Edexcel Geography GCSE

Development Dynamics

Detailed Notes

Measuring Development

Development is the idea of what **21st Century life** should consist of - essentials (such as access to clean water and electricity), access to services and opportunities.

Development can be measured in lots of different ways using **indicators**, depending on how you view development. For example, if you think wealth is important for development, you measure a country based on its **economic indicators**. Whereas if you think the health and welfare of a country's population should determine their development, measure using **social indicators**. The table below lists and explains different kinds of indicators:

Economic Indicators	**GDP** and **GDP per capita** - A measure of wealth and mean wealth through income. A high GDP per capita could represent a high-earning population and productive workforce, but GDP per capita could be skewed by very rich minorities, even if the majority of the population earn very little. **Poverty Line** - The number of people earning less than \$1.90 per day. In the UK, 0.2% of the population earn less than \$1.90 per day whereas in Zimbabwe, South Sudan and Madagascar, over 70% of the population live under the poverty line. **Economic Inequality** - This is the difference in wealth between the richest 10% and poorest 10% of the population. The larger the inequality, the less wealth is shared across the population and the fewer who benefit from the economy.
Social Indicators	**Life Expectancy** - Measuring lifestyles and health. Life expectancy is an estimate of how long a person will live, made when they're born, based on predicted advances, current services and the risk of diseases. **Literacy Rate** - Quality of education which correlates to economic output. A well-educated workforce tends to earn higher wages. **Infant Mortality Rate** - Quality of healthcare and attitudes towards children. Infant mortality is important since infants are some of the most vulnerable people of society, so are more likely to catch disease and infection or suffer from malnutrition.
Environmental Indicators	**Pollution Levels** - The volume of pollution in the air and water will show how wasteful a country is. It also shows whether a country has developed its technology to become more efficient and less polluting. **Area of Woodland/ Green Space** - The more open land a country has, the more pleasant it is to live there. The proportion of woodland lost or gained can reflect the government's attitude to the environment.

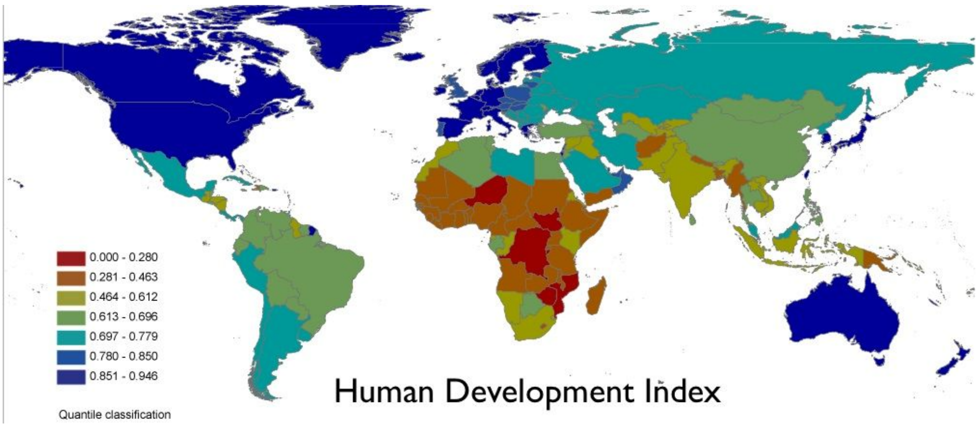
Developments through **technology** have changed the way we measure development. We have also learnt that development can be **interpreted differently** for different societies; some countries value particular factors more than other countries do.

Using different measures and indices can result in countries ranked differently for development.

Human Development Index

The human development index measures a **mixture** of factors, ranking each country between 0 to 1 where 1 is the most developed country. The index takes into account:

- ➔ **Income** & Inequality between the highest and lowest earners
- ➔ Levels of **education** - how many years that children will spend in school
- ➔ **Life expectancy**



