder the redevelopment of critical urban areas.

- **Urban mobility**: Congestion is one of the most serious problems facing the urban areas of Cyprus. Heavy dependence on the private automobile, the absence of a comprehensive and efficient road network, insufficient traffic management measures and lack of public parking spaces, combined with the inadequacy of mass transport and infrastructure to promote alternative forms of movement have led to reduced comfort, quality and safety. This situation creates a negative impact on the environment through greenhouse gas emissions, on the economy through high fuel cost, and on the quality of life itself through environmental noise and reduced mobility for those deprived of a car. The difficult traffic conditions are compounded by the existence of widespread development and low population densities, which limit the viability of a dependable public transport network, as well as the still incomplete state of the primary road network, due to rapid development and urbanization.

- **Open green space**: The urban areas of Cyprus face serious shortages in terms of open green space, in terms of surface area, location and functionality, largely due to the aforementioned historic circumstances and inadequate development control mechanisms up to the 1990s. Although current planning regulations specify the concession of a percentage of land under development as public green space during planning permit procedures, this has not always been the case, particularly during the period of rapid urban expansion in the 1980s. However, not all land designated as public green through the planning permit process is immediately available for parks, recreation and green infrastructure, as it
is generally fragmented and dispersed, while local authorities often face limitations in their ability to fund the landscaping and maintenance of such areas.

- **Architectural and cultural heritage:** Despite the introduction of policies for the protection and management of archaeological heritage and sites since the 1950s, with regard to structures of more recent architectural and cultural heritage, a mix of inherent socioeconomic characteristics, including land tenure patterns, social perceptions and a rudimentary architectural heritage policy up until the 1980s, have led to the decay and disappearance of remarkable traditional buildings and other landmarks, causing disruption of continuity in historic urban cores. Although innovative policies promoting heritage restoration and reuse are now in place, a number of neglected traditional structures are still threatened with abandonment, decay and even demolition if not protected. Therefore, an integrated and comprehensive architectural and cultural heritage policy has an important role to play in the balanced development of urban areas.

- **Ageing population in historic centers:** As a result of continuing suburbanization trends since the second half of the 20th century, the population in all historic urban cores is sharply aging, sometimes with up to a quarter of inhabitants aged over 65. According to field survey data, it is estimated that up to 10% of buildings are abandoned in such areas, versus a vacancy rate of 6.7% for the whole of Cyprus. This, in connection with the general lack of amenities and poor condition of public spaces, renders urban centers into unattractive places for both residence and economic activity.

- **Lack of urban infrastructure:** Incomplete key infrastructure networks, such as central sewerage and storm water systems, sidewalks, pedestrian ways, cycle paths, green areas and public spaces etc., often due to rapid urbanization and lack of planning in previous periods, severely reduce the amenities and the service level available in urban areas. Similarly, a deficiency regarding community infrastructure, such as care centers for the elderly and children, youth centers for healthy and creative engagement, facilities for recreation opportunities, as well as cultural infrastructure, which could contribute both to the development of the country’s cultural resources and to the cultural diversification of tourism economic activities, seriously degrades the quality of life in all urban areas.

1.3. **Managing rural-urban linkages**

Historically, the urban system of Cyprus has evolved as a network of coastal towns with the capital city in the central plains. This network is completed by groupings of rural communities, each focusing on the nearest urban area. As a result, rural-urban linkages have been an inherent characteristic of the island’s urban system. With the urbanization trends beginning in the 1950s and accelerated during the 1970s, communities surrounding the main urban centers have been gradually incorporated in medium-sized or smaller agglomerations, albeit retaining their original municipal boundaries. At the same time, more distant communities have waned in favor of urban-rural rings of more robust villages surrounding each urban area. In terms of policy, each one of the main urban areas is the administrative seat of its respective district, with all villages located within its boundaries looking towards it for services of general interest. With the loss of the countryside’s productive capacities, these communities have increasingly been looking towards their respective urban areas for employment and economic activities, particularly as road travel and communications have made this possible since the 1980s.

Despite constraints related to small populations and the difficulty of achieving economies of scale, the island’s urban areas are potential development poles, in synergy with their surrounding rural areas within a polycentric network. The urban areas of Cyprus can thus be approached from different perspectives – as a continuous built-up with a total population exceeding a certain threshold level; as a functional area where a proportion of the population commutes to the urban centre; or as potential areas of daily interaction at a
more strategic level. The following illustration compares the spatial extents of these three alternative definitions of the concept of rural-urban linkages:

**Morphological Urban Areas (MUAs)**
Municipalities with continuous built-up areas

**Illustration 4**: Urban Areas and Rural-Urban Linkages in Cyprus – These maps represent different understandings of “urbanity,” as a continuous built-up area, as a functional area with daily commuting and as a potential area of daily interaction; each of these approaches is relevant for spatial development strategies in different ways – in particular, concerning urban-rural linkages.

