

Learning Unit 6: Urbanisation and the environment

GGH2604



Sources to consult

- **Atlas:** Tigris-Euphrates river plains (Iraq, Kuwait), Manchester, London, Massachusetts, Las Vegas, Hong Kong, Shenzhen, Guangzhou, Lagos, Addis Ababa.
- **Prescribed book:** Chapter 6, "Cities: Sprawl and the urban planet", on pages 99-119 in Whitehead (2014)
- **Case Study 6:** Efficiency of parks in mitigating urban heat island effect: An example from Addis Ababa
- **Additional Resources on myUnisa:** YouTube videos and Podcast 6.4

Learning Outcomes

- Identify and distinguish between the different forms of urbanisation
- Describe how urbanisation can have regional and global consequences
- Discuss the causes and consequences of the Urban Heat Island (UHI) on human life
- Formulate appropriate strategies to reduce or prevent environmental degradation associated with urbanisation and the UHI

A brief history of urbanisation: From Mesopotamia to the mega-region

- If urbanisation reflects the relatively large-scale concentration of people, resources and infrastructures into one place, the first incidence of urban areas dates back to the Neolithic age around 4 000 BCE, when small cities started to emerge in the fertile plains between the Tigris and Euphrates rivers. This area, which is now contained predominately in the modern state of Iraq, was known at the time as Mesopotamia – meaning “land between two rivers”.
- In 1760, when England was still a predominantly rural-dwelling country, the population of Manchester stood somewhere between 30 000 and 45 000 people.
- By 1801 this population had risen to 72 000, and by 1851 to 303 382; that is nearly a sevenfold increase in the size of the city in the space of 91 years – mostly due to industrialisation.

A brief history of urbanisation: From Mesopotamia to the mega-region

- The American city of the twentieth century was a city that was defined by spatial expansion. This new urbanisation process was facilitated by the rise of mass transit systems (including both public transport and the motorcar), and led to the creation of a new urban phenomenon: sprawl. Los Angeles and Las Vegas are examples of the new form of urbanisation.
- While some of these megacities are industrial (the Rheine-Ruhr agglomeration) and suburban (Los Angeles) cities, which have expanded to megacity status over a relatively long time period, many megacities of the present and future are still going through rapid episodes of urban growth. In China, the cities of Hong Kong, Shenzhen and Guangzhou are beginning to amalgamate. This so-called “endless city” has a combined population of approximately 120 million people.

A brief history of urbanisation: From Mesopotamia to the mega-region

- **Watch** the YouTube video titled “Urbanisation and the future of cities” from the link:
<https://www.youtube.com/watch?v=fKnAJCSGSdk>
- **Vote** in Poll 6.3.1 on myUnisa. The poll question is:
 - Mumford argued that suburbanisation often means that many people in the city have farther to travel to reach nature and also has the effect of alienating people from each other. Do you agree with this argument?
- **Vote** in Poll 6.3.2 on myUnisa. The poll question is:
 - Whitehead (2014:100) claims that we could “...consider our contemporary geological period not as the Anthropocene so much as the *Metropocene*: A period defined by the dynamics and demands of urbanisation”. Do you agree with this claim?

Urbanisation and the environment

- **Read** Case Study 6: Efficiency of parks in mitigating urban heat island effect: An example from Addis Ababa.
- **Watch** the YouTube video titled “The urban heat island effect” from the link:
<https://www.youtube.com/watch?v=4SihdPRRMPI>
- **Listen** to Podcast 6.4 titled “Regional and global effects of urbanisation” on myUnisa.
- **Watch** the YouTube video titled “How Nigeria is dealing with its e-trash” from the link: <https://www.youtube.com/watch?v=OlJBwxGNX8>
- **Participate** in the Discussion Forum Topic 6 on myUnisa:
 - Revisit the theories on population growth and resource exploitation in learning unit 2. In your opinion, is toxic colonialism in Africa an example of the Malthusian, Cornucopian or (eco-) Marxist perspective? Give reasons for your answer.

Thank you

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