



The Tenth Session of the World Urban Forum

Cities of Opportunities: Connecting Culture and Innovation

Abu Dhabi, UAE 8-13 February 2020



Introduction

The 2030 Agenda for Sustainable Development and the New Urban Agenda (NUA) have placed culture at the forefront of current debates on urbanization. Culture and cultural diversity are sources of enrichment and provide an important contribution to sustainable urbanization.¹ Today, culture is understood in its broad sense as the set of distinctive spiritual, material, intellectual and emotional features of society or a social group, and that it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs. Culture and urbanization are mutually reinforcing. They renew and regenerate each other by way innovation. Culture is as open, evolving and forward looking as it is a repository of the past through heritage and traditions; it implies the capacity to survive as well as to adapt to change and create. In urban areas, culture becomes visible in the built environment, public spaces, practices, representations and artistic expressions, all of which become symbols of local identity.

With 55% of the global population residing in urban areas, and cities becoming more heterogeneous, cultural diversity has important implications for how urban areas are planned and managed.² Migration among the main factors driving the increase in global urbanization. There are currently 258 million international migrants worldwide, which means that every seventh person in the world is a migrant.³ The continuous flow of global migration means that cities all over the world have become progressively more multicultural. The cultural diversity of cities is an asset, which can be harnessed for the social and economic benefit of communities. Urban areas contain the cultural diversity, creative capital, vitality, social infrastructure and career opportunities that attract the skills and talent required to generate and exploit knowledge.

Cities are hubs of innovation often deployed to address a wide range of urban challenges— achieving water management, sustainable mobility, security, solid waste management and renewable energy. In the context of urban areas, culture and innovation are inextricably linked and together can foster entrepreneurship and resilience, while harnessing opportunities, enhancing well-being and generating economic growth and employment. The city with its concentration of people, ideas, and resources serves as a catalyst to initiate and sustain innovation. The rapidly changing urban context provides an opportunity for culture and innovation to converge and address persistent and emerging urban challenges. It is against this backdrop that the Tenth Session of the World Urban Forum (WUF) has as its theme: “Cities of Opportunities: Connecting Culture and Innovation”. It is apt that, for the first time, a country from the Arab States region, where human settlements have emerged and evolved into the world’s oldest and newest cities, will host the World Urban Forum.

The World Urban Forum

Organised and convened by UN-Habitat, the World Urban Forum has become the foremost international gathering for exchanging views and experiences on sustainable urbanization in all its ramifications. The inclusive nature of the Forum, combined with high-level participation, makes it a unique United Nations conference and the premier international gathering on urban issues.

The objectives of the World Urban Forum are:

- i. Raise awareness of sustainable urbanization among stakeholders and constituencies, including the general public;
- ii. Improve the collective knowledge of sustainable urbanization through inclusive open debates, sharing of lessons learned and the exchange of best practices and good policies;
- iii. Increase coordination and cooperation between different stakeholders and constituencies for the advancement and implementation of sustainable urbanization.

Thematic Objectives of the Tenth Session of the World Urban Forum

- i. To take stock of emerging innovative approaches and practices in harnessing culture and innovation as drivers of sustainable urbanization;
- ii. To provide greater insights into the linkages between urbanization, culture and innovation as a basis for achieving inclusive, safe, resilient and sustainable cities and human settlements;
- iii. To promote synergies between the past and the future, creating spaces for convergence in multicultural and multigenerational communities;
- iv. To promote innovative solutions and approaches to urban development, building on the value of cultural diversity to improve quality of life for all in cities and human settlements;
- v. To explore the role of culture and the creative economy in driving prosperity and socioeconomic opportunities for all in cities and human settlements;
- vi. To explore the role of culture and innovation in implementing the New Urban Agenda and achieving the urban dimensions of the 2030 Agenda for Sustainable Development;
- vii. To build on the lessons learned of previous WUFs, especially with respect to bottom-up approaches to sustainable urbanization.

1 United Nations, 2016

2 United Nations, 2017b

3 United Nations, 2017b

Cities of Opportunities: Connecting Culture and Innovation

Dialogue 1	Dialogue 2	Dialogue 3	Dialogue 4	Dialogue 5	Dialogue 6
Urbanization, Culture & Innovation	Implementing the New Urban Agenda to drive Sustainable Change	Tradition and Modernity: A Creative Convergence for Better Cities	Frontier Technologies and Innovation for Inclusive, Sustainable and Resilient Smart Cities	Urban Planning & Heritage Preservation - Regeneration	Partnerships & Initiatives Supporting Culture & Innovation in Cities

To achieve these objectives, six dialogues as described below constitute the entry points for the overall discussion.

These dialogues will explore how culture and innovation can contribute to sustainable urbanization in different contexts. These include: the mutually reinforcing links between urbanization, culture and innovation; culture and innovation as key drivers of sustainable urbanization; protecting and harnessing traditional knowledge systems in the face of contemporary challenges; the contribution of the cultural and creative industries to inclusive urban prosperity; culture as a basis for urban regeneration and revitalization; and the role of global and regional partnerships that support culture and innovation in achieving sustainable urbanization. Placing culture at the heart of urban development contributes to sustainable development, and acts as an accelerator for the achievement of the urban dimensions of Agenda 2030 for Sustainable Development.

Dialogue 1: Urbanization, Culture and Innovation

The 21st century is the urban century. This is because cities are humanity’s greatest building blocks, given their economic and policy contribution, population, density, cultural diversity, and innovative edge. Megacities and regional hubs such as New York, London, Beijing, Seoul, São Paulo, Bangkok, Dubai, Cairo and Lagos are the nexus of socioeconomic and political change. These cities generate their own wealth and shape national and, in some cases, regional and international policies.

The shift towards an increasingly urbanized world constitutes a transformative force, which can be harnessed for a more sustainable development trajectory. The Tenth session of the World Urban Forum will be taking place at a time when 4.4 billion people live in the world’s urban areas and where cities are increasingly taking the lead to address global challenges such as poverty, inequalities, environmental degradation, the climate and refugee crises. The opportunity for culture and innovation to address challenges arising from urbanization has never been greater.

