

You will need to revise:

1. Global development - HIC , LIC, NEE
2. Development indicators
3. Why is Chad an LIC?
4. Urbanisation
5. Challenges of living in the slums of India
6. Tectonic hazards - Tectonic plates, Earthquakes, volcanoes, and hazard management
7. What challenges do people in Japan face? - Human and natural
8. How does water create conflict? - The river Nile

1. Global Development -
HIC, LIC, NEE

HIC = High income country e.g UK and Japan

NEE = Newly Emerging Economy e.g India and Brazil

LIC = Low Income Country e.g Bangladesh and Nepal

2. Development indicators

In order to decide if a country is an HIC / NEE / LIC, we look at development indicators to make a judgement.

- **Life expectancy** = The average age a person lives to.
- **Access to basic services** = The number of people who can access basic services and necessities such as clean water, sanitation (access to toilets & bathing), and food.
- **Access to healthcare** = The number of doctors available for every percentage.
- **Access to education** = The number of people who attend primary, secondary school, and higher education e.g college.
- **Literacy rate** = The percentage of adults who can read and write.
- **Access to technology** = The percentage of people who have access to phones, internet, tv etc.
- **GDP (Gross Domestic Profit)** = The total value of goods and services that are produced in a country per year, measured in \$.
- **Infant mortality rate** = The number of babies per 1000 births that die under the age of 1.
- **Poverty levels** = Percentage of people living on very small incomes or below the poverty line.

HIC's have: High GDP / Low birth and death rates / High literacy rate / High life expectancy / High access to basic services, health care and education / High access to technology.

LIC's have: Low GDP / High birth and death rates / Low literacy rate / Low access to basic services, health care and education / Low access to technology / High poverty levels / Low life expectancy

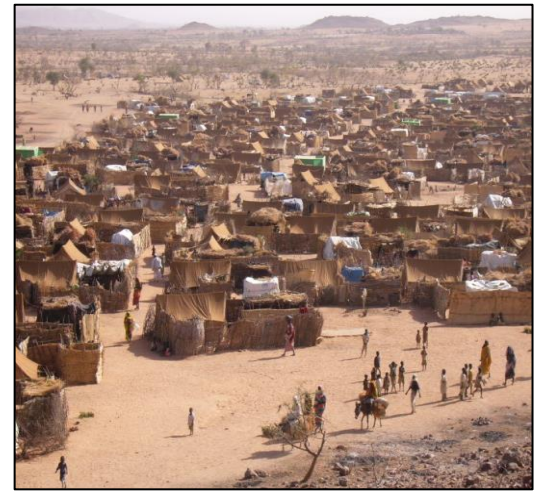
3. Why is Chad an LIC?

Physical causes

- It is one of the **poorest countries** in the world.
- It is **located in the Sahara Desert**, so it gets very hot and dry. Per year it only gets **roughly 760mm of rain!**
- The **climate can change dramatically** from droughts (no rain for a long time) to flooding so the country cannot rely on growing enough crops to feed the people there.
- It is **landlocked** (surrounded by other countries) so it is difficult to bring in supplies or trade with other countries across the world.

Human causes

- It has a **low life expectancy** (49 years for men / 52 years for women)
- **87% of the population are farmers** so if there is a poor harvests, they earn very little money so poverty levels are high.
- There has been a **civil war and conflict** for 35 years
- A **large number of refugees** (300,000) from countries like Sudan travel to Chad seeking safety, this **puts more stress on the limited resources** available like food.



The World's Megacities Are Set for Major Growth

Population growth of the world's top 15 megacities (millions, 2011-2025)



4. Urbanisation- This is the growth of urban areas (towns and cities) in the number of people who move to the cities and towns

- A megacity is a city with **more than 10 million people** e.g Tokyo (Japan)

4. Urbanisation

There are many reasons why people may move from rural areas (countryside) to urban areas (cities/towns) some of them include:

- **Better access to education** (schools, colleges & universities)
- **Better job opportunities** (more options available)
- **Better housing** (safer, warmer, larger etc)
- **Better transport access** (regular buses or trains)
- **Higher wages**
- **Better access to healthcare** (more hospitals, doctors, medicines)
- **Easier access to basics** (electricity, food, and clean water)

Pull factors- the things that are good about urban areas that attract people. E.g. better paid jobs.

Push factors- what is bad about the rural areas making people leave. E.g. poor health care facilities.

5. Challenges of living in the Slums of India

- Dharavi is the largest slum in India with over 1.2 million people living there.
- It is located in the Capital city of Mumbai and has 56% of the population of Mumbai living on just 6% of the land so it is very overcrowded.
- There is a high crime rate in the slums.
- There are few schools in Dharavi so a lot of people are uneducated and illiterate (can't read).
- There are job opportunities available but they tend to be informal work and/or in poor working conditions.
- The average wage in Dharavi is just 80p so many live in extreme poverty.
- Nearby rivers are polluted with rubbish and human waste causing, and spreading diseases like cholera easily as it is the main source of drinking water.
- There is limited access to running water or toilets (1 toilet per 500 people) without proper sewerage systems drinking water becomes contaminated easily.
- The residents live in poor quality houses that are made of any materials around e.g wood and metal sheets. They are not safe and not weatherproof. Fires can spread easily as they are so closely packed together.

