

ECOSOC • Integration Segment (27–29 May, 2014) SUSTAINABLE URBANIZATION 

# UNITED NATIONS EDUCATIONAL, SCIENTIFIC, AND CULTURAL ORGANIZATION

Contribution to the 2014 United Nations Economic and Social Council (ECOSOC) Integration Segment

# UNESCO Statement - ECOSOC Integration Segment on Sustainable Urbanization

## Building on an integrated approach for smart, creative sustainable cities

By 2050, the global population will increase by about one third to surpass 9 billion. Around 70 per cent of the world population will live in urban areas. Rapid urbanization is already posing significant challenges, particularly but not confined to low-income and middle-income countries, as municipal authorities seek to combine policies and actions that connect environmental sustainability, social cohesion, equity and cultural creativity with economic performance.

Many city governments around the world are aiming to optimize city systems for efficiency, in particular through technology-driven improvements for achieving carbonneutrality. However, for urbanization to become sustainable, environmentally friendly capacities technologies need to be supplemented by integrated cultural, social, educational and environmental policies that create the necessary ethical and intellectual knowledge, skills, attitudes and behaviours of citizens in order to sustain the quality of the urban environment.

Cities can be both smart and sustainable by developing a harmonious continuum between the past, present and future through sustainable urban development. This necessitates preserving the ecological balance and social identity of urban communities, embedded in tangible and intangible heritage, while at the same time fostering creativity and technology, to increase their productivity and resilience, and thereby improving welfare and quality of life for citizens.

## Culture as a driver for sustainable urban development and management

A vibrant cultural life and the quality of urban historic environments are key for achieving sustainable cities. Local governments should preserve and enhance these environments in harmony with their natural settings. Culture-aware policies in cities should promote respect for diversity, the transmission and continuity of values, and inclusiveness by enhancing the representation and participation of individuals and communities in public life and improving the conditions of the most disadvantaged groups.

Culture-led redevelopment of urban areas and public spaces, and in particular historic urban ensembles must give priority to increased sustainability of planning and design interventions by taking into account the existing built environment, intangible heritage, cultural diversity, socioeconomic and environmental factors along with local community values. In this regard, the Recommendation on the Historic Urban Landscape (2011) adopted by UNESCO's General Conference is an essential tool for integrating policies and practices of conservation of the built environment into the wider goals of urban development policies.

Support to creativity is also critical. Tapping into the transformative power of creativity can effectively contribute to making globalisation a more positive force for present and future generations and finding imaginative and sustainable development outcomes. Indeed, cultural and creative industries represent one of the most rapidly expanding sectors in the global economy. They also represent a wellspring of local revenue-generating activities, owned by the people and embedded in a local fabric. Amongst others, cultural heritage, cultural and creative industries, arts and crafts, sustainable

cultural tourism, culture-led urban revitalization and cultural infrastructure can serve as strategic tools for poverty alleviation, revenue generation and inclusive economic development, attracting investment and ensuring green, locally-based, stable and decent jobs.

Cultural Tourism presently accounts for 40 per cent of world tourism revenues. Cultural heritage sites in general, and in particular, those inscribed on the UNESCO World Heritage List, generate substantial revenues and employment from tourism. Indentifying tourism as a subsector for investment would encourage investment in infrastructure and stimulate local development. Tourism, if managed carefully and to the benefit of the host communities, provides significant links between heritage assets and sustainable development. Protection, preservation and safeguarding of cultural heritage go hand in hand with the sustainable development of tourism and where planning is harmonized.

Shared urban public spaces where creativity fosters social engagement, inclusion and security need to be promoted. UNESCO's action focuses on supporting the model of "creative cities" as laboratories for sustainable development, places where imagination, inspiration and innovation are openly and freely exchanged: platforms for dialogue and ideas, where a diversity of images, text, sounds are conceived, created, produced, exchanged and traded.

