

## **LISTENING 1.1**

Lecturer: All right ... now that you're all seated, we can begin by saying that this course is intended to cover a wide range of topics dealing with modern society and, more specifically, urbanisation. The most obvious place to start is with the 'city' ... I'll begin by defining the word 'city'... It is derived from the word 'civitas', which originally meant an organised community that was completely independent ... and that is in Latin, of course. In ancient Greece such communities were called 'city-states' or 'polis'.

Now, moving on, have you ever wondered what roles a city has to fulfil in order to be successful? Mmm? First of all, a city must be a place where people can live, find their food and have access to other necessities. Moreover, it must be a place where people can find jobs to support themselves. That, as we all know, is mainly why people move to cities. Furthermore, a city must be a place where people can entertain themselves, as well as get around easily, which means it must have a good transport system. Finally, cities should be pleasant places for people to live in, which means that they should be human-friendly. But, how can they be, when so many of them are overpopulated?

The majority of the world's population are city dwellers. In many countries in Western Europe and in the United States, more than 75 per cent of the inhabitants choose to live in cities and because of this, cities grow bigger by the day. This growth is sometimes so great that a city actually swallows up surrounding towns or may even spread into other cities nearby. As a result, a huge built-up area is formed. Geographers call it a 'continuous urban area', otherwise known as a 'conurbation' - a word made up of the words 'continuous' and 'urban'. This great spread of houses, roads and factories often accommodates over five million inhabitants, whereas an average-sized city can have from a few thousand people to a few million. Two good examples of sprawling cities are London and Paris. One of the world's biggest conurbations is the Tokyo region.

Conurbations - and big cities in general - present a lot of problems, which of course affect their inhabitants. One of these problems is inadequate housing. The increasing demand for more homes and more space allows the city to eat into the countryside and replace it with steel and concrete. Many attempts are being made to create 'green belts', which are areas of land set aside where building is prohibited. These 'greenbelts' are believed to limit city growth to a certain extent.

Another idea that has been adopted worldwide in order to overcome the problem of overcrowded cities is to start again, that is build on a new site. 'New Towns' mean new housing and new industry for the people who choose to settle there. The idea was first thought of in the late 19<sup>th</sup> century by Ebenezer Howard and was named 'Garden City'. Ebenezer wanted to combine city life with the benefits of open country. Two such New Towns, Letchworth and Welwyn Garden City, were built in England in the early 20<sup>th</sup> century. Today, there are nearly fifty New Towns in the United Kingdom. But this idea has also taken hold in the United States, France, India, Sweden, the Netherlands, and South America. Now, before we continue, I'd like all of you to turn to page 25 in your textbooks to see some models ... (fade out)

## **LISTENING 1.2**

Tsunamis are a natural hazard that can cause great destruction and loss of life not only to shores near their source, but sometimes to shores across an entire ocean basin. A tsunami is a series of large waves generated by an impulsive disturbance, for example, an earthquake, landslide, volcanic eruption or explosion, that causes disturbance to the sea floor, resulting in a large volume of water being suddenly displaced and then forming tsunami waves. Tsunamis are sometimes referred to as tidal waves but this is considered incorrect by oceanographers since no tides are actually involved in their creation, although the word tsunami is derived from the Japanese words meaning harbour wave. Tsunamis have been reported since ancient times and have been extensively documented, which means that we can use this information to further study their characteristics and thereby, help us in developing effective warning programmes. Tsunamis are sometimes referred to as seismic sea waves as they are usually caused by a sudden rise or fall of a part of the earth's crust. They can sometimes be caused by submarine landslides, submarine volcanic eruptions and meteorites but are more likely to be caused by earthquakes. This happens when an earthquake occurs underneath or near the ocean and creates movement in the floor of the ocean. This seismic disturbance can vertically displace the water column which creates fluctuations in the level of the ocean.

Tsunami waves are formed when the mass of displaced water attempts to find its equilibrium. The tsunami waves then move outwards, away from their source and travel unnoticed on the sea's surface at speeds of almost six hundred miles an hour, which means they can cross an entire ocean sometimes in a day or even less. The depth of the ocean basin determines the speed of the tsunami and on reaching shallow water the front of the wave will slow down. After this the waves pile up to create one gigantic wave that can rise up to thirty feet before reaching the shore.

The effect of the tsunami is devastating with wavelengths that can be in excess of 60 miles carrying rocks weighing as much as 20 tonnes up to 180 metres inland. The enormous energy of the tsunami can demolish houses, lift heavy vehicles and move large and weighty boulders, bringing the threat of injury and death to anyone living near the ocean. Tsunamis can occur in all oceans of the world and have been recorded in all major oceans. They are most common around the edge of the Pacific because of the many large earthquakes along the margins of the Pacific Ocean. According to the national Geophysical Data Centre, the first ever recorded tsunami occurred off the coast of Syria in 2000 BC. Since 1900 most tsunamis have been generated in Japan, Peru, Chile, New Guinea and the Solomon Islands. History is full of examples of tsunamis that have caused huge destruction to many countries. Significant examples are tsunamis that occurred in the 18<sup>th</sup> and 19<sup>th</sup> centuries in Portugal, China, Indonesia and Japan. Tens of thousands of Portuguese people were killed in 1755 by a tsunami which followed the Lisbon earthquake. Soon after, the tsunami of 1782 in the South China Sea, caused the deaths of over 40,000 people. Over a century later, the Greek Krakatau Volcanic eruption in 1883 ravaged coastlines along the Sunda Straits destroying numerous villages and killing 36,500 people. In the last half of the 20th century there have been a number of destructive Pacific wide tsunamis occurring in 1946, 1957, 1960 and 1964. In the last decade alone there have been at least ten tsunamis, three of which were in Indonesia. One of the most devastating tsunamis to take place occurred recently in 2004, when the biggest earthquake for over 40 years took place in the Indian Ocean. This probably ranks as the most destructive tsunami on record, spreading across four and a half thousand kilometres wide, over a period of 7 hours and resulting in the deaths of 280,000 people — the greatest loss of life in Tsunami history. The U.S. coast and Geodetic Survey established the tsunami warning system as a result of the loss of life and damage caused in the Pacific. The Pacific Tsunami Warning Centre became operational in 1948 and now links to over 30 seismological stations throughout the Pacific basin. It provides data on earthquakes in the Pacific and issues a tsunami watch to all receiving stations. There was no warning system in the Indian Ocean prior to the 2004 tsunami, arrangements have been made to implement a hi-tech network of ocean monitoring technology and a community response drill which takes a warning to every beach. Tsunamis cannot be predicted but numerical models and historical records can help determine where they are likely to be generated, so preparation can be made for these natural hazards.