Source: www.geocurrents.info

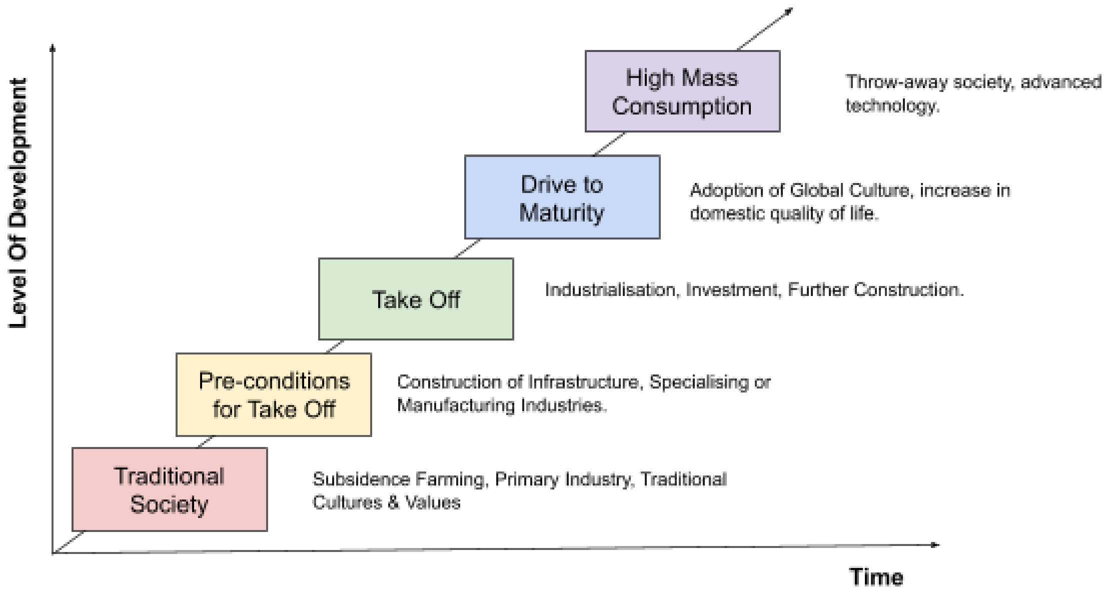
Top 5 Countries on HDI	HDI Score	Bottom 5 Countries on HDI	HDI Score
Norway	0.953	Niger	0.354
Switzerland	0.944	Central African Republic	0.367
Australia	0.939	South Sudan	0.388
Ireland	0.938	Chad	0.404
Germany	0.936	Burundi	0.417

Reasons for trends in top 5:
Using the **Human Development Index**, the most developed countries (dark blue) include: Northern America, Europe, Ireland, Japan, South Korea, Australia & New Zealand. This may be because:

- These nations have **large economies** and advancing technology (**quaternary**) industries, resulting in a high GDP per capita.
- Cities and towns are **well structured**, with strong infrastructure and transport links, excellent supplies of clean water, electricity and food to households.
- Most of these nations have **free education systems**, with opportunities to progress onto further education (universities) or into employment & apprenticeships.

How Do Countries Develop?

All countries follow the same pathway to becoming **developed**. This can happen over a series of years, decades or even centuries! We can draw this pathway in **five stages**, which we call **Rostow's Modernisation Theory**.



Rostow believed that countries pass through **five stages** as they grow economically and become developed. This development can be shown as **stages of growth** over time:

- **Traditional Society** - The country's economy is based predominantly on **primary industry** - agriculture, small-scale mining, foraging and fishing. There is low levels of **technology** or **scientific knowledge** which can limit the healthcare that the locals receive, as well as making farming more manual. However, countries in this first stage have **traditional cultures**, religion and values, which might not be seen anywhere else in the world!

- **Pre-conditions for Take Off** - The country starts to create resources that are in demand around the world. The country hasn't started trading internationally, but they are starting to mine, farm or collect resources that they might later sell for profit. For example, this could include mining for minerals and metals or learning to farm cotton.

