
Concept Note

Today, an estimated 55% of the world’s population lives in urban areas. This is expected to rise to 68% by 2050. The exploding urban population growth creates unprecedented challenges, including water and sanitation, air quality, green spaces and housing. Such challenges have been thrown into sharp relief in the context of the COVID-19 pandemic, which has severely impacted urban living. The pandemic is nevertheless generating global discussion about the potential for transformation in urban areas, and UIA World Architecture Day 2020 presents an opportunity for architects and urban planners to engage meaningfully in that discussion, whether it be by showcasing their work or organising events. For this year’s World Architecture Day, on Monday 5 October at 12:00 pm - 14:30 Greenwich Mean Time (GMT), the UIA is hosting a webinar on the 2020 theme: Toward a better urban future. Within this theme, we will focus on how architects can contribute solutions to the following four issues: Water and Sanitation; Green Spaces; Air Quality, and Housing.

Water and Sanitation
Cities cannot be considered sustainable habitats for human life without ensuring reliable access to safe drinking water and adequate sanitation. Access to water and sanitation in cities is improving all the time, but progress is undermined by the exponential growth of urban populations, which is also leading to the over-exploitation of water resources. There are multiple cities in developing countries that do not take into account the carrying capacity of the natural resources as a limit to urban development. In many cases, the availability of water has not been a requirement for the approval of growth plans, even in areas clearly threatened by drought.

We might typically think that the responsibility of urban water supplies lies with technical specialists and engineers. However, in the context of climate change, rapid urbanisation and the pandemic, it is time for the design community to engage with urban water challenges. Architects have the capacity to transform the built environment into a tool for the management of water resources through, for example, rainwater collection and storage, to supply the local water bodies.

Public Spaces
Urban living limits access to natural outdoor spaces and increases exposure to environmental hazards, such as air and noise pollution. Looking at the design of public spaces, we can see that COVID-19 has highlighted not only the importance of green spaces in creating healthy and sustainable urban living environments, but also the limited access of many urban dwellers to such spaces. The World Health Organisation asserts that green spaces and other nature-based solutions

1. improve the quality of urban life and the health and well-being of residents;
2. mitigate the impacts of extreme weather events, such as flooding and heatwaves;
3. reduce air and noise pollution.

For optimum impact, green spaces need to be uniformly distributed throughout urban areas and the total area occupied by such spaces should be large enough to accommodate the needs of the entire city’s population.

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3 https://www.euro.who.int/__data/assets/pdf_file/0010/342289/Urban-Green-Spaces_EN_WHO_web3.pdf%3Fua=1
This creates challenges for urban planners, architects and landscape architects, especially in areas under pressure regarding space, resources and built development.

Nevertheless, the evidence suggests that an improved urban future is one that makes space for the natural world in urban environments, and architects around the world are coming up with creative solutions that integrate green space into design.

**Air quality**
The WHO’s Global Platform on Air Quality and Health\(^4\) provides a comprehensive view of air pollution levels in over 4000 cities, as well as the subsequent health impacts. The data indicates that 1 in 9 deaths worldwide are due to pollution-related illnesses, ranging from stroke, heart disease, lung cancer, and chronic and acute respiratory diseases, including asthma.

Figures published by UN-Environment show that the building and construction sector accounts for approximately 39% of CO2 emissions, mainly resulting from the manufacture of building materials such as steel, cement and glass\(^5\). Since the construction industry contributes so heavily to greenhouse gas emissions, it means that it also has the capacity to facilitate a large-scale reduction in such emissions. One key example of the ways in which architects can improve air quality is by opting for sustainably sourced, recycled, local materials, thereby lowering production and transport emissions.

**Housing**
According to UN-Habitat, more than 20% of the world’s population lacks adequate housing. There are 1 billion people living in informal settlements and slums and more than 100 million people are homeless. By 2030, the numbers of people in inadequate housing could increase to 3 billion\(^6\). COVID-19 has underlined the deficiencies of housing in urban areas. More than ever, people need access to shelter, space and privacy, and yet much urban accommodation sits empty and unused, be it apartments, houses or hotels.

Architects play a key role in delivering universal access to adequate, safe and affordable housing, taking into account technical housing standards for minimum floor space and accessibility criteria. Many architects have already made headway with innovative and affordable solutions.

**Conclusion**
Sustainable Development Goal 11 aims for resilient, inclusive, safe, diverse cities by 2030. The pandemic has shown that we are capable of rapid social and political shifts, and architecture is a discipline with the capacity to transform urban landscapes. World Architecture Day is about sharing knowledge and exchanging ideas to inspire this transformation, fundamental to human rights and environmental sustainability.

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\(^4\) [https://www.who.int/airpollution/data/cities/en/](https://www.who.int/airpollution/data/cities/en/)