(Source: ESPON Project GEOSPECS, Alterra, University of Geneva)

**Functional Urban Areas (FUAs)**
Municipalities with over 10% in-commuting to MUA

**Potential Urban Strategic Horizon (PUSH areas)**
Municipalities within 45 minutes from MUA by road
Nicosia, Limassol, Larnaca and Paphos are identified as the four main urban centers, or Morphological Urban Areas (MUAs). Their respective Functional Urban Areas (FUAs), i.e. the group of local entities where at least 10% of the employed population commutes to the urban center is then illustrated. If the local population commutes to multiple urban centers, the municipality or community is associated to the urban center which attracts the largest flows. Neighboring FUAs are therefore mutually exclusive on the preceding mapping exercise, and secondary commuting patterns in the direction of smaller urban centers are not reflected. Potential areas of daily interaction correspond to areas within 45 minutes travel time from the external border of the MUA. These have been described as “Potential Urban Strategic Horizons” or “PUSH areas” in ESPON. They neither correspond to areas of influence of each city, nor to areas that can a priori be described as urban or suburban. Instead, PUSH areas correspond to the areas within which commuting or daily mobility around a city could occur. From a strategic planning perspective, one can consider that settlements within these PUSH areas can rely on cities for the provision of services and for employment opportunities. As these PUSH areas cover a very high percentage of the Island’s entire surface, it is increasingly more possible to orient spatial policy towards an integrated urban-rural approach, at the same time taking territorial specificities into consideration.

1.4. Social aspects of urban development

Various initiatives are undertaken at local level to respond to the needs of urban youth and the aging, as well as to promote gender integration and the integration of immigrants. These are funded both nationally and at EU level through various programs and schemes, while municipal authorities in all urban agglomerations are active in this area, having developed various forms of inter-municipal cooperation to address common challenges they share across administrative boundaries, as well as informal arrangements for metropolitan inter-municipal cooperation. For illustration purposes, because of its well integrated approach and extensive range of services provided, a useful example of such local initiatives is the Nicosia Municipal Centre for Contemporary Social and Cultural Services, which hosts social programs implemented by the town’s Multifunctional Foundation in cooperation with public services and municipal authorities.

Illustration 5: Day care for the elderly, after school activities for children, courses for the integration of migrants, adult support groups are some of the activities organized by municipal social services and similar initiatives.
(Source: Nicosia Municipal Centre for Contemporary Social and Cultural Services)

Services offered mainly aim at improving the quality of life of economically and socially vulnerable groups, such as children, working women, immigrants and the elderly, through the provision of organized group activities, counseling services, psychological support and guidance to individuals and families, in collaboration with public and other services, local committees, voluntary and charitable organizations and persons sharing the overall vision. Programs for the elderly include day care activity centers to promote

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3 The towns of Famagusta and Kyrenia, currently under Turkish military occupation, as well as all other areas outside government controlled territories have not been considered due to the lack of official data.

4 ESPON is a European Cooperation Programme in support of the effectiveness of EU Cohesion Policy under European Structural Investment (ESI) funds as well as national and regional territorial development policies, through the production, dissemination and promotion of territorial evidence. It is co-financed by the EU budget, with contributions from all Member States and four partner countries. Cyprus participates since 2004.

5 For detailed information see (online information at present only available in the Greek language): http://www.nicosia.org.cy/el-GR/municipality/multipurpose-centre/.
their healthy and creative entertainment, socialization and occupation and make them feel active and useful; as well as home care services for those in need. Programs for schoolchildren include general after school activities and programs that give priority to children from single parent, large family and low income households and daycare integration activities for third country (non-EU) nationals. Programs for immigrant integration include Greek and English language instruction, free internet café and computer skills training, guidance on employment issues, consultation by professional social workers, information on local customs and civil protection institutions in the host country, as well as presentations to the society at large to combat racism and xenophobia.

It is important to note that, despite the significant reduction of public funding since the 2010’s, as a result of the fiscal and general economic crisis, such initiatives have survived, while in some cases the number and scale of activities they offer has actually expanded due to the increased needs of vulnerable social groups, through the adoption of business sponsorship and frequent fund-raising activities.

2. LAND AND URBAN PLANNING

2.1. Ensuring Sustainable Planning and Design

The sustainability of spatial planning in Cyprus is ensured at the strategic level through the adoption of the Council of Europe’s Guiding Principles for the Sustainable Spatial Development of the European Continent (Hannover, 2000) and their incorporation into the country’s spatial development plans’ philosophy. During the 2009-2011 spatial plan review process, The Charter on Sustainable European Cities (Leipzig, 2007) was adopted as a main strategic reference document to guide the amendment of development plans for the Island’s four main urban agglomerations, while the Reference Document on Integrated Urban Regeneration and its strategic potential for smarter, more sustainable and socially inclusive urban development (Toledo, 2010) has been used to a lesser extent to guide planning towards a more integrated and holistic approach.

Further, a section on ‘urban development’ in has been included the National Sustainable Development Strategy. Discussions during the 2010 review of this strategy have revealed that the sustainability of planning policy must be measured against economic, social and environmental criteria and in any case should not be limited to physical design alone nor should it take a sectoral approach. In the European context, sustainable urban development is both a real challenge and a widely acknowledged necessity, which involves the timely identification and analysis of threats faced by urban areas, taking action to address the risks involved in the development process and, simultaneously, capitalizing on advantages and opportunities by taking into consideration the territorial impact of sectoral policies and achieving their coordination on the ground with the scope of sustainable, balanced and cohesive growth. It was therefore decided to introduce appropriate policy assessment tools for evidence-based monitoring of urban development, including, but not restricted to, a set of urban sustainability indicators.