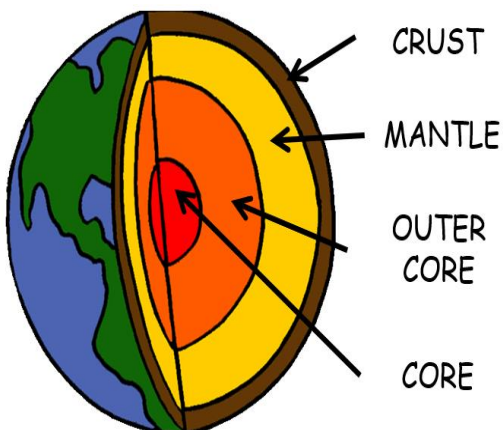


6. Tectonic Hazards - Tectonic plates, Volcanoes and Earthquakes and hazard management

What are tectonic plates?

The crust of the earth is divided up into **tectonic plates** that move due to **convection currents** in the mantle. Where the plates meet is called the **plate boundary**. **Earthquakes occur on all 4 of the types of plate boundary whilst volcanoes occur on constructive and destructive only.**

Structure of the Earth



1. Constructive Plate boundary



2. Destructive Plate Boundary

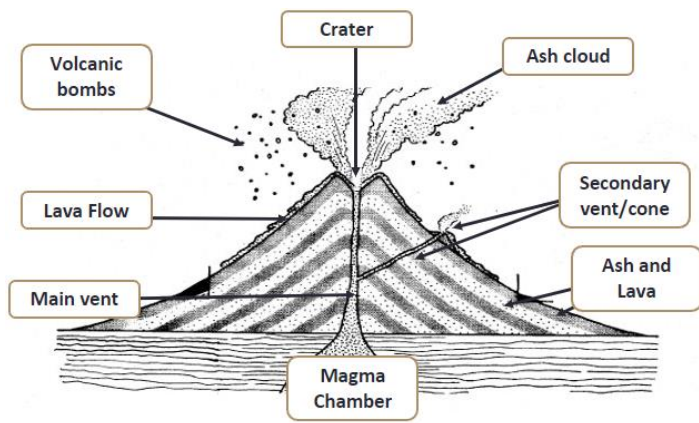


3. Collision Plate Boundary



4. Conservative Plate Boundary





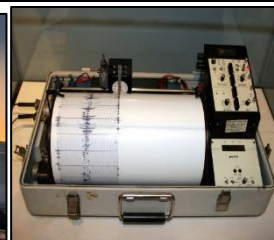
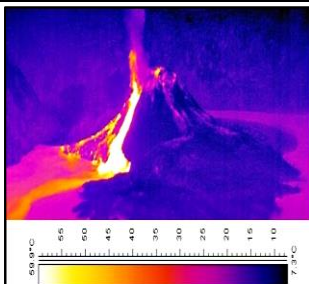
How do volcanoes form at plate boundaries?

Volcanoes occur at constructive and destructive plate boundaries, where plates move away from each other or come together. This **plate movement** forms cracks/**weaknesses** in the crust.

The **magma** in the **mantle** is under **pressure** and some is released through the **weaknesses** in the crust. This creates a volcanic eruption. **Ejecta** that comes out during an eruption can be gas, ash, volcanic bombs and lava. Overtime ash and lava build up the volcano creating a cone shape.

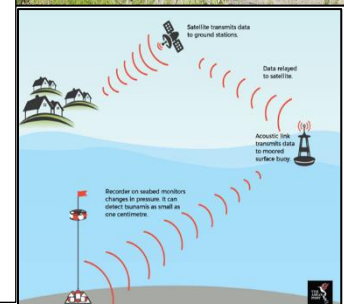
How can we manage the damage/effects of Tectonic hazards?

Managing volcanoes	Managing Tsunamis
<ul style="list-style-type: none"> • Thermal imaging = Using thermal cameras we see what is going on beneath the crust and how hot the earth is getting. Increasing temperatures can indicate a build up of magma in the magma chamber. • Drones = Fly over volcanoes and take videos/images of the changing shape of the volcano (E.g. bulges as the magma chamber swells. They can also collect air samples to look for increasing gas emissions. • Satellite images = Used to see the overall size and how far away the hazard is such as poisonous volcanic ash. • Seismographs = Record the movement of the ground. Increasing earth tremors may indicate an eruption is likely. 	<ul style="list-style-type: none"> • Tsunami walls = Designed to help reduce the amount of water that can reach the coast and damage towns • Tsunami warning system = Designed to detect vibration under the water and alert stations at nearby countries


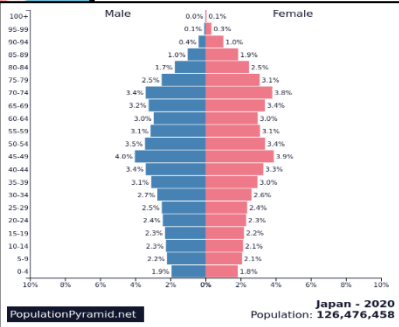


Managing earthquakes

Earthquakes cannot be predicted in the same way as other tectonic hazards but **people can prepare for them by doing drills and building earthquake proof buildings** (with rubber shock absorbers and emergency window shutters etc).