#### Education for sustainable cities

Sustainable development and urbanization can only be achieved if individuals and societies change the way they think and act. Education is central to achieving this change. It helps ensure that cities are socially just, ecologically sustainable, economically productive, politically participatory and culturally vibrant. Education for Sustainable Development (ESD) provides every citizen with the opportunity to acquire the knowledge, skills, attitudes and values needed to shape sustainable development. ESD motivates learners to reduce their carbon footprint and choose more sustainable lifestyles. Moreover, it empowers learners to take informed and responsible decisions, which are important conditions for making cities key centres of thought and action for sustainable development.

## Sustainable urban water management

Sustainable water management is a key challenge for cities. Traditionally, in urban planning and urban water management, urbanization is viewed as a major contributor to water stress, a threat to sustainability, and a burden to future generations that is associated with high marginal costs and social inequities. Urban water management increasingly relies on large imports of water, energy and other resources, produces large quantities of wastewater which can have adverse effects on the receiving water systems, reduces environmental flows for ecosystems, and disrupts ecological services and functions. The traditional model of urban water management is at the same time highly compartmentalized and centralized, and separately managed and financed. This traditional approach to urban water management remains largely inadequate at technical, environmental, economic, and social levels to address the challenges of sustainability in the face of rapid urbanization and population growth.

In order to support sustainable urbanization as an integration tool, there is a need for a paradigm shift in how water resources are used and managed in urban areas. The

paradigm shift should be such that all components of the water cycle in urban areas are managed in an integrated, participatory, and forward looking manner.

#### Biosphere Reserves as laboratories of ideas for sustainable urban futures

Rapid urbanization, unsustainable development and the excessive consumption of resources of cities have an important impact on the local ecological wellbeing, with effects on biodiversity, ecosystems, natural resources and human health. However, cities have the potential to become engines of innovation to reduce carbon emissions, for green economies and sustainable management of natural resources, and be safeguards for diversity, human and ecosystem wellbeing. UNESCO Biosphere Reserves provide ecosystem services for human wellbeing and are learning laboratories at local and regional levels. They are an effective means to promote and enhance cooperation between the cities and the regions in which they are located, fostering the harmonious integration of people and nature for sustainable development.

#### Sustainable development of coastal cities

Fifteen out of the thirty cities with more than 10 million inhabitants are located on the coast, very often in low-lying areas, and more than half the human population lives within 100 kilometers from the shore, leading to urban sprawl in coastal areas. As a result, coastal flood damages are expected to increase significantly during the 21st century and up to 4.6% of global population is expected to be flooded annually in 2100 if sea levels rise as expected, with an estimated annual losses of 0.3–9.3% of global gross domestic product. Furthermore, urban centers and their population are also vulnerable to the impacts of tsunamis. Sustainable urbanization will therefore require adaptation strategies and plans to mitigate the impacts of sea-level rise and related processes such as coastal erosion, as well as disaster preparedness and risk reduction mechanisms.

Coastal cities have a direct impact on the ocean by consuming natural coastal habitats and polluting the ocean. Demographic growth on land results in high demand for maritime space in order to conduct socio-economic activities such as fisheries, offshore energy exploitation, tourism, mining or cabling, amongst others. As the demand for goods and services increases, competition will increase between different ocean users, thus managing human activities in a changing environment will be essential for coastal cities to be sustainable.

#### Renewable energy systems and urban sustainability

Most of population growth will occur in developing countries, substantially increasing their energy needs. In this context, the use and application of off-grid renewable energy systems, especially solar energy could prove to be the most appropriate and locally available option. The electrification of schools buildings by using alternative energy sources could help in addressing sustainable urbanization while improving the quality teaching and learning , particularly when modern information and communications technologies (ICT) are also made available. Establishing electricity access in areas far from the grid is best achieved by the use of decentralized solar systems. In addition, the abundant alternative energy options in many parts of developing countries make these technologies ideal and most appropriate for such decentralised application.