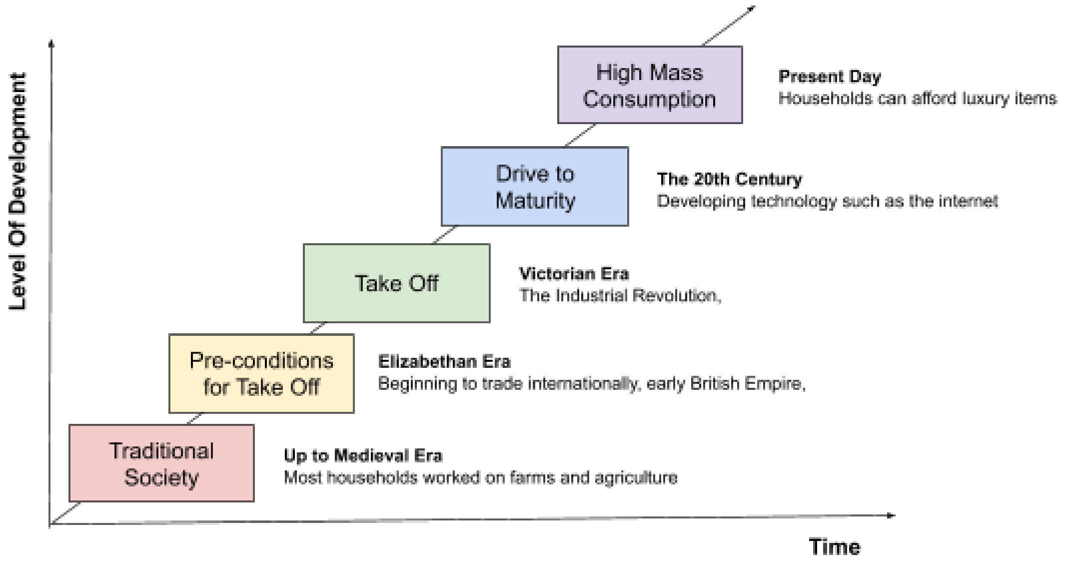
- **Take Off** - The country rapidly industrialises, so many businesses choose to invest or start a new company in the country. The country will start to trade valuable resources - such as minerals and cotton - but without manufacturing it first, so they make a small profit. More and more families choose to work in industry rather than agriculture, which earns them a higher wage and more regular income (farming is seasonable, industry gives you a job all year around!). Local services develop and cities grow.

- **Drive to Maturity** - The growing economy might not solve a country's problems at first: pollution, poverty, sweatshops. However, over time, business will develop and the government will earn enough tax to improve the country and control these problems. Industries that pollute or exploit their workforce are fined, until they leave. This leaves behind good job opportunities, attractive cities and a good economy.

- **High Mass Consumption** - The final stage is for the most developed countries. These countries have a high average income, so most families can afford more luxury items: chocolate, televisions, washing machines, laptops, etc. At this stage, families in this country have a good quality of life and a good access to services such as healthcare and schools.

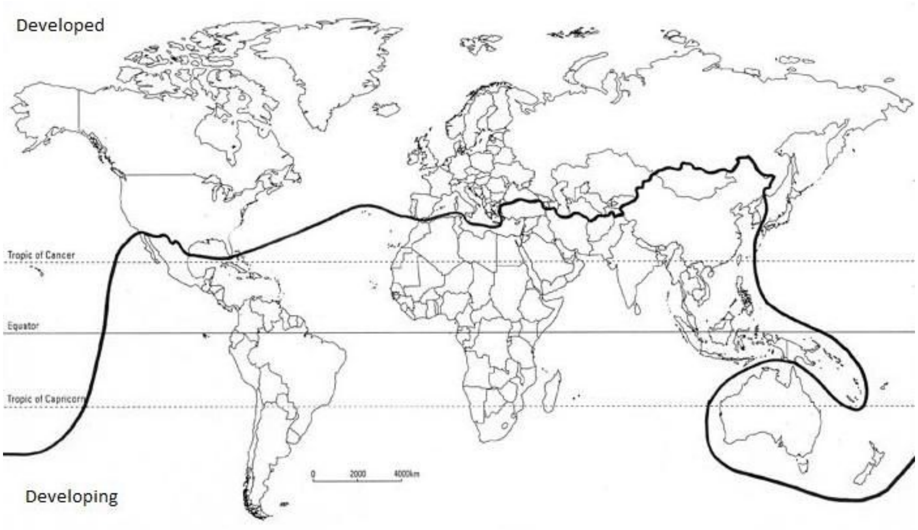
So you can choose any country in the world and try to match their development to a stage in Rostow's model. For example, the UK and USA are both at the '**High Mass Consumption**' stage, whereas India is at the '**Drive to Maturity**' stage and Ghana is at the '**Pre-Conditions for Take Off**' stage.