In a context of all-encompassing urbanization, where more than half of the global population currently lives in urban areas, the promotion of a culture-based approach is essential to ensure human-centred, inclusive and equitable development. This is now fully acknowledged in both the 2030 Agenda for Sustainable Development and the New Urban Agenda adopted by the United Nations in 2015 and 2016 respectively. Culture, from cultural heritage to the creative economy, manifests itself through both individual and collective creativity, and in all its diversity, allows communities to respond to current global challenges. Culture influences the way people think and interact at all levels, whether at individual, community or local government levels, can determine future development outcomes, and influence policy directions in multiple areas. Cities provide the ideal backdrop for creativity to flow, and cultural institutions, goods and services to thrive.

For centuries, cities have been hubs of innovation and catalysts for progress. Urbanization, the agglomeration of talent and resources in a city, exude creativity, create wealth, and enhance social development. Urbanization harness human and technological resources thus, resulting in unprecedented economic and social gains. From technology to institutions, modes of operation and information, innovation is a creative capital that is brought to bear on various dimensions of urban development. Paired with culture, innovation is essential for sustainable urban growth.

The cultural diversity of cities can contribute to their sustainability, inclusiveness, vibrancy, prosperity, competitiveness, attractiveness and overall development. It has been shown that culturally diverse cities are more innovative as they benefit from a wider array of global knowledge that supports the generation of ideas, approaches to problem-solving and diversity in decision-making processes. Cultural diversity can allow enhancing the cities’ creative capital and vitality, which in turn attract the skills and talent required to generate and exploit knowledge and build dynamic competitive advantage. Cultural diversity however also faces challenges, which can lead to intolerance and social disruption. Managing diversity and promoting intercultural dialogue and social cohesion require inclusive policies and dedicated measures.

While cities have always been melting pots of cultural diversity, there are certain features of contemporary cultural diversity that are novel First, cultural diversity in cities is both wider and deeper than ever before. Second, cultural diversity is far more affirmative as minorities and immigrant groups demand equal rights, access to urban opportunities, and the right to participate in decisions that affect their collective life. Third, the forces of globalization, which drive international migratory patterns, entail sustained flows of ideas, symbols and meanings, which permanently link the places of origin of culturally diverse urban populations and their present sites of domicile.

The city of Mosul, Iraq, which for centuries has been a crossroad of culture in the Middle East, has seen large-scale destruction of significant sites, monuments and buildings, including religious monuments, libraries, and archaeological sites. In such conflict or conflict-prone settings, culture is an important vehicle to foster tolerance, mutual understanding and reconciliation, mitigating social tensions and preventing renewed escalation into violent conflict.

New technologies have an important role to play in implementing recovery and reconstruction initiatives and frameworks. Overall, integrating culture into people-centered and place-based development as well as reconstruction and recovery strategies, can strengthen the resilience, diversity and sense of belonging of communities in their cities. It can promote social inclusion and economic development, while enabling the creation of culturally diverse and innovative cities and fostering a process of sustainable development.

There is also the possibility that cultural diversity could also make participatory processes around planning issues more complex, as different socio-cultural groups have different expectations and needs. Cultural diversity also places new demands in terms of mediating between conflicting lifestyles and expressions of culture. For instance, conflicts around religious buildings, burial arrangements, ritual animal slaughter and building aesthetics are issues that are increasingly being addressed in urban areas. If not properly managed, this could trigger anti-immigrant resentment, alienation and even violence.

Experience shows that much of the understanding and negotiation to manage diversity occurs at the local level, through everyday experiences and encounters. The importance of the neighborhood context and the local micro public is key in the development of new interaction. Place identity, innovative design of space and urban regeneration and revitalization can strengthen identities and belonging, integrating both host communities and new arrivals— migrants, refugees, and internally displaced people. It is important that urbanization models and urban planning allow for socially and physically integrated urban growth. This should allow for equitable access to services, transport, education, public space, employment and housing for the most vulnerable by focusing on mixed-use development, transport planning for multiple users, affordable housing policies, and urban renewal programmes.

Dialogue 1: Urbanization, Culture and Innovation

Key Issues

The Tenth session of the World Urban Forum will be taking place at a time when 4.4 billion people live in the world's urban areas and where cities are increasingly taking the lead to address global challenges such as poverty, inequalities, environmental degradation, the climate and refugee crises. Urbanization is one of the most significant trends of the 21st century as it provides the foundation and momentum for global change.

Culture, through cultural heritage and the creative economy, together with innovation, can contribute to the cities' sustainability, inclusiveness, vibrancy, prosperity, competitiveness, attractiveness and overall development. Cultural diversity is a key element to enhance the cities' creative capital and vitality, which in turn attract the skills and talent required to innovate, generate and exploit knowledge and build dynamic competitive advantage.

Cultural diversity and the foundations of social justice and inclusion are particularly at threat in the context or aftermath of conflicts, crises and disasters, which have increasingly affected cities. Culture plays a particularly significant role in recovery, peacebuilding and reconstruction of conflict-affected cities. The city of Mosul, Iraq, which for centuries has been a crossroad of culture in the Middle East, has seen large-scale destruction of significant sites, monuments and buildings of cultural and religious importance, between 2014 and 2017, along with a large part of the urban fabric of the Old City. To restore the emblematic expression of Iraq's pluralistic identity and protect humanity's cultural heritage, UNESCO has launched a flagship initiative 'Revive the Spirit of Mosul', which aims at supporting the Iraqi Government and people in the recovery and reconstruction of the city of Mosul.

Culture needs to be fully integrated in urban regeneration and revitalization strategies as well as city reconstruction and recovery processes by all actors involved.

Objectives of the Dialogue

This Dialogue will explore the role of culture and innovation to address global challenges such as poverty, inequalities, environmental degradation, the climate and refugee crises, in the context of urban development as well as city reconstruction and recovery, drawing on perspectives from different parts of the world.