Rationale in support of horizontal and vertical coordination – the importance of sustainability indicators

In the urban planning process sectoral policies interact in countless ways, both evident and salient, which cumulatively create permanent, irreversible and extremely important spatial effects. For example, policies in transportation, industry, tourism and the environment influence the formulation of urban development plans in a decisive way. These policies and related options not only affect the distribution and intensity of land use but also have widespread economic, financial and social consequences, which should be taken into account together with spatial and urban parameters from the early stages of plan formulation. Therefore, the introduction of indicators and measurable parameters, which describe and define the sustainability of all development options, allows the planning system and the community to realize the extent and importance of horizontal relations of the various development sectors and helps to draw useful conclusions regarding their interaction and interdependence.
Simultaneously, the vertical cooperation between different levels of government is also of great importance for the development of urban policy. Reliable indicators allow local and regional authorities to adapt the objectives of territorial aspirations over time to strategic objectives concerning higher levels of programming, but also allow the central government to take effective measures and set the appropriate priorities for individual areas, putting into practice the principles of reciprocity and subsidiarity. The introduction of commonly accepted sustainability indicators thus greatly contributes to mutual understanding and promotes cooperation between different levels of administration.

Moreover, the involvement of citizens in the urban planning process contributes significantly both to the success of the process itself, the social acceptance of the final result through mutual trust and confidence building, and the aversion of the waste of investment funds that are particularly precious and limited in times of austerity. The broadest possible consensus and understanding of choices from the community is very important, not only for the success of local and regional initiatives, but also to create an attractive host environment that appeals to outside investors and economic actors. It is obvious that the adoption of a comprehensive and transparent system of urban sustainability indicators facilitates, encourages and supports the effective participation of civil society and young people in the planning process.

Based on the above considerations, the URBANGUARD project⁶ was implemented between 2004-2007, through the collaboration of the Department of Town Planning and Housing with several non-governmental organizations and consulting offices. With the participation of a broad stakeholder spectrum comprising state agencies, local authorities and organized citizen groups, around 30 urban sustainability core indicators were selected to facilitate monitoring and evaluation of policies implemented in urban areas through statutory spatial development plans. These could be used at a technical level to assess the sustainability of urban development and the necessary documentation and transparency of the decision-making process. Furthermore, the introduction of urban sustainability indicators can help solve the serious lack of disaggregated data, considered absolutely necessary for the documentation of urban planning choices and programming decisions. The main issue hindering the smooth implementation of this indicator system from its inception was the lack of adequate and reliable statistical information in several key areas.

More recent efforts have concentrated in the contribution of Cyprus towards the development of the Reference Framework for Sustainable Cities (RFSC), within the framework of EU intergovernmental cooperation in the field of urban development. The inception of the RFSC, confirming the implementation of the Leipzig Charter in favor of integrated sustainable urban development, dates to the Marseille Statement⁷ of 2008. The RFSC includes a set of urban sustainability indicators widely used by cities throughout the EU, which was developed through collaboration of EU Member States, led by France, institutions and other stakeholders. Cyprus actively participated in this process and, as a result, the URBANGUARD indicators were included in the reference pool used to derive the final RFSC set of indicators. Cyprus also chaired the dissemination phase of the RFSC (2012-2015), in close cooperation with France and the European Commission’ contractors for that project, in particular the Council of European Municipalities and Regions (CEMR), based in Brussels. The updated version of the RFSC⁸ urban sustainability monitoring tool, including the aforementioned related set of indicators, was unveiled in Nicosia, within the framework of the CEMR Congress 2016 and is now available for use by all cities.

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⁶ URBANGUARD was a Cyprus project co-financed by the EU through the LIFE financial instrument; for detailed information see http://www.moi.gov.cy/moi/urbanguard/urbanguard.nsf.  
⁷ Final statement by the Ministers in charge of urban development, organized by the French Presidency of the Council of the European Union in Marseille, November 2008.  
2.2. Improving urban land management and addressing urban sprawl

Key parameters to bear in mind when considering action against sprawl include not only environmental but also social, economic, political, cultural and other factors. Each place’s unique characteristics and governance arrangements influence trends in urban sprawl, land take and soil sealing. It is also evident that different approaches are appropriate in different situations and for different levels of development. In the case of Cyprus, lax regulation of the real estate market has led to ‘leap-frog’ development trends, according to developers’ priorities rather than on the basis of environmental and spatial criteria. This has resulted in continuous demands for the designation of additional development areas, since some land remains idle due to a number of factors, including the inability or unwillingness of disinterested landowners to invest; the incomplete road network, which depends on the incremental development of neighboring parcels; or the speculative retention of land from the market. The resulting sprawl includes many vacant gaps, which still count as urban land, since they cannot be considered as coherent green areas, while at the same time demands for further expansion of development boundaries continue. It may be said that, ironically, participative planning has had a catalytic effect on the expansion of designated residential areas over the last twenty years, partly due to the high proportion of land ownership in Cypriot society and the understandable efforts of each land owner to upgrade his or her property.

Illustration 6: Sprawling residential development in the outskirts of Nicosia, early 2000’s.
(Source: European Cities from Helsinki to Nicosia: Insights on Outskirts, COST Action C10, page 257)

In order to activate idle urban land, a number of policy measures have been promoted, including the implementation of public intervention planning projects for the completion of local road networks and legislative proposals to enable the implementation of urban land consolidation. Additional proposals which still face strong opposition but must eventually be discussed include the introduction of betterment fees and the taxation of idle land. The promotion of environmental policy measures with spatial implications has also been pursued, including the full implementation of the Strategic Environmental Assessment directive; the promotion of the preparation of guidelines against soil sealing practices, particularly as run-off management is crucial in Mediterranean climatic conditions due to the high risk of flash floods; the characterization of the islands’ landscapes, to promote a better documented landscape policy; and the expansion of protected areas with parallel transfer of development rights for owners of properties designated as protected to be used in other development areas. At the same time, a set of governance measures with particular implications in action against sprawl are also being promoted, albeit independently within the overall reform strategy. These include the re-assessment of policies which permit the construction of homesteads outside development boundaries, as well as the combined effects of the