Rapid and unprecedented urbanization around the world is putting pressure on the availability and use of resources, resulting in overburdened urban landscapes and generating new security issues that are unsustainable on the long run. Placing creativity, innovation, education and integrated resource management approaches at the heart of urban renewal and planning can lead to more sustainable, liveable, safer and productive cities offering a better quality of life. UNESCO stands ready to support this endeavor, offering an integrated approach to sustainable urbanization.

#### Action-oriented recommendations by UNESCO to support sustainable urbanization

**General recommendation:** Promote creativity, research and innovation, cultural diversity and social inclusion, as well as integrated management of natural and cultural resources and assets as drivers for sustainable urban development

1. Culture as a driver for sustainable urban development and management needs to be harnessed by:

- Protecting and safeguarding the urban historic landscapes and as well as cultural and natural heritage;
- Boosting creativity, research and innovation to strengthen sustainable urban planning;
- Promoting integrated local policies for cultural diversity and social inclusion;
- Strengthening cultural and creative industries, inter alia by building local capacities in the creation, production and distribution of cultural goods and services;
- Mainstreaming culture into local economic and social development programmes and initiatives;
- Promoting the concept of 'creative cities' as a powerful means for stimulating creativity, innovation and imagination, in particular of youth, for sustainable urban development;
- Including a Cultural Impact Assessment mechanism for urbanization processes in order to improve the quality of public spaces;
- Boosting sustainable and responsible cultural tourism;
- Expanding inter-city networking and cooperation, knowledge sharing and exchange at national and international level.

2. Sustainable development and urbanization can only be achieved if individuals and societies change the way they think and act. Education for sustainable development (ESD) is central to achieving this change:

- Mobilize Education for Sustainable Development (ESD) as a driver for sustainable urbanization, empowering every citizen with the opportunity to acquire the knowledge, skills, values and attitudes needed to address social, economic and environmental challenges of the 21st century urbanized world;
- Include ESD as a key component of integrated planning and management approaches for sustainable urbanization.

3. There is a need for a paradigm shift in how water resources are used and managed in urban areas. The paradigm shift should be such that all components of the water cycle in urban areas are managed in an integrated, participatory, and forward looking manner:

- Adopt an integrated and participatory management of the urban water cycle, encompassing water sources, wastewater and storm water;
- Improve scientific knowledge for sustainable urban water management and the science-policy-society interface to translate this knowledge into sound policies, strategies and practice; build capacities and raise awareness for sustainable urban water management;
- Shift from water-supply management to water-demand management;
- Take measures to reduce water pollution, incorporating prevention, control and restoration strategies to safeguard water quality from the source to the tap in order to reduce health and environmental impacts of water pollution.
- Protect urban aquatic ecosystems and habitats, using these ecosystems as a tool for flood protection, pollution control and improvement of the quality of life.
- Adapt urban water systems to climate change by shifting towards flexible and adaptable urban water systems with improved flood and drought resilience;
- Include the financial and service sectors, including formal and informal institutions in integrated urban water management approaches;
- Balance technological innovations with low cost and efficient solutions, and the formulation of incentivizing policies;

4. Biosphere Reserves are an effective means to promote and enhance cooperation between the cities and the regions in which they are located, fostering the harmonious integration of people and nature for sustainable development:

• Promote sustainable urban futures through UNESCO Biosphere Reserves.

5. Sustainable urbanization in coastal cities requires adaptation strategies and plans to mitigate the impacts of sea-level rise; appropriate disaster preparedness and risk reduction mechanisms; new ways of managing human activities in a changing environment. There is therefore a need to:

- Implement Tsunami Early Warning Systems (EWS) and educate urban communities at risk about preparedness measures;
- Conduct urban hazard assessments and set up integrated urban disaster management strategies;
- Adopt integrated coastal management and marine spatial planning processes to consider the cumulative effect of human activities on the ocean.

6. Responding to the increasing energy needs of developing countries, especially in urban areas, the use and application of off-grid renewable energy systems, especially solar energy could prove to be the most appropriate and locally available option for public buildings:

• Promote energy supply of public buildings through off-grid renewable energy systems, especially solar energy.