Initial Questions

This Dialogue will address the following questions:

- i. What is the role of culture for sustainable urban development; can urbanization strengthen, modify, erode or even produce 'new' forms of culture and cultural identities?
- ii. What is the role of culture for city reconstruction and recovery? How should culture be integrated in reconstruction and recovery processes?
- iii. How does cultural diversity contribute to the sustainability, inclusiveness, vibrancy, prosperity, competitiveness, attractiveness and overall development of cities? How to safeguard cultural diversity and promote the coexistence of diverse backgrounds and cultural expressions in urban areas?

Dialogue 2: Implementing the New Urban Agenda to drive Sustainable Change

With the adoption of the 2030 Agenda for Sustainable Development (Agenda 2030) in 2015 and the New Urban Agenda (NUA) in 2016, urbanization has emerged as a key agenda in international development policy. This is a clear indication of the role that planned urbanization can play in achieving inclusive, safe, resilient and sustainable development. Very often, we are reminded that the battle for sustainable development will be won or lost in cities. Indeed, it is argued that up to 65% of the targets of the Sustainable Development Goals are at risk should urban stakeholders not be assigned a clear role in the implementation of the agenda. For instance, cities have a clear role in ending poverty (Goal 1); reducing inequality (Goal 10); promoting inclusive and sustainable growth, and full and productive employment (Goal 8); ensure sustainable consumption and production patterns (Goal 12) and combating climate change and its impacts (Goal 13).

An integrated approach to the implementation of the NUA by all levels of government and various stakeholder, as well as enhanced coordination and coherence supported by innovation, and in consonance with the prevailing cultural milieu is crucial for achieving sustainable urbanization. Culture and innovation are creative capital that have direct implications for sustainable urbanization and the overall prosperity of the city.

The NUA acknowledges the importance of culture and cultural diversity in the sustainable development of cities and human settlements. The NUA recognizes that culture can play a pivotal role in the promotion and implementation of new sustainable consumption and production patterns that contribute to the responsible use of resources. Culture features prominently in Agenda 2030; indeed, Target 11.4 seeks to strengthen efforts to protect and safeguard the world's cultural and natural heritage. This implies that culture is now firmly recognized by the international community as a key component for achieving sustainable urbanization.

A culturally sensitive approach to implementing the NUA implies efforts to understand and respect urban identities, values and views giving new dynamism to city plans and leading to inclusive growth. It is the key to expanding freedoms and addressing the interlinks between social, economic and environmental sectors and ensuring sustainable and holistic development strategies.⁴ For example, the conservation of local culture and heritage must be safeguarded through informed intelligent and sensitive cultural policies, not only to maintain city uniqueness but to allow for knowledge spillovers that are based on years of knowledge accumulation and observation. Cities need to create conducive environment for culture to flourish, with efforts made to safeguard cultural expressions.

Culture brings value to sustainable urbanization, and in itself, has become a factor for different forms of innovation. Recently, space and its related attributes have largely contributed to new forms of cultural manifestation and development. Space recreates memories, reinvents the notion of identity and belonging and redefines and reinforces the soul of the city, which is exhibited through its cultural heritage and intangible values. The city's soul is also revealed through its social fabric, its creative and intellectual assets, its vibrancy and distinct personality. Cultural inclusion is associated with a host of benefits for sustainable urban development in all its ramifications.

Innovation and advances in science and technology are crucial for implementing the NUA, achieving Sustainable Development Goals, and other global development frameworks relevant to sustainable urbanization such as the Paris Agreement on Climate Change and The Sendai Framework for Disaster Risk Reduction.⁵ The NUA identifies innovation as an important enabler for achieving sustainable and inclusive urban prosperity, and in planning and managing spatial development. The implementation of the NUA requires an enabling environment, including access to science, technology and innovation, and the use by city authorities of innovation and creativity to address intractable urban challenges. Furthermore, advances in data— open data, big data and the Internet of Things, and various integrative platforms have a key role to play in the monitoring, follow-up and review of the implementation of the New Urban Agenda. These new techniques can reduce the cost of knowledge production for the support of decision-making process.

Innovation is critical for an effective global response to climate change and environmentally sustainable and resilient urban development. There is a pressing need to accelerate and strengthen innovation to deliver environmentally and socially sound technologies in order to achieve the goals of the Paris Agreement.⁶ Harnessing technological innovation is crucial for countries to achieve the smooth implementation of their intended nationally determined contributions and national adaptation plans. A review of 190 intended contributions revealed that almost 140 countries highlighted the importance of climate technologies for meeting their targets.⁷

Innovative financing mechanisms are crucial for the implementing of the New Urban Agenda. Besides, the conventional sources of funding for sustainable urbanization, innovative approaches that capture and share the increase in land and property value generated as a result of urban development and investment in infrastructure need to be explored. Measures such as gains-related fiscal policies could be established as appropriate, to prevent its solely private capture, as well as land and real estate speculation.⁸

4 UNESCO, 2009

5 UN-Habitat, 2019

6 United Nations, 2015

7 United Nations, 2015

8 United Nations, 2016

Dialogue 2: Implementing the New Urban Agenda to drive Sustainable Change

Key Issues

The adoption of the New Urban Agenda marked a major milestone in global urban policy. In many respects, the NUA represents a *paradigm shift*⁹ that will:

- Readdress the way cities and human settlements are planned, financed, developed, governed and managed, while recognizing sustainable urban and territorial development as essential to the achievement of sustainable development and prosperity for all;
- Recognize the leading role of national governments, as appropriate, in the definition and implementation of inclusive and effective urban policies and legislation for sustainable urban development, and the equally important contributions of subnational and local governments, as well as civil society and other relevant stakeholders, in a transparent and accountable manner; and
- Adopt sustainable, people-centred, age- and gender-responsive and integrated approaches to urban and territorial development by implementing policies, strategies, capacity development and actions at all levels.