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9 The policy “for the construction of isolated residential units outside development boundaries” was originally introduced into the planning system, with relevant provisions in all published development plans, ostensibly to fulfill the housing needs of rural families who could not afford to purchase residential plots but possessed farmland suitable for the construction of a homestead. Attracted by the prospect of a home in the countryside, this policy has inadvertently been exploited by groups other than those it was originally intended for and has consequently been strongly criticized by spatial planners and environmental pressure groups as a key factor enabling urban sprawl. As a result, efforts are being made to strengthen relevant policy provisions so that they apply specifically to social and environmental criteria.
reorganization of the national strategic planning framework and the forthcoming administrative reform, with clustering of municipalities, increased intergovernmental cooperation at the local level and devolution of planning authorities to the regional level.

2.3. Enhancing Urban and Peri-Urban Food Production

Given the relatively short distances and high connectivity of urban areas with their agricultural hinterlands, policy efforts undertaken to enhance food production, particularly when concerning small scale sustainable practices, in effect address urban and peri-urban food production. Within current agricultural policy, the priority to strengthen farm viability covers “all types of agriculture in all areas,” while the better integration of primary production in the food chain through quality schemes, producer groups and inter-branch organizations is another key priority. Moreover, specific measures promote sustainable food production practices, including protected geographical indication, organic food production, agricultural ecosystem and bee pollination management, as well as promotion of resource efficiency, climate change resilience and the shift to a low carbon economy.\footnote{Ministry of Agriculture, Rural Development and the Environment, \textit{Cyprus Rural Development Programme 2014-2020}, version 2015.}

2.4. Addressing Urban Mobility Challenges

Congestion is one of the most serious problems besetting the urban areas of Cyprus, which seriously hampers their sustainability. The insufficient provision of adequate quality public transport services, as well as other sustainable means of transport (cycling, walking) has a negative impact on the environment, contributing to greenhouse gas emissions among other effects; on the economy, with high fuel costs and staggering loss of man-hours in transit; on public health, due to lack of beneficial physical exercise that could be gained from active modes of travel and the negative health effects of traffic-related air pollution; as well as on quality of life, due to factors as diverse as reduced mobility for those deprived of a car (captive users) and increasing environmental noise. The adverse traffic conditions are compounded by urban sprawl and low population densities, which gravely limit the viability of public transport and sustainable short distance travel (cycling, walking), while problems are further intensified by the incomplete state of the primary road, cycling and pedestrian networks, the construction of which tends to follow rather than precede development. Congestion, coupled with poorly controlled parking on roadsides and sidewalks in addition to the general lack of adequate parking demand, management, planning and pricing policy, acts as a deterrent to the development of retail and tourism, particularly in historic urban cores. A similar hindering effect is caused, in some such areas, by widespread remnants of adjacent incompatible land uses, predating the implementation of planning legislation.

On-going policy goals to address these problems and strengthen efforts to combat dependency on the private automobile include the promotion of efficient and effective public means of transport of adequate quality, as well as the promotion of infrastructure for alternative forms of movement, including paying the appropriate attention to the movement of pedestrians and cyclists, in addition to the completion of an integrated and efficient primary road network, the introduction of appropriate traffic management measures in congested areas, as well as traffic calming measures (including speed limit enforcement) in residential and other areas with increased pedestrian and cyclist traffic, the provision of incentives for the creation of additional parking spaces for public use at select high-demand retail areas as well as strategic peripheral locations (for park-and-ride purposes), the improvement of parking control in commercial areas and illegal parking enforcement in general, among other measures.
Illustration 7: Mobility trends in Cyprus: Exponential increase of private car numbers and dramatic decline of public transport (PT) use. (Source: Nicosia Integrated Mobility Master Plan, 2011)

2.5. Improving Technical Capacity to Plan and Manage Cities

In Cyprus, local authorities have developed a consensual political culture despite serious challenges regarding the level of decentralization and the strength of the local government system, undoubtedly further aggravated by the acute economic crisis of the 2010’s. Their administrative structure is permanent and relatively strong, while they usually possess adequate administrative capacity. Moreover, local authorities have independently developed various forms of inter-municipal cooperation to address common challenges they share across administrative boundaries, as well as informal arrangements for metropolitan inter-municipal cooperation (such as within the Nicosia urban agglomeration) and spatial forms of multi-level governance, which include, for example, the regional Water Boards. However, because of the serious shortcomings and dependencies observed in the functioning of the current local government system, a broad reform is under way, addressing both the clustering of local authorities and the restructuring of local government in general. Local government reform is intrinsically related to the overall reform of public administration and is sought through a holistic approach for the improvement of the system as a whole, rather than the implementation of corrective measures through a piecemeal approach. The main strategic objective is the effective and efficient provision of services so that all the population, irrespective of their place of residence, can enjoy quality services at the lowest possible cost, provided in a sustainable, transparent and fair manner.