You can also imagine a developed country in the past, and match up the stages of development to different times. For example, think about the UK's development over time:



Global Inequality

Neighbouring countries can have very different levels of development, but the world on a whole can be split into half: developed and developing countries.



Source: Laura Geography

This line is called the **Brandt Line** and it divides developing and developed countries into their groups. On the whole, the **northern hemisphere** is more developed than the **southern hemisphere**. There are many factors that can explain why this is the case:

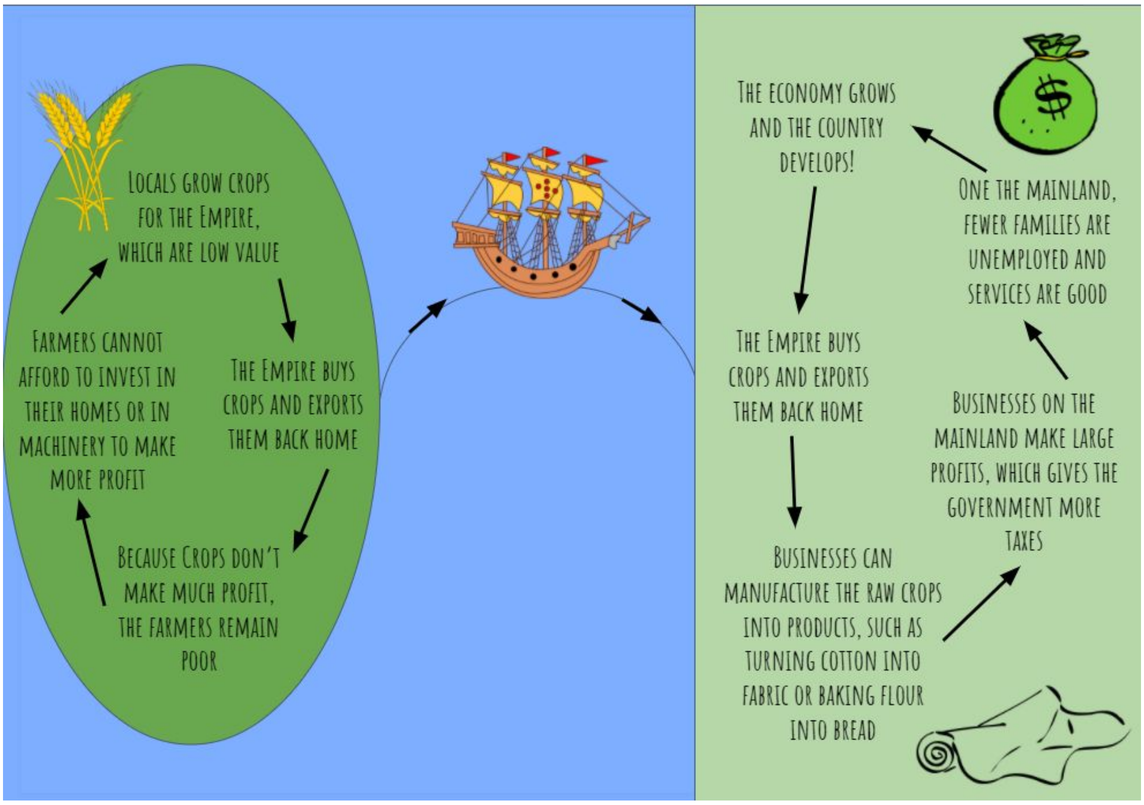
Social Causes of Inequality

- **Education** - Education is important to the development and **economy** of a country. If someone doesn't have the right **qualifications**, they might not be able to get a well-paid, dependable job. This can lead to increased **unemployment** or large **poverty**, as families struggle to pay their bills.

  A poor education system can impact services and facilities. For example, if children can't get a good education, they may not be able to progress onto **university** and get their degree. This means jobs that require degrees - for example doctors, teachers - might suffer from **shortages of workers**. This will impact the availability of healthcare or the quality of teaching for future generations.