The NUA is anchored on three transformative commitments that are grounded in the integrated and indivisible dimensions of sustainable development— social, economic and environmental. These transformative commitments are social inclusion and ending poverty; ensuring sustainable and inclusive urban prosperity and opportunities for all; and promoting environmentally sustainable and resilient urban development.¹⁰

The NUA places emphasis on effective implementation at the local level and on the role of local governments and affirms that sustainable urban development as a critical step for realizing sustainable development in an integrated and coordinated manner at the global, regional, national, subnational and local levels. The New Urban Agenda is an accelerator and implementing framework for the 2030 Agenda for Sustainable Development and other internationally agreed goals and targets relevant to sustainable urbanization.

The New Urban Agenda can be implemented through an action framework that encapsulates national urban policies; a system of institutions, regulations and governance; urban and territorial planning; the appropriate financial frameworks; and local implementation. Developing the capacity to implement urban development plans and placing housing at the centre of urban policies and at the centre of urban development are also essential for implementing the New Urban Agenda.

Objectives of the Dialogue

This Dialogue will examine the role that culture, and innovation can play in implementing the New Urban Agenda and achieving the Sustainable Development Goals and other internationally agreed goals and targets relevant to sustainable urbanization.

Initial Questions

This Dialogue will explore the following questions

- i. How can culture and innovation contribute to achieving the transformative commitments of the New Urban Agenda – social inclusion and ending poverty which ensures that no one and no place is left behind; sustainable and inclusive urban prosperity and opportunities for all; and environmentally sustainable and resilient urban development?
- ii. How can culture and innovation contribute to the effective implementation of New Urban Agenda?
- iii. What role can policy play in different contexts in strengthening the innovative financing frameworks and instruments, including innovation in information technology and data required to implement and monitor the implementation of the New Urban Agenda

Dialogue 3: Tradition and Modernity: A Creative Convergence for Better Cities

Traditional knowledge systems (TKs) commonly referred to as indigenous knowledge systems, is “know-how accumulated, tested and adopted across generations”¹¹ If adequately harnessed, indigenous knowledge systems have the potential to contribute to achieving Agenda 2030 for Sustainable Development. However, TKs are increasingly threatened by the commercialization of culture, advances in technology, globalization, rapid urbanization, and the destruction of ecological systems; thereby, eroding cultural values in certain contexts.¹² The threat to TKs brought about by processes of discrimination, dispossession and the exploitation of indigenous knowledge or practices for financial gain by third parties; and the risk of commodification can lead to a loss of traditional community values and practices, housing, employment, land ownerships and threatening socio-cultural cohesion and urban development.

In order to ensure that indigenous knowledge systems are safeguarded, it is important to create awareness and understanding amongst urban practitioners to ensure that indigenous communities are able to develop and adapt them with changing urban contexts. This will help ensure these values are integrated into sustainable urban development.¹³

9 United Nations, 2016

10 United Nations, 2016

11 World Bank, 2004. “TKs commonly referred to as indigenous knowledge systems, is know-how accumulated, tested and adopted across generations.”

12 State of the World’s Indigenous Peoples, 2009

13 State of the World’s Indigenous Peoples, 2009

14 State of the World’s Indigenous Peoples, 2009

Member States are considering how best to prevent the erosion of TKs at different levels of governance.¹⁴ This requires an approach which strikes a balance between conservation, sustainability and urban development, as well as ensuring the active participation of local communities. Cities can harness traditional knowledge to address contemporary urban challenges such as achieving food security, well-being and quality healthcare, water management, social inclusion and gender equality. Ensuring the passing on of TKs in cities can bring about sustainable outcomes. Bottom up initiatives such as community development can facilitate this continuity, as it provides renewed links between governments and citizens, reduces obstacles that deepen the inequality of opportunities among different groups and brings about new opportunities to tackle development challenges. For instance, the use of bottom up approaches which draw on TKs and new technologies have been adapted to address urban environment challenges.

Natural landscapes, along with the built environment can constitute assets that attract millions of tourists. Rapid urbanization, uncontrolled tourism, inadequate planning and standardized urban renewal projects increasingly threaten the authenticity and integrity of urban heritage. Dealing with such threats requires integrated place-based and people-centered approaches to urban planning and management, that account for the integrity of the urban fabric and the identity of communities¹⁵ and ensures sustainability. Place attachment needs to be enhanced to encourage local population to participate in urban regeneration, especially due to the need to increase the awareness of local contexts in urban planning, as well as acknowledging the key role locals play in supporting the cultural and creative industries.¹⁶

With increasing mobility around the world and improved travelling conditions, cities are experiencing an upsurge of tourism activity. The more sustainable model is one based upon authenticity and culture-based urban planning. Culture-Inspired tourism, often focused on local communities, are more dynamic and attract repeat visitors. Properties on UNESCO's World Heritage List including historic towns and cities, have special cultural significance attractive to visitors bringing about multiple benefits to communities.

Today, cultural tourism accounts for about 40% of world tourism revenues.¹⁷ The generation of wealth from cultural sites increases productivity and access to employment, especially for youth and women, reduces poverty and inequality, stimulates development, and generates resources to address urban challenges. However, when mismanaged, tourism can put heritage at risk, undermining its potential for sustainable development. Similarly, urban development can also erode the cities' historical and cultural assets and affect the quality of life.

The creative economy provides opportunities to support indigenous knowledge, crafts, culture and traditional practices. Creative goods can also contribute to sustainable urban development through the contribution of cultural production, dissemination, cultural enrichment and strengthening of social cohesion.

To support the growth of the creative economy, cities need to create an environment conducive for nurturing entrepreneurship through investing in the youth.¹⁸ Dealing with the challenges faced by indigenous knowledge systems in an age of globalization, requires empowering the youth as pioneers of new social innovations to unlock their creativity and carry their heritage for future generations.