An important milestone in the effort to improve technical capacity to plan and manage cities is the implementation of the HIPPODAMOS Project, an integrated information system, which places all planning procedures on a completely new basis, including those relating to the electronic submission, receipt, validation, management and examination of permit applications, as well as communication with applicants and their representatives. Through the full implementation of HIPPODAMOS the latest available technologies will be exploited for the electronic management of spatial planning and plan formulation, as well as plan implementation and development control processes, including exchange of information with the public and concerned stakeholders, including competent government departments, agencies, authorities and independent organizations, with appropriate online and database links. The main objectives of this effort include achieving transparency of procedures, improving the quality of services provided and the level of citizen satisfaction, as well as increasing productivity. The system begins functioning on a pilot phase in 2017, while access to it will gradually be extended to all regional planning and building authorities.
3. ENVIRONMENT AND URBANIZATION

3.1. Addressing climate change

As a country already experiencing climate change, especially through extensive droughts and the associated impacts on water supply and biodiversity, which are expected to intensify over the coming decades, Cyprus has prepared a National Climate Change Adaptation Strategy. In addition, the national risk assessment in relation to climate change is currently under preparation through the cooperation of government and relevant stakeholders, to be elaborated and linked to the climate change adaptation strategy. Both of these documents will thus become the framework of action for the effective preparation and proofing of the country against observed and expected changes in climate, through measures, actions and practices necessary for the effective climate change adaptation of key policy areas, including water resources, soils, coasts, biodiversity, agriculture, forests, fisheries and aquaculture, public health, energy, tourism and infrastructure. For each of these policy areas, sectoral adaptation plans have been prepared, including a set of prioritized adaptation measures against the risk of drought and water scarcity, the reduction of risks from coastal storm flooding and inundation, as well as addressing issues of soil sealing, coastal erosion, reduction of energy demand etc.

According to the latest inventory submitted to the United Nations Framework Convention on Climate Change (UNFCCC), total emissions have been reducing by an average of 3% annually since 2008, primarily due to the financial situation and the impact of the promotion of renewable energy sources (RES). Energy remains the largest source of emissions, contributing 71% of their total, of which 54% is from the production of electricity and 32% from road transport. Consequently, from the point of view of mitigation, which is the primary focus of the national climate strategy, policies for the reduction of greenhouse gas emissions include measures for the increased use of RES, the introduction of cleaner fuels, such as natural gas, increased energy efficiency in buildings, promotion of public transport and low emission vehicles, improvement of waste disposal and animal waste treatment. Moreover, the country has committed to reducing non-trading system emissions by 5% by 2020 through the EU Effort Sharing Regulation and, according to projections, as a result of such policy measures, it is anticipated that emissions in Cyprus will be reducing by 5% annually during the following years.

Recent studies have shown that desertification is a serious threat to the environment of Cyprus, with 57% of the area of the island classified as vulnerable. Scenarios show that in case of continued climate change, with a moderate reduction of the mean annual rainfall and an increase of mean temperatures by just over 1°C, the area under threat will increase to 70%. Recognizing the gravity of the issue, Cyprus has ratified the relevant UN Convention and completed a national action plan to combat desertification, along with an implementation plan and the prioritization of measures to address the phenomenon.

3.2. Disaster risk reduction

The intensification of urban development over the last decades has inadvertently increased the risk for both natural and technological disasters. On the one hand, land take, soil sealing and interference with seasonal watercourses due to development sprawl have decreased the ways in which natural drainage occurs, particularly during brief flash flood periods, resulting in higher risks of flooding; whereas on the other hand, due to increased development and the complexity of land use patterns, there has been an increase in the following:

11 Department of the Environment, National Climate Change Adaptation Strategy (in Greek), Nicosia, 2015
12 For detailed information see http://cypadapt.uest.gr/.
14 Department of the Environment, Plan to Combat Desertification in Cyprus, 2008-2011.
need to transport and store substances necessary for various economic activities that could, under special conditions become hazardous to health and the environment. To prepare for disasters resulting from hazardous substances Cyprus has transposed the European SEVESO Directive through regulations governing safety and health at work, urban development and spatial planning, as well as civil defense measures.\textsuperscript{15}

Illustration 8: Flood hazard and flood risk locator map, showing potential significant flood risk areas, around the Limassol urban agglomeration. (Source: Water Development Department, 2012-2014)

Regarding flood risk reduction, Cyprus implements the EU directive on flood risk management\textsuperscript{16} which legally defines flooding to include both floods from rivers and torrents and floods from the sea, and provides for flood risk evaluation, as a combination of the probability of flooding and its potential negative consequences. Work is currently under way for the preparation of a flood risk management plan, including a program of prevention measures and measures for the reduction of flood risks.\textsuperscript{17}

3.3. Air pollution

To keep track of air quality, a network of monitoring stations has been set up and is operated for the measurement of key pollutants, including ozone and particulate matter (PM), and related meteorological parameters. Measurements recorded are made available to the public along with information on air quality through a dedicated air quality website.\textsuperscript{18} The assessment of these measurements shows an improvement of air quality and most key pollutants do not exceed allowable thresholds, with the exception of ozone and PM10. In the former instance, ozone exceedances, observed mainly in non-urban areas, are primarily due to trans-boundary pollution and climate conditions prevailing in the Mediterranean Basin; whereas in the latter case, PM10 measurements exceed both the annual and daily limit values all over Cyprus and are due to a mix of anthropogenic and natural sources (sea salt) and trans-boundary pollution (Sahara dust storms).

Regarding the emissions of other pollutants, main contributors include road transport, electricity generation, heat production in winter and industrial sources. Thus, the national action plan for the improvement of ambient air quality\textsuperscript{19} includes policies and measures to address the impact of air pollution from the transport sector, such as the introduction of intelligent transportation systems, the development of an Integrated Mobility Master Plan for the capital city,\textsuperscript{20} incentives for low-emission vehicles, the promotion of the use of bicycles, park and ride and central bus stations etc. Notably, as a result of legislative measures adopted with respect to automobile excise and circulation taxes, including incentives for the purchase of low emission and electric vehicles, Cyprus recorded the second largest annual CO\textsubscript{2} emission reductions in newly registered cars within the EU (2013-2014), while the country holds the third largest CO\textsubscript{2} emission reductions in newly registered cars since 2010.