- **Health** - A limited number of doctors or **unsubsidised healthcare** (treatments aren't paid for by the government) might lead to low-income families having a poorer health. Some countries are more **vulnerable** to **diseases** and poor health than other countries, for instance:
  - **Mosquitoes** prefer hot, humid climates such as in South America and Africa. Mosquitoes transfer diseases such as **Malaria**.
  - Countries that continue to mine or have **intensive industries** will have populations with poor health. Miners develop **respiratory** conditions whereas factory workers can develop **cancers** from the chemicals they use.

- **Historically Disadvantaged** - Countries that have been ruled in the past by another country can be disadvantaged. For example, countries that were part of the British Empire have smaller economies than the UK's economy. This is because, during the British rule, the British government would take more than it gave to its ruling empire. This is explained in the diagram below:

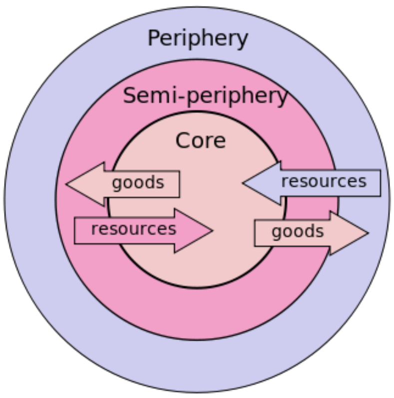


If the farmers earn a low wage, the government earns **less tax** and so local schools and healthcare won't be **invested** into. Alternatively, farmers with little savings are more vulnerable to **crop failures**, which can result in families losing their jobs and going **hungry**, increasing the **poverty** for a country.

This model can be more simply drawn if we just look at the **movement** of **resources** (the raw materials such as cotton or wheat) and **goods** (manufactured items such as fabrics). This model is called **Frank's Dependency Model**, and it shows how different areas trade resources and goods in a cycle.

It is important to remember that selling goods makes more **profit** than selling resources, so even though the arrows look the same size, **trading** isn't **fair** for all countries involved. So the **core** tends to become richer, whilst the **periphery** remains poor and low development.

Source: Ourpolitics.net



This model can describe **different countries**, or inequality **within** a country. For example, the periphery could be the Carribean and the core could be Britain (during the Empire). Alternatively, the core could be the capital city and the periphery could be rural villages within a country, such as in China.

There are many countries that Britain took **advantage** of during the British Empire (17th - 20th century) including many **Caribbean** countries as well as some **African** nations. This allowed Britain (as well as other European countries that had colonies at the time) to develop ahead of its colonies. This development gap is still present today.

Think Further: Neocolonialism

Colonialism is the direct control over a country by another, for power, money and to take resources. However, some countries can be controlled and **influence indirectly**. This is **neocolonialism**. Nowadays, countries aren't ruled by another country as part of an empire, but they are still influenced and sometimes exploited.

For example, influential countries (e.g China, USA) could **influence** ally countries through trade agreements or politics to agree to what they want. Here are some examples of neocolonialism in the world today:

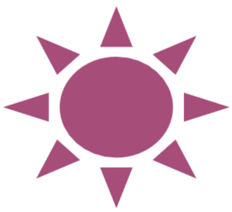
- **China** pays for **fishing rights** off the coast of many East African countries. China is able to feed its growing population legally, but may **overfish** which damages the African coral reefs.
- Many **UK** businesses pay **foreign manufacturers** to build their products - sew their clothes, construct phones and technology, etc. In other countries, **workers' rights** may be less strict and wages could be lower, which means the UK business might earn minimise costs and so earn **more profits**.

Source: BBC

Source: IB Times

Environmental Causes of Inequality

- **Climate** - The climate of a country (the annual characteristics in weather patterns) can affect whether a country has many **resources** to trade. Countries with a large amount of resources to sell will have **stronger economies**, so they tend to be more developed as the community improves and the government can **invest**.