Nurturing the creative economy requires decision makers to enhance the creative capital of urban dwellers and develop creative clusters through an integrated approach that involves the private and public sectors.¹⁹

Dialogue 3: Tradition and Modernity: A Creative Convergence for Sustainable Cities

Key Issues

Traditional knowledge systems are increasingly threatened by various aspects of modernization— globalization, advances in technology, commercialization of culture and urbanization. Harnessing the potential of traditional knowledge systems can contribute to sustainable urban development. Cities need to balance the benefits of integrating into a globalized world with protecting the uniqueness of local cultures, as these are based on knowledge and practices developed over centuries and embody ways to address urban challenges.

Modernization can lead to the erosion of cultural values and practices which guide approaches to housing, employment and land ownership. Erosion of cultural values could also threaten socio-cultural cohesion, as well as harness the benefits associated with modernization and innovation. that reflect the cultural value of a city. Similarly, innovation and modernization must reflect the prevailing cultural context.

Objectives

This Dialogue will explore the ability of cities to maximize their convergence to bring about sustainable outcomes— economic, social and environmental.

The dialogue will address the extant threats to Indigenous knowledge, and the need for community initiatives to promote and preserve indigenous knowledge, alongside capitalizing on new technologies to foster creativity and convergence in cities and communities.

Explore how culture and innovation can be used to nurture and support entrepreneurial development and creative economies in cities.

15 UNESCO, 2016

16 UNESCO, 1998

17 UNESCO, 2016

18 ilo.org, 2019

19 En.unesco.org, 2019

20 UN-Habitat, 2016

Initial Questions

Key questions to be addressed by this dialogue include:

- i. How can urban areas preserve and capitalize on traditional knowledge systems to improve the quality of life?
- ii. What are the prevailing threats to culture and how do these play out in urban areas?
- iii. How can cities create a conducive environment for nurturing sustainable and inclusive urban prosperity and opportunities especially in creative industries using modern technologies?

Dialogue 4: Frontier Technologies and Innovation for Inclusive, Sustainable and Resilient Smart Cities

Urban areas are increasingly characterized by the deployment of innovation and technology and by a revolution in data to inform decision-making.²⁰ Often referred to as disruptive technologies²¹, this trend signifies a move towards a knowledge-based economy that relies more on analytical capabilities than physical inputs. This Fourth Industrial Revolution²² is characterized by innovation and technological breakthroughs— automation, robotics, artificial intelligence, the use of drones, the Internet of Things, etc.²³ The application of frontier technology is revolutionizing the way cities are planned, governed, managed, analyzed and mapped.

FIGURE 2: Ten Top Urban Innovations



Source: World Economic Forum (2015)

Advances in technology enhances productivity and prosperity as it facilitates innovation, efficiency and effective service delivery.²⁴ Such innovations can contribute to making cities more sustainable and provide solutions to a wide range of challenges— water management, sustainable mobility, security, solid waste management, green city development, renewable energy and urban agriculture.²⁵

Technological innovation is redefining urban labour markets and in the process, blurring the conventional lines between tradeable (manufacturing-based) employment and non-tradeable (service-based) employment. This has profound effects on the employment structure of the city in that huge non-tradeable or service jobs have become tradeable with relocations occurring within and across regions. While this creates new forms of employment in some cities, it is also deepening unemployment and job insecurity in others.²⁶

21 PublishOx.com, 2019

22 Schwab, 2016

23 Brynjolfsson and McAfee, 2014

24 UN-Habitat, 2013

25 World Economic Forum, 2015

26 Koutoumpis and Lafond, 2018

27 ESPON, 2017

By 2025, it is reckoned that almost half of both new and replacement employment within the European Union will be highly skilled employment, forcing highly mobility across Europe.²⁷ The cultural and creative industries which have particularly flourished in urban areas have strongly benefitted from advances in technology. The cultural and creative industries also contribute to the global, regional and local urban economy; they generated at least USD 2,250 billion with more than 29.5 million jobs worldwide in 2015, which is equivalent to 3% of the World GDP and 1% of the world's working population.²⁸ While the cultural and creative industries are open to people of all ages and backgrounds, they provide a significant contribution to youth employment and are connecting formal and informal sectors, generations and regions.

Online outsourcing can serve as an avenue to leapfrog technology in developing regions, with the possibility of addressing urban challenges. Given that many developing countries lack infrastructure to appropriately business activities, the private sector has had to fill this void. The innovative nature of the private sector has made it possible to develop the capacity of city authorities to adopt technology to address urban challenges. For instance, harnessing ICT and internet infrastructure has contributed to improved governance, financial management and accountability, and the delivery of urban services in Africa.²⁹

Innovation boosts can further be achieved through policies that provide for ICT dedicated parks, which allow for the clustering industries with the aim of fostering knowledge exchange in technological innovations. Such ICT dedicated parks can stimulate productivity, innovation and growth of local industries, and increase foreign direct investment and related technology exchange with globally more advanced economies. They can also drive transformative structural changes, including the bundling of public services in urban areas; greater efficiency in the use of limited government funding for infrastructure; and generation of jobs and incomes. Several Gulf Cooperation Council countries have invested in ICT dedicated parks to boost socioeconomic growth and diversity away from an oil dependent to knowledge-based economy.³⁰

The ever-increasing application of data is driving the phenomenon of Smart Cities; this relates to the innovative application of information and technology to improve quality of life, efficiency of urban operations and services, and competitiveness in cities.³¹ Smart Cities can guide better decision-making with respect to prosperity, sustainability, resilience, emergency management, or effective and equitable service delivery, and in the process, enhance the implementation of the NUA. The global smart city market will grow by 14% annually, from USD 506.8 billion in 2012 to USD 1.3 trillion in 2019.³² Singapore has been at the forefront of the Smart City movement; its Smart Nation Programme seeks to harness ICT, networks and data to bolster better quality of life, create more opportunities, and to support stronger communities.³³

It is important to note that all smart city initiatives have been successful³⁴; besides, the technology and digital platforms that underlie smart cities are often developed and marketed by private sector actors, which in turn can lock-in or force cities to depend on certain technology, and thereby skew the long-term investment priorities of national and city governments.³⁵ Similarly, data ownership issues may arise between local governments and the private sector supplying technology in the context of information collected.