\textsuperscript{15} For detailed information see (online information at present only available in the Greek language) http://www.mlsi.gov.cy/mlsi/dli/dliup.nsf/All/0D48EDC6511EE031C2257DD804368F0?OpenDocument.


\textsuperscript{18} For detailed information see http://www.airquality.dli.mlsi.gov.cy/.

\textsuperscript{19} Department of Labor Inspection, National Action Plan for the Improvement of Air Quality, Nicosia, 2008.

\textsuperscript{20} Ministry of Transport, Communications and Works, The Nicosia Integrated Mobility Master Plan, Nicosia, 2011.
3.4. Reducing traffic congestion and noise pollution

Cyprus has recently developed a Sustainable Urban Mobility Plan (SUMP) for Nicosia, the nation’s capital and largest agglomeration (Nicosia Integrated Mobility Master Plan\(^2\)) and similar strategic mobility plans are being prepared or planned for other urban agglomerations, such as Limassol and Larnaca. These strategic plans include policies, measures and infrastructure projects to reduce car use and increase sustainable mobility, some of which have already been implemented or are scheduled for implementation in the near future. Main measures include, among others:

- Improvement of the public transit service, including the enhancement of the main transit stations, the renewal of bus fleet and bus shelters, the redesign of bus lines and schedules, the introduction of ITS/smart technologies (automatic ticketing system, real time information system etc.) and the operation of a small-bus transit system for the historic urban core and central commercial district of Nicosia.
- Construction of a new cycle network connecting main university institutions with the urban core of Nicosia.
- Regeneration and/or partial pedestrianization of the historic urban cores and central commercial districts of Nicosia and other urban centers.
- Redevelopment of main urban arterials to include bus lanes and cycle paths.
- Preparation of a feasibility study for a tram network for the city of Nicosia.
- Introduction of bicycle sharing systems in Nicosia, Limassol and Larnaca.
- Revision of urban road planning and design standards in favor of sustainable modes of travel.
- Amendment of urban land use policy and planning legislation to promote compact, mixed land-use use and transit oriented development, as well as cycle parking and footway infrastructure.

Illustration 9: The proposed cycle network for the Nicosia agglomeration.
(Source: Nicosia Integrated Mobility Master Plan, 2011)

In addition, Cyprus has developed strategic noise mapping for major roads exceeding 6 million vehicle passages per year, with relevant noise action plans prepared to reduce environmental noise in cases where limit values are exceeded. Mapping has been completed for the four main urban agglomerations of Nicosia, Limassol, Larnaca and Paphos, where the population exposure to different noise zones has been estimated. This information has been presented to the public in order to inform about environmental noise and its effects, as well as to draft action plans with the scope of preventing and protecting from environmental noise as well as ensuring noise environment levels are kept within acceptable values.\(^2\)

3.5. Waste management

Due to high consumption patterns Cyprus has one of the fastest rising waste generation rates in Europe with considerable environmental, health and socioeconomic impacts given the small size of the country. The reduction of waste generation rates and their appropriate management according to the waste hierarchy is therefore a priority. Over the period 1996-2011, the total amount of municipal waste generated increased by 45%, although more recent data show that the growth rate of residual waste has been reduced, due to the increase in separate collection (mainly involving packaging and WEEE) and energy recovery. According to legal requirements, government has prepared a waste management strategy, a waste management plan for municipal waste and a waste prevention program.

4. URBAN GOVERNANCE AND LEGISLATION

4.1. Decentralization and strengthening of local authorities

As already mentioned, a sweeping local government reform is under way, with three bills currently up for discussion in parliament, concerning the clustering and cooperation of local authorities, as well as the amendment of legislation defining their role and functioning. The new legislative framework for the operation of local government is based on the clustering of services and seeks to strengthen local democracy, enhance the transparency, efficiency and effectiveness of local governance, and allow local authorities to operate in a sustainable and equitable way, fostering economic, social and territorial cohesion. Through this reform, regional level clusters will acquire competences in areas including development control, water and sanitation and waste management; while local level clusters will manage green areas, public space and refuse collection, among other competences. Overall, this reform aims to update and streamline the coordination, monitoring and regulatory framework of the local government system.

4.2. Improving participation and human rights in urban development

Particularly over the past decade, the planning system has been under continuous streamlining with a view to improving citizen participation and human rights in urban development. Recognizing that the involvement of citizens in the urban planning process contributes significantly both to the success of the process itself, as well as to the social acceptance of the final result through mutual trust and confidence building, at the same time averting the waste of investment funds that are particularly precious and limited in times of austerity, the broadest possible consensus and understanding of choices from the community is actively sought, not only for the success of local and regional initiatives, but also to create an attractive host environment that appeals to outside investors and economic actors.

This participatory approach has been structured through a series of amendments of the urban planning legislation between 2007 and 2014, to include provisions on open calls for public consultation, structured public hearings on the basis of the results of the public consultation, as well as mandatory written consultation with the involved local authorities and all institutional stakeholders, during the statutory development plan preparation and amendment procedures. To further safeguard effective and wide


23 In 2011 the annual per capita waste generation reached 683 kg, one of the highest rates in the EU.

participation, local authorities are strongly encouraged to conduct community hearings prior to submitting their positions and proposals during the consultation process. Moreover, recent pilot implementations of the structured democratic dialogue process as a tool for participative planning have shown ways in which the system can be enriched and upgraded to accommodate more smart, efficient and effective modes of citizen participation, within a place-based approach and from the perspective of local societies.