	If it regularly rains, the population can collect fresh rainfall to drink. Countries with **regular rainfall** tend to suffer less from **water-borne diseases**, which is good for the people's health. Having a large amount of rainfall can be good for a country. If more rain falls than the population needs, a country could store and **sell** the excess water to a neighbouring country. Alternatively, countries with **temperate** climates (moderate levels of rain) tend to grow crops very well. So food can be **exported** and sold.
	Plants grow better in **warmer** climates, so countries with warm climates tend to have successful farms. This means they are less likely to be short of food or have a **starving** population. Countries that are too hot (near to the **Equator**) suffer from **droughts** and soil erosion (**desertification**), so farmers often have crop failures and the population aren't well fed. On the other hand, cold **Arctic climates** (countries found near to the Poles) cannot grow crops throughout the year because of the low temperature. So they must rely on **food imports** to survive, which can be **expensive**.
	If a country frequently experiences **extreme weather** - e.g. hurricanes, flooding - it may be difficult to develop. Every time a storm happens, there is some **damage** to the buildings, which must be replaced & **repaired** in the future, which costs money. Also, if people can't go to work during the storm, the **economy** will be impacted. This limits the development of a country.

- **Topography** - Topography means the **shape** of the land - whether it's mountainous, or flat land, whether it changes height a lot or remains constant. Topography has a big effect on where communities live and where we can **build**; for example, steep land is difficult to build on and rocky mountains are difficult to dig into to build the **foundations**, so **mountainous** areas are less built on than flat land. This means countries with a lot of mountainous regions have less space to build on, which could **build up cities** and put pressure on the country. Japan has lots of mountainous areas so most of their cities are built along the coast.

  In addition, whether a country is **landlocked** or has access to the sea can affect the development. Countries that have a **coastline** can have ships to **trade** with other countries. In addition, boats can be used for fishing which increases the food supply of a country or they could be used for **leisure** and **tourism**, which can help the economy grow. **Landlocked** countries are often less developed because they can't trade using boats and can't fish, so must rely on **airplanes** and growing their own crops.

Political Causes of Inequality

- **Governance** - Governments have different **aims and styles** of leadership that can affect the growth of the economy and the lifestyle of its people. On a whole, the **most developed** countries tend to have **capitalist** governments, whereas countries with **communist** governments tend to be **less developed**. However, the **inequality** between the wealthiest and poorest households is greater for capitalist governments.

Think Further: Types of Governments

Here is a summary of the types of governments and reasons why they lead to inequality (or not!):

- **Capitalist Governments** - Governments who focus on economic growth, by allowing businesses to run themselves (private businesses).

  E.g. UK, USA, Germany

  😁 **Highly developed** as businesses encourage jobs and the population tends to be wealthier on average. The government receives **business taxes**, which they invest in local services such as schools and healthcare.

  😖 **Inequality** is very large between the richest and poorest, as businesses can take **advantage** of the poorest families to make money (e.g. using factory workers on zero hour contracts or minimising their wage).

- **Communist Governments** - Governments who try to equal out the spread of money, so everyone in the country has a fair access to resources.

  E.g. Russia, China, North Korea

  😁 There is little **economic inequality**, since everyone in the country is on the **same wage**. Businesses are owned by the government, so workers are less likely to be exploited.

  😖 There is **political inequality** for many communist governments, as people in power can get better access to services or can become **corrupt** and take more money. Sometimes, communist governments stay in power and limit the voice of the people.

But, it is important to remember that not all governments follow this trend - some communist governments can be more developed than capitalist!

- **International Relations** - Not all countries have the same number of **ally countries**. Countries with more allies have more opportunities to **trade**, and so can earn more **profit** and their economies grow. Alternatively, if one country is in need, allies can provide **aid** in the form of money, water, food or emergency supplies. Therefore countries with better international relations are more **developed** than others.