While frontier technology can enhance economic growth, productivity and social inclusion, when unevenly deployed in cities, it can create a digital divide— which can exacerbate inequality, characterized by well-connected affluent neighbourhoods and business districts coexisting with under-serviced and under-connected low-income neighbourhoods. The affluent tend to have greater access to these technologies, and ICT can often serve to extend their reach and control while curbing that of the more socioeconomically marginalized residents. To realize the potential of innovation and technology in achieving sustainable urbanization, an enabling environment must be created with the appropriate institutions, to ensure inclusion, and to bridge the digital divide.

Dialogue 4: Frontier Technologies and Innovation for Inclusive, Sustainable and Resilient Smart Cities

Key Issues

Over the last two decades, urban areas have been largely transformed by the rapid deployment of advances in information and technology, and by a revolution in city data to inform and facilitate decision-making. The Fourth Industrial Revolution is unfolding as a distinctly urban phenomenon, and as such, cities have, become the source, proving ground and beneficiary of digital platforms and technological innovation. This has propelled the global movement to smart cities; thereby, allowing cities to become platforms for implementing digital technologies capable of providing solutions and services, and managing the major systems required for achieving sustainable urbanization. The deployment of frontier technology has been accompanied by deeper connectivity and networking of cities and citizens at both the local and global levels, with a wide range of ramifications for urban areas and their residents.

28 En.unesco.org, 2019. Television, visual arts, newspapers & magazines, advertising, architecture, books, performing arts, gaming, movies, music and radio, design. Figures EY, 2015

29 Relhan, Ionkova, and Huque, 2012

30 UN-Habitat, 2013

31 ITU, 2015

32 Transparency Market Research, 2014

33 Prime Minister's Office Singapore, 2019

34 Pettit and White, 2018

35 ISPI, 2019

36 UNESCO, 2016

Objectives of the Dialogue

This Dialogue will promote further debate on the increasingly pervasive role of frontier technologies in fostering sustainable urbanization and responding to urban challenges with perspectives from different regions of the world.

The Dialogue will address the current criticism against the SMART city concept, which seems to be subject of corporate power, unable to respond to the informal character of the city, reproducing unequal spaces and exacerbating the urban divide.

Initial Questions

This Dialogue will explore the following questions:

- i. What are the mutually reinforcing links between urbanization and innovation given that cities are investing in building technological hubs and incubators, supporting knowledge centres and universities in the belief that this will directly solve urban problems?
- ii. What are the opportunities and the threats to sustainable urban development brought about by the advancement in technology?
- iii. What are the challenges reflected in the debate about smart cities? The ever-increasing application of data and technology is driving the phenomenon of smart cities, which involve the innovative application of information and technology to improve quality of life
- iv. How can city governments harness frontier technologies to increase entrepreneurship, prosperity and productivity?
- v. How can frontier technologies be deployed in cities in such a way that they not create a digital divide and ensure that no one or place is left behind while protecting human rights and privacy? What role can the deployment digital technology can play a key in eradicating poverty in many contexts?

Dialogue 5: Urban Planning and Heritage Preservation - Regeneration

Through the adaptive reuse of existing buildings and the reprogramming of cultural spaces, cities can develop creative and innovative ways to reinvent and reinvigorate themselves while reducing or eliminating sprawl. While a variety of urban models and strategies have favoured a 'place-based' approach adapted to the local context, historic areas have consistently provided examples of densely populated urban settings with low-carbon emissions, which are adapted to soft transportation. They have also served as examples of the adaptive reuse of building stock. Decision-makers should thus enhance the knowledge of historic areas to strengthen urban planning and regeneration strategies.³⁶

Currently, many cities are placing culture at the heart of regeneration and urban renewal. These cities do not only improve the physical environment, but also the non-physical elements of urban space through creative means that advance the quality of place concept, promoting what has been termed as 'cultural infrastructure'.³⁷ These cities have established a creative connection between cultural heritage, tourism and a renewed understanding of the 'soul of the place', which is often translated into an heterogeneous, multifunctional and diverse space. These cities not only create new forms of cultural locality, they also promote urban economic development.

The protection and enhancement of the built heritage requires new strategies and thinking on ways of creating distinctive place-identity solutions for better cultural, and social integration and inclusion. These place-identity solutions can be created by connecting culture and innovation and constructing new public spaces that promote social and community interactions as a way to complement and enrich the local built heritage. Cities can provide ethnic and culturally diverse social groups and individuals with a 'spatial membership' with the possibility to integrate their own values, identity and history into the social and physical fabric of cities.³⁸ These cities accentuate notions of multiculturalism, diversity and complexity, overlapping, instead of separating, local layers of identity as a way of being inclusive.

The preservation of cultural heritage also plays an important role in creating and enhancing social capital, with the ability of inspiring and promoting citizens participation in public life, improving the well-being of individuals and communities, contributing to the reduction of social inequalities, and facilitating social inclusion.³⁹ As heritage spaces are not static and frozen in time, but active catalysts for ongoing urban development, urban legislation must recognize cultural heritage as a dynamic and active element of sustainable urbanization. Without integrated planning, demands for housing or commercial land use are often prioritized by the market with little consideration for heritage districts and the soft infrastructure they provide in support of innovation.

Well-preserved urban heritage, diverse cultural institutions and a vibrant creative sector play an important role in local cultural policies and branding strategies; it seeks to draw the essential resources to support sustainable development, including economic activity related to tourism, creative capital, and skilled labour. Culture and innovation work in coordination to promote sustainable tourism and enhance economic potential. Creative cities that are tourist-friendly balance touristic access to cultural assets with resident needs. Innovative technology offers these cities the opportunity to broaden access to cultural assets, include residents in the development process, reach a wider tourist market, and even manage cultural assets. These cities leverage their creative capital and creative industries to drive economic development.