5. **URBAN ECONOMY**

In the case of Cyprus, considering the relatively small size of the total urban population and the specific nature of urban settlements and governance system, urban economy is most appropriately addressed through policies at the national level. With accession to the EU in 2004, strategic development plans were gradually phased out, as planning shifted towards operational programs harmonized with the overall European strategic reference framework. Issues of local economic development and job creation in urban areas are thus addressed through operational programs such as those of the current programming period 2014-2020, for the former case through OP Competitiveness and Sustainable Development and, for the latter, OP Employment, Human Resources and Social Cohesion.

5.1. **Supporting local economic development**

While the impact of the recent crisis has been particularly severe, the results of Cyprus’ efforts to achieve fiscal consolidation and to restore financial stability are producing the first positive results. Emphasis is now also placed on structural reforms that promote competitiveness, growth and jobs in the context of the Action Plan for Growth and in line with the broad orientations for structural reforms provided by the Annual Growth Survey for 2015. However, historic urban cores, in particular, have suffered some of the most severe impacts of the recession, with a sharp decline in economic activity and the abandonment of a significant number of commercial uses. As a result, some of the most acute socio-economic and environmental problems are now evident in these neighborhoods, along with the more general pre-existing problems of functional nature, regarding accessibility and mobility.

Clearly, the complexity of revitalizing the urban economy calls for an integrated approach; appropriately, according to plans for the 2014-2020 programming period, policy in this area is currently oriented towards integrated interventions to be implemented in deprived urban neighborhoods, focusing on degraded historic centers, so that these areas will be better placed to serve as poles of growth through the attraction of economic activities, research and education infrastructure and highly skilled human resources. The strategy is to create cultural, social, economic and environmental infrastructure and mechanisms to strengthen efforts to steer these areas towards steady growth, while helping restart the urban economy as a whole. The aim of this effort is to upgrade the quality of life and the urban environment and bring attention to the comparative advantages that characterize such neighborhoods, in the historic centers of the country’s main urban areas. In this context, integrated urban interventions will focus in particular on the revitalization of the degraded urban environment and the upgrading of urban mobility; on the promotion of entrepreneurship with a focus on SMEs; and on the protection and promotion of natural and cultural assets, along with the creation of cultural and social infrastructure, including the reinforcement of social cohesion.

27 EUROPE 2020, Cyprus National Reform Programme, 2015.
5.2. Integration of the urban economy into national development policy

According to the operational programs of the current programming period\textsuperscript{30} the attainment of sustainable urban development objectives is foreseen to be achieved in a horizontal manner, through the implementation of parallel interventions in several priority areas, such as those concerning the support of the transition to a low emission economy; the protection of the environment in general and, more particularly waste collection at source and recycling; the promotion of climate change adaptation and relevant risk prevention; the promotion of employment and mobility in the labor market; as well as the promotion of social inclusion and combating poverty. Policy objectives in the transport sector are also complementary to the objectives of the strategy for sustainable urban development, since the main objective there is also to enhance urban mobility, which, in combination with interventions in the context of integrated urban development strategies, will contribute to the improvement of the quality of life in urban areas, addressing congestion, reducing greenhouse gas emissions and thus improving air quality.

Integrated sustainable urban development is implemented through urban development strategies, where the basic development needs and potentials of each area of intervention, particularly concerning deprived urban neighborhoods, are identified, recorded and expressed through specific objectives. They are directly linked to the annual development budget and available funds and have been developed by eligible Municipalities on the basis of specifications set at national level, including guidelines for an integrated approach to urban development and the establishment of thematic priorities and selection criteria.

5.3. Creating decent jobs and livelihoods

Rising unemployment and the decline in growth and jobs in recent years for both men and women of all age groups call for measures to create new sustainable jobs, focusing on areas with positive growth prospects and high added value. Target groups include the long-term unemployed and inactive persons, focusing on the acquisition of specialized knowledge and skills, on the basis of existing and future labor market needs. In the current recession, strategies for creating jobs initially focused on short-term horizontal relief measures, such as subsidized employment plans without thematic or sectoral targeting, i.e. strengthening all economic activity and all categories of beneficiaries, with the exception of sectors hit hardest by the crisis. Through the adoption of the program on Employment, Human Resources and Social Cohesion in 2015, interventions with relative specialization are foreseen with emphasis on dynamic high value-added sectors, such as energy, tourism, green and blue economy and generally areas highlighted by the Smart Specialization Strategy,\textsuperscript{31} as well as demographic and social targets, including those concerning women in the workforce and inactive persons, reducing the pay gap between the sexes, effectively addressing child care issues etc.

The current policy orientation is to plan employment retention measures and interventions of a similar nature of existing research studies carried out by the Human Resource Development Authority,\textsuperscript{32} such as the ones concerning green jobs, employment forecasts and training prospects. Examples include:

- Provision of incentives to businesses in the private sector for the creation of jobs through the implementation of support schemes covering part of the employee wage costs;
- Subsidy schemes for practical training followed by employment, allowing a first stage of internship for a specified period, followed by the smooth integration of beneficiaries into a job position;

\textsuperscript{30}See notes (26) and (27).
\textsuperscript{32}For details see the Human Resource Development Authority website (online information at present only available in the Greek language), http://www.hrdauth.org.cy/.
Subsidy schemes for flexible work arrangements, allowing employment on terms mutually satisfactory to both beneficiaries and their employers, through flexibility for various aspects of the work, such as time schedule, physical presence etc.;

Employment schemes for the unemployed to cover community service needs for vulnerable population groups, such as childcare and care for the elderly;

Vocational education and training programs in selected dynamic sectors of the economy with high added value and positive growth prospects, including the areas of ICT, energy and tourism, focusing on the provision of specialized skills to beneficiaries and covering part or all of their wage costs.