7. What challenges do people in Japan face?

Natural challenges	Human challenges
<p><u>1. Tectonic hazards</u></p> <ul style="list-style-type: none"> - Japan is located around several tectonic plates that are constantly moving so earthquakes are common. It is known as a 'Hazard Hotspot' - Lots of volcanoes as Japan is located on the Ring of Fire. (see picture below) Volcanic eruptions happen often. Mount Fuji is the most famous. - Japan is on the coast and so often experiences Tsunamis (giant waves caused by underwater earthquakes) 	<p><u>1. Ageing population</u></p> <ul style="list-style-type: none"> - The population of Japan is getting older and older, often living until late 90s and even 100s. - As people get older they need more healthcare and assistance. - Elderly people are unable to work and so have little income left to afford their care. - Some elderly people are committing crimes to be cared for in prison, this is costing the Japanese government huge amounts of money to look after them and create specially designed prisons.
<p><u>2. Typhoons</u></p> <ul style="list-style-type: none"> - These are powerful circular storms. - They are created over warm tropical oceans - They bring high winds and heavy rain. - The deadliest months of Japan's typhoon season are August and September - On average there are around 7 or 8 typhoons per year that pass over the southernmost islands. - Typhoon Jebi (2018) was Japan's worst typhoon in 60 years! 	<p><u>2. Low birth rate</u></p> <ul style="list-style-type: none"> - Fewer babies are being born which is causing problems as the population get older. - Fewer babies means fewer future workers. - This will cause a lot of economic damage to Japan as they will have few workers available to fill in the jobs left behind by elderly people who are unable to work.
  <p>Japan - 2020 Population: 126,476,458</p>	<p><u>3. Lack of space</u></p> <ul style="list-style-type: none"> - Japan itself is not overcrowded but the cities like Tokyo are. Japan is very mountainous, so there is little flat land for people to build on. Most flat land is found at the coast and is where the major cities are located. This means that cities like Tokyo are overcrowded. - Space is at a premium in the city so people live in small flats and have little green space. They even have capsule hotels.

8. How can water create conflict? - The River Nile

The River Nile runs through the continent of Africa and flows from the south to the north through Ethiopia, Sudan, and Egypt. The usage of the Nile's water is causing conflict between these countries because of the...

1. Creation of the Grand Renaissance Dam

- The Grand Renaissance Dam is **located in Ethiopia and is built on the Blue Nile**. It was built to provide HEP (hydro-electric power) and provide a regular source of water to people and for crop production.
- **Ethiopia is pleased with the Dam** because it means that they can **use it to create hydro-electric power**. Currently 65% of people there live without an electricity supply so this will benefit the people of Sudan and any surplus can also be sold to other countries for profit.
- Ethiopia is a LIC (low income country) and the dam will **improve Ethiopia's development**.

2. Sudan's high-water usage

- Sudan has been using **huge amounts of water to enable agribusiness to thrive** (large-scale commercial farming).
- **Millions of gallons of water are being pumped out of the Nile each day and is used to irrigate (water) crops**. This will help them to grow crops on a large scale, much of this produce can be sold to other countries for profit. Dairy cows are also reared on these large farms. They need to be sprayed with water and require air conditioning to survive in the desert. This uses even more water and power.
- **Some argue that this agribusiness is unsustainable** as it needs so much water and power. Some people believe that is only good for large scale farms and does not benefit local people.

3. Egypt's worries about lack of water

- Egypt is concerned that because the **Nile runs through Ethiopia and Sudan first**, by the time it reaches Egypt **there will be little water left**. This will **cause problems for the people of Egypt** because they will **lack the water for their crops and homes**. This could lead to **food shortages and lack of drinking water**. (This is even more of a problem as Egypt's population is increasing).
- **Egypt needs increasing amounts of water for its industry to run** (factories use lots of water) With less water in the Nile, Egypt believes its industry could suffer.
- Egypt also worries that **the water left in the Nile will have greater concentrations of pollution in it** by the time it reaches them.
- They are **also angry because Egypt was never told about the building of the Grand Renaissance Dam and feel that Ethiopia now has control of the river**, even though the Nile runs through their country on its way to the Mediterranean Sea. They **feel like they have been betrayed** and this is causing tensions to rise between Ethiopia, Sudan and Egypt.