37 UN-Habitat, 2008

38 UN-Habitat, 2008

39 Astara, 2012

40 UNESCO, 2016

Historic preservation and urban infill can be implemented as complementary strategies and require decision-makers and stakeholders to be informed about the opportunities for reuse. It also requires flexibility in zoning and land use to allow specific sites to be repurposed appropriately. The needs of urban residents and the urban economy are constantly evolving, and urban infill is an effective tool to help the city keep pace while also conserving green space and managing the urban boundary. There are many measurable benefits to urban infill. Leveraging the density of the city and investing in existing services to support new capacity, can lead to savings in infrastructure funding by avoiding the need to extend the services network.

Local cultural policies and strategies to rebrand and improve the image of cities serves a two-fold purpose. On the one hand, these policies and rebranding strategies can help to enhance the competitiveness of cities in terms of drawing investment and tourism which in turn lead to the creation of jobs and economic development. On the other hand, residents enjoy a heightened sense of pride in their urban environment and greater commitment to the city, as a result. These linked strategies are often also the tools of tourist-friendly creative cities, to be discussed later.

It is widely accepted that rebranding strategies can have a significant economic impact on cities. Branding strategies and local cultural policies seek to draw the essential resources to support sustainable development, including economic activity related to tourism, creative capital, and skilled labor. "Well-preserved urban heritage, diverse cultural institutions and a vibrant creative sector can attract visitors, investors and skilled workers. Innovative practices of urban conservation, including affordable housing solutions and economic frameworks for the development of the cultural and creative industries, can generate sustainable jobs, particularly for women, young people, minorities and marginalized groups. Cultural tourism can act as a catalyst to generate revenue and improve urban infrastructure and services."⁴⁰

While gentrification offers an economic benefit to some urban areas, city leaders must be careful to ensure that no one and no place is left behind, including displacement and exclusion of the poorest and most vulnerable groups and the cultural heritage of transitioning areas. Rising property values as a result of urban development must benefit all residents. Connecting members of marginalized communities or groups to the city and ensuring their access to its economic and social benefits, is a shared responsibility of government, civil society and the private sector.

Gentrification and its consequences remain a salient criticism of smart cities, creative cities, arts district, and urban regeneration projects. Rising property values as a result of urban development must benefit all residents. As culture is leveraged to regenerate cities and districts, governments must be vigilant that new, wealthier residents attracted to up and coming areas do not displace, marginalize, or erase existing residents, culture, and heritage. Sustainable urban development must leave no one and no place behind and balance the competing priorities and forces of gentrification and inclusion.

Dialogue 5: Urban Planning and Heritage Preservation - Regeneration

Key Issues

Many cities are placing culture at the centre of urban regeneration and renewal. The UNESCO Global Report on **Culture for Sustainable Urban Development** underscores the important link between heritage spaces and ongoing urbanization. "Quality urban spaces inherited from the past need to be protected and preserved, while also used as a basis to improve more recent urban spaces. Respecting the layering process of a city strengthens the overall urban identity and sense of ownership among city residents."⁴¹ The role of urban planning and legislation in supporting culture and innovation in the urban space is still unfolding. From supporting development to protecting and leveraging cultural heritage, the higher aims of a society are actualized in urban planning and legislation.

Urban planning and legislation play important roles in integrating culture into cities. Urban planning creates the physical and spatial framework to support culture. In a normative sense, legislation lays the supportive legal framework. Preservation of the cultural landscape is often defined through legislation and then implemented by urban planning. In their absence, unplanned development often subsumes heritage districts in its wake. Without integrated planning, demands for housing or commercial land use, which yield an immediate economic return on investment, are often prioritized by the market, with little consideration for heritage districts and the soft infrastructure they provide in support of innovation.

In some cities, the role of cultural heritage is being diminished in favour of a given narrative or to make space for more profitable venture. It is therefore vitally important to discuss the role of urban planning and capacity-building in supporting heritage preservation and regeneration.

Objectives

This Dialogue will examine the role that urban and territorial policies including legislation can play in preserving cultural heritage, including promoting cultural infrastructure, sites, museums and assets.

41 UNESCO, 2016

42 En.unesco.org, 2019

Initial Question

This dialogue will address the following questions:

- i. How can urban planning and legislation leverage cultural heritage for regenerating urban areas?
- ii. How can the tangible and intangible aspects of cultural heritage be leveraged for sustainable urban development?
- iii. How can cultural heritage be leveraged through urban and territorial policies to safeguard and promote cultural assets and infrastructure, as well as rehabilitate and revitalize urban areas?
- iv. How can cities promote urban development strategies while preserving cultural heritage?
- v. Which are the financing models and mechanisms that can achieve the best outcomes in urban regeneration of heritage areas in cities?
- vi. How do we ensure that regenerated cities and districts do not displace, marginalize, or erase existing residents' culture heritage; and that the benefits associated with regeneration are not appropriated by wealthier residents?

Dialogue 6: Partnerships and Initiatives Supporting Culture and Innovation in Cities

Many partnerships at various levels have been established to promote knowledge exchange based on culture, creativity and innovation. Multilateral entities strive to foster cultural ties between Member States and promote cooperation in various areas. UNESCO has spearheaded efforts to promote the importance of culture for development, including cultural heritage in all its forms, the creative economy and sustainable cultural tourism. This is advanced by generating and implementing norms and standards as well as innovative proposals, and assisting countries through policy advice, programming, monitoring and benchmarking. UNESCO has established networks in different thematic areas to support these efforts, in particular, the Creative Cities Network, which was launched in 2004, to promote cooperation with and among cities that have identified creativity as a strategic factor for sustainable urban development.⁴² The 246 cities which currently make up this network work across 82 countries, work together towards a common objective: placing creativity and the cultural and creative industries at the heart of their development plans at the local level and cooperating actively at the international level. At the local level, cultural and creative industries clusters and local inter-firm networks represent examples of partnerships that support the cooperation and cross-fertilization of ideas. The practice of clustering economic activities by relying on the effect of proximity provides competitive advantage and numerous benefits for knowledge exchange.

Capacity building is key in maximizing the collective impact of culture, creativity and innovation in creating livable cities, as it provides a means of achieving the objectives of the existing frameworks, action plans and partnerships. The efforts must target all involved stakeholders, the public and private sectors, in addition to academia and non-profit organizations.