6. HOUSING AND BASIC SERVICES

6.1. Improving access to adequate housing and serving vulnerable populations

In the aftermath of the 1974 Turkish invasion government set up the Service for the Displaced Persons to provide housing help and support to internally displaced persons. Among a number of available schemes, the most commonly used by beneficiaries were the schemes concerning the concession of residential units in housing estates for displaced persons; the concession of state land for a self-housing scheme; the granting of financial assistance for self-housing in a privately owned plot or the purchase of a residence or an apartment; and the rent subsidy scheme for displaced persons and war victims. Over the years, housing policy for displaced persons included cases of deprived neighborhood regeneration to provide housing in restored historic buildings, as well as, in the late 1990’s, an ambitious program for the reconstruction, radical improvement and regeneration of housing estates for displaced persons built during the 1970’s and 80’s.

For several decades this comprised the only housing program offered, although gradually, over the years and up until 2014, a Consolidated Housing Program was implemented by the Ministry of the Interior to provide housing help and support, such as for the acquisition of a housing unit, the construction of a unit on a private plot of land or rent subsidy, to various vulnerable population groups, including persons with disabilities, families with three or more children, single-parent households and others. Some of the schemes that had been developed and implemented over the years included incentives for young couples to acquire housing in rural areas adjacent to the UN Buffer Zone as well as in peripheral, isolated or mountainous rural areas; specific plans for the revitalization of urban areas adjacent to the UN Buffer Zone in the Nicosia urban agglomeration; several types of schemes addressed to state aid recipients and disabled persons; as well as a repatriated persons (returning overseas Cypriots) rent assistance scheme.

However, following the unprecedented fiscal and financial crisis of the 2010’s, the Consolidated Housing Program was suspended indefinitely in 2014, until economic conditions allow its resumption, whereas the general intention is to re-examine the feasibility of introducing a more integrated affordable housing policy over the next years. At present, only schemes offered by the aforementioned Service for the Displaced Persons are in place, as well as some schemes offered by the Cyprus Land Development Corporation, a semi-public agency, for middle income beneficiaries.

33 For details of schemes offered by the Service for the Displaced Persons see (online information at present only available in the Greek language) http://www.moi.gov.cy/moi/moi.nsf/page47_gr/page47_gr?OpenDocument.

34 For details of schemes offered by the Cyprus Land Development Corporation see (online information at present only available in the Greek language) http://www.cldc.org.cy/.
6.2. Improving access to sustainable means of transport

Better access to sustainable means of transport is gradually achieved through the regeneration and/or completion of the urban pedestrian and cycle networks as well as through the enhancement of the public transit system. Specific measures undertaken towards this objective are have been described in paragraph 3.4 above. Moreover, conforming to the provisions of the National Action Plan for People with Disabilities, all new public open space or road schemes currently designed or implemented are accessible for wheelchair (ramps, elevators etc.) and the visually impaired (e.g. tactile tiles); while the new urban bus fleet is wheelchair accessible (low-floor and/or low-entry buses). Towards the same general objective, geometric design and urban planning standards safeguarding minimum sidewalk widths for wheelchair and visually impaired accessibility have been recently issued.

Illustration 10: New redesigned intermodal transfer station in Nicosia. (Source: Department of Town Planning and Housing)

7. URBAN SUSTAINABILITY INDICATORS

i. Percentage of people living in slums
   There are virtually no slums in Cyprus

ii. Percentage of urban population with access to adequate housing
   Access to housing is generally secured in Cyprus with a number of exceptional cases; according to ESPON Policy Brief 4, 2016, Urban Partnership Themes in a Wider Territorial Context, housing cost overburden rate in urban areas of Cyprus is the second lowest in the EU (in the range of 3-5%). No statistical data is available on the percentage of population with access to affordable housing.

iii. Percentage of people residing in urban areas with access to safe drinking water
   Approaching 100%

iv. Percentage of people residing in urban areas with access to adequate sanitation
   Approaching 100%

v. Percentage of people residing in urban areas with access to regular waste collection
   Approaching 100%

vi. Percentage of people residing in urban areas with access to clean domestic energy
   Approaching 100%

vii. Percentage of people residing in urban areas with access to public transport
   No statistical data available; although public transport organizations operate in all urban areas and accessibility is provided for each urban agglomeration and its surrounding district, parameters related to overall ridership, attractiveness of public transport in general and frequency of connections all need improvement (see paragraphs 2.4, 3.4 and 6.2 of the Report).

viii. Level of effective decentralization for sustainable urban development
   No survey data available (see paragraphs 2.5 and 4.1 of the Report)

ix. Percentage of city, regional and national authorities that have implemented urban policies supportive of local economic development and creation of decent jobs and livelihoods
   No survey data available (see paragraphs 5.1, 5.2 and 5.3 of the Report)

x. Percentage of city and regional authorities that have adopted or implemented urban safety and security policies or strategies
   No survey data available

xi. Percentage of city and regional authorities that have implemented plans and designs for sustainable and resilient cities that are inclusive and respond to urban population growth adequately
   No survey data available

xii. Share of national gross domestic product (GDP) that is produced in urban areas
   No statistical data available

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