

# URBAN CHALLENGES



## 1. Housing

In developing countries, about a third of urban inhabitants live in impoverished slums and squatter settlements (UN-Habitat, 2012). **Slums** are urban areas that are heavily populated and have sub-standard housing with very poor living conditions, creating several problems.

Slum areas typically suffer from:

- poor housing with small, overcrowded houses built very close together using inadequate materials and with uncertain electricity supply
- restricted access to water supplies
- little or no sanitation facilities and no solid waste disposal, which leads to a polluted and degraded local environment
- inadequate health care facilities which, coupled with the poor living conditions, increases sickness and death rates
- insecure living conditions – slum dwellers may be forcibly removed by landowners or other authorities.

Many low-income families gravitate to these informal settlements that proliferate in and around towns. Poverty is one of the most critical issues facing urban areas. Urban poverty degrades both the physical and social environment.

## **2. Water supply and sanitation**

The provision of water and sanitation services to growing urban settlements and slum areas presents important challenges. The increased demand for water from the growing population can place added stress on already stretched resources. In and around cities, water is commonly in short supply and subject to increasing competition by different users. Urban growth leads to increasing demand for water for industrial and domestic use, which conflicts with agricultural demands.

It is especially difficult to provide water and sanitation services to deprived areas and the poorest people. Many people in these areas live without access to safe drinking water and proper sanitation. Even where adequate water supplies are available, sanitation and wastewater disposal are often inadequate or missing.

## **3. Waste and pollution**

Urbanisation affects land, water, air and wildlife because of the number of people, the amount of buildings and construction, and the increased demands on resources. It has impacts on the physical environment in several ways.

### *Water quality*

In developing countries many rivers in urban areas are more like open sewers. The lack of sanitation and sewerage systems has a dramatic impact. People use the rivers to dispose of all their waste from homes, industries and commercial businesses. Wastewater from human settlements contains organic material and nutrients; industrial wastewater contains many different types of toxic pollutant. These make the water unsafe for humans to use for many purposes including drinking and irrigation. Any changes to the quality of surface water also affects groundwater because they are linked by the processes of the water cycle so pollutants from the surface will infiltrate down and contaminate soil and groundwater as well.

### *Solid waste*

In many towns and cities solid waste management is inefficient or non-existent. Solid waste management means the proper collection, transfer, recycling and disposal of all the solid material we throw away, including plastics, paper and cardboard, food wastes, electrical waste, etc. It also includes industrial, hospital and institutional wastes which often contain pathogens as well as hazardous and toxic chemicals, which need special care.

Urban waste often ends up in illegal dumps on streets, open spaces, wastelands, drains or rivers. This is frequently a problem in peri-urban areas, which are convenient for dumping wastes because of the availability of open space and ease of access from central urban areas. This can lead to the pollution of groundwater and surface waters which may be used as a source for drinking water. Sometimes the wastes are collected and taken to legalised waste disposal sites but these are not always properly managed to protect water bodies and groundwater.

## Air quality

Air quality in towns and cities is frequently very poor as a result of air pollution from many different sources. These include:

- vehicle exhausts
- smoke from domestic fires
- outputs from factory chimneys
- diesel-powered generators
- dust from construction works and city streets.

Poor air quality has a significant impact on the health of many urban residents as well as leaving a damaging and unsightly layer of dust on plants, buildings and other surfaces.

## 4. Health

Urbanisation can have both positive and negative effects on health. The main benefits are associated with easier access to hospitals, clinics and health services. This improves emergency care and general health. There are also benefits from easier access to sources of information such as radio and television which may be used to communicate information about health to the general public. For example, women living in towns and cities are more likely to be informed about family planning, which results in reduction in family size and less frequent childbirth, with consequent benefits to general health.

However, urban life can also damage your health. Poor environment, housing and living conditions are the main reasons for poor health in urban areas.

Contamination of water sources can cause epidemics of waterborne disease. Close proximity to other people can make the spread of many types of infectious disease more likely. The polluted air can also cause respiratory disease and contribute to premature deaths among more vulnerable sections of the population such as older people and children.

## 5. Food

Population movements also put pressure on food supplies and on food distribution. As people migrate to the cities, they tend to use purchased food instead of their own crops and this makes them more vulnerable to changes in food prices. As the population grows and the demand for water and land increases, it becomes difficult to increase food production in a sustainable way. The increase in urban demand, combined with a loss of agricultural land, means more pressure on rural people to produce food for the growing number of urban people.

Pollution from urban areas can disrupt food supply. For example, fisheries are often damaged by urban domestic wastes and liquid effluents from city-based industries. (Effluent is another word for wastewater that flows out from a source.)

## **6. Economic and social systems**

The process of urbanisation has positive as well as negative economic and social changes. The positive effects include economic development, and education. However, urbanisation places stresses on existing social services and infrastructure. Crime, prostitution, drug abuse and street children are all negative effects of urbanisation. Also there tends to be a lack of social support for children in school and home by their hard-working, usually poor, parents. Inadequate income, overcrowded housing and poor living conditions create a fertile ground for the development of violence. Violent crime is more visible in the cities than in rural areas and it affects people's everyday life, their movements and the use of public transport. Crime in the city can create a sense of insecurity in its inhabitants. This unsafe feeling in city streets separates residential areas into higher-income and lower-income groups, which reduces the sense of community and forms areas with dissimilar incomes, costs and security levels.

## **7. Transport**

As cities grow in population and size, spreading into the surrounding rural areas transport becomes more problematic. People, goods and services must be moved about the city between residential areas, industrial zones, business centres and retail complexes. Roads become more congested, especially during rush hour periods causing lost time and money, and increased air pollution.

Public transport flows often cannot cope with increased passenger numbers caused by rapid city growth and plans must be implemented to improve metro, bus and tram systems.

## **8. Energy**

The growing population, industrial and service sectors of rapidly urbanising centres causes an increased demand for energy. When this is fulfilled by fossil fuels it is unsustainable and leads to the release of more greenhouse gases which results in global warming and a climate crisis.

Cities need to move towards the use of sustainable, renewable sources of energy such as solar and wind, but this often takes time and investment. On a local scale this can be done by micro-generation schemes, solar panels on the roofs of offices and apartments and small scale wind farms and turbines. Efforts must also be made to reduce energy consumption in the city by insulating homes, using energy efficient appliances and machinery and building energy efficient homes and businesses.

**WRITE NOTES IN EACH OF THE BOXES BELOW ABOUT THE  
8 MAJOR CHALLENGES OF CITY GROWTH**

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**URBAN CHALLENGES**

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