There are still serious capacity gaps on all levels of governance and lack of integrated approaches. Institutional actors need to enhance the skills and understanding for the better integration of culture, innovation and creativity in urban planning and development strategies, as well as establish platforms for collaboration between these policy areas. This calls for measures and actions to sensitize regional, national and local authorities on the tangible and intangible benefits of culture, as well as the catalytic impact of the creative economy on sustainable urban development. To ensure that policies are inclusive, policymakers need to be aware and responsive to the emerging trends shaping their cities, which can have unintended externalities, such as gentrification and social exclusion. The rise of the online platforms shared economy and the popularization of tourism are also among the emerging challenges that are having an impact on the lives of local inhabitants and cultural heritage, and that need to be addressed.

Some positive developments in capacity building activities have been noted, including the emergence of open platforms that support informal learning and skills development related to cultural heritage, diversity, smart technology and cities as well as curricula focused on the cultural and creative industries in business schools. In Mombasa, Kenya, conservation activities geared towards the building of artisans' skills have revitalized the furniture and tourism industry,⁴³ demonstrating the catalytic impact of creative industries on a city economy.

Scaling up the impact of culture-based innovative solutions requires continuous efforts in creating enabling conditions to foster the growth of the cultural and creative industries and to ensure that they are beneficial to all. This requires investments in new technology, improved data collection, favorable regulatory environment, and the promotion of and access to quality learning opportunities and enhanced public participation.

Governments must take steps to support the ease of commercialization, public uptake of new technologies, infrastructure improvements and adoption of appropriate labour laws to create an environment conducive for the development of the cultural and creative industries. This may include expansion of public financing for small- and medium-sized enterprises, simplification of administrative procedures, flexible labour market policies, but also ease of importing skilled professionals. A proactive workforce strategy, the promotion of continuous learning and training, and the alignment of higher education curricula with business environment, briefly outlined above, that meets the challenges presented by the Fourth Industrial Revolution, will be necessary to complement such efforts to empower creative artists and reimagine cities.

Initiatives to widen the use of technology and develop related skills should be widely supported as improvements in applications and use of digital technology can have cost-effective results in transforming cities. The implications favour the private sector as well, as the adoption of new technology

43 UNESCO, 2016

44 World Economic Forum, 2018

spurs business growth by improving production efficiency and expanding markets.⁴⁴ An example of a creative solution for improved urban results includes UN-Habitat's partnership with Microsoft. Using Minecraft, a computer game, and operating on a subscription-basis; this initiative engages young people to design and improve their public space. The results have informed local authorities and led in the implementation of over 100 projects in 30 countries so far.

A related area requiring critical attention also regards data collection, documentation and analysis of the impact of creative goods, creative services and related industries on the urban economies at local and national levels, in addition to the availability of reliable and updated databases of cultural heritage. The availability of data varies greatly by country, but new technologies can bridge the gap and are a source of untapped potential to build livable cities based on people's needs. Innovative solutions such as the use of big data then come into play with their capacity to quickly digest gathered data, which can in turn advise smart city initiatives to increase efficiency.

Lastly, it is critical to promote accessibility and participation in the efforts to transform public spaces through cultural activities and innovative solutions. Communities and local-level networks should be involved in the development of creative activities and policies. Cultural participation is positive for social cohesion and building a sense of belonging and has been found to also improve public participation and local urban management and governance.⁴⁵

Dialogue 6: Partnerships and Initiatives Supporting Culture and Innovation in Cities

Key Issues

Leveraging culture and innovation in city development strategies remains a challenge, due to the lack of skills and capacities of both governmental actors as well as creative professionals. Similarly, there is an insufficient understanding of the interplay between culture and innovation in urbanization and in city management. It is worthwhile to unpack these issues and seek avenues to redress the obstacles that hinder culture and innovation to become part and parcel of the daily business in cities.

The growing understanding and appreciation of the nexus between cultural and city development calls for collaborative city-to-city partnerships, as well as with other stakeholders such as the private sector, NGOs, and academia, to share experience and best practices. Furthermore, capacity building in its broad sense can address the knowledge, skills and information gaps that prevent culture and innovation from being mainstreamed in city and planning management. Knowledge-based institutions—universities, think tanks, and training institutions—can play a key role in developing the training and education responses, as well as generating reliable and timely data for well-informed and evidence-based policies. This will ensure the rise of a new generation of creative urban professionals with the right mix of skills and knowledge who adopt interdisciplinary and inclusive approaches.

To harness the potential presented by cultural heritage and innovative solutions, governments must prioritize the creation of enabling environments conducive for the growth of the entrepreneurial sector and creative markets and responsive to the needs of practitioners in an increasingly digital era.

Objectives

This dialogue will explore the role of partnerships and multi-stakeholder initiatives that make use of culture and innovation in city development strategies. The dialogue will identify existing gaps and discuss the necessary capacity building, training and education strategies and plans to mainstream culture and innovation into sustainable urban development practices. Lastly, the dialogue will propose measures to spur innovative solutions that can help city managers, planners and entrepreneurs to capitalize on the latest technological advancements and trends in the interplay of culture and innovation.

Initial Questions

The Dialogue will encourage conversation on the following themes:

- i. How can global-local partnerships and cultural initiatives lead to innovative solutions in cities?
- ii. How can national and local governments create an enabling environment for creative entrepreneurship and support the needs and contributions of different stakeholders?
- iii. What are the challenges faced and lessons learned from initiatives and networks on culture, innovation and sustainable urbanization?
- iv. What type of capacity building is required to advance the rise of creative professionals with the skills and knowledge to positively respond to the urbanization challenges vis-à-vis culture and innovation?
- v. How can governments and private sector make the most of the new technology and innovations in urban planning and management to increase efficiency and achieve equality?

⁴⁵ Ferreira & Duxbury, 2007

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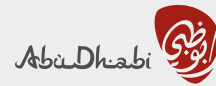


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