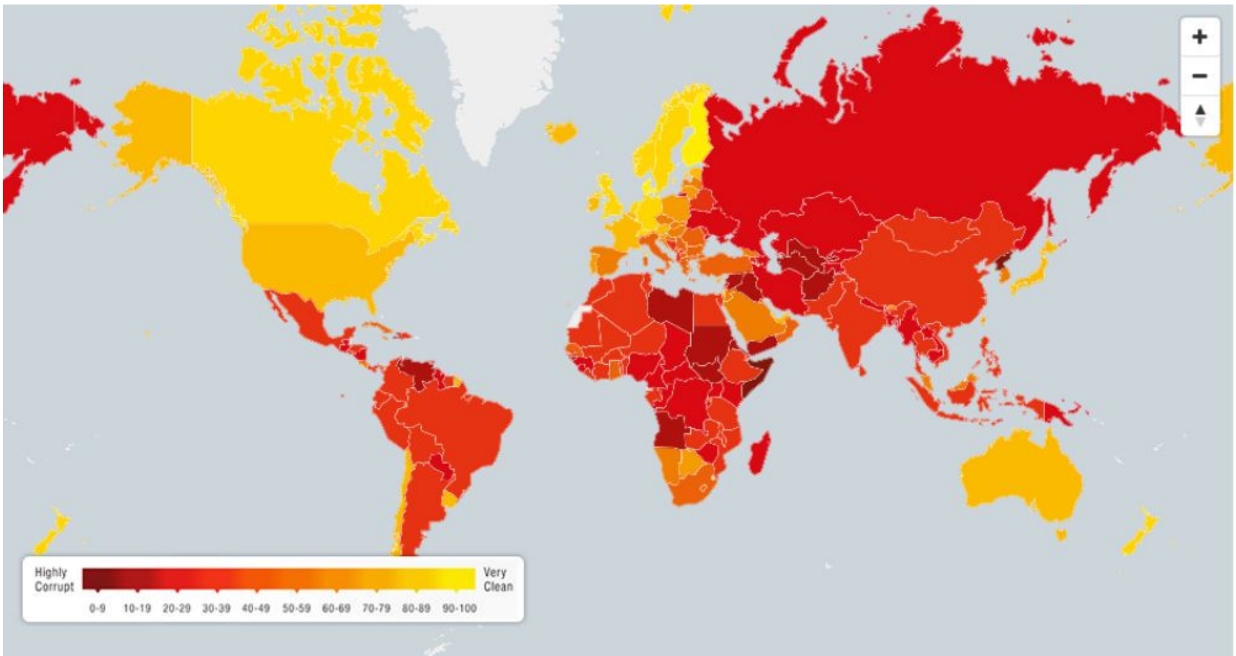
Corruption

You should compare any measure of development with how **honest** you think a government is; not all governments declare the correct numbers and instead could lie about statistics to make their country look better.

Countries that are likely to **lie** about statistics tend to have corrupt governments. Corruption includes:

- Governments who force themselves in **power** or to stay in power for longer
- Police and government who **receive bribes** to change laws or ignore criminal activity
- Money goes **missing**, especially aid, which should have gone to benefiting the population

5% of global GDP is spent corruptly - bribing officials or 'lost' money in governments. Governments who aren't being lawful or aren't helping their people, may lie to cover up their wrong doing. So it is important to identify countries of high **corruption**.



Source: Procurious.com

Improving Development

Countries might want to improve their development to grow their economy and improve the population's lifestyle. Schemes can be planned by the government - **top-down projects** - or by small non-government organisations (NGOs) - **bottom-up projects**. These different schemes will be targeted at different groups of people, with benefits and disadvantages.

Top-Down Projects

These projects tend to be **large-scale**, **expensive** constructions that try to improve a fundamental need: generating more electricity, collecting more clean water, etc. These decisions are agreed by the **government** and large international businesses (**TNCs**), and can take many years to complete.

Some examples of **top-down projects** include:

		
Source: Yangtze River Cruises **Three Gorges Dam (China)** - A major dam to store clean water and produce electricity	*Source: BBC News* **Favela Replacement (Brazil)** - Constructing new houses for the residents of Shanty Towns	*Source: Infrastructure Intelligence* **The HS2 Railway (UK)** - Building railway lines to improve commuting

These schemes can have a mixed impact on the country:

👍 Top-down schemes tend to be **large scale**, so will benefit a large community of people.

👍 Due to the large construction, many **job opportunities** are created to build the project - from unskilled labourers to civil engineers.

👎 Locals have **little voice** in the project and some small villages may be **evicted** against their will. Their homes need to be **demolished** to clear room for the project, and often it is the poorest families that are forced to be evicted.

👎 These projects cost **millions of pounds**, which could be spent directly into communities. The benefits take a long time before they are felt by locals, since these projects tend to take decades to complete.

👎 Large scale construction projects such as dams and train lines involve a large quantity of **concrete**. Concrete produces **carbon dioxide** when manufactured, so these projects contribute largely to **global warming**.

Bottom-Up Projects

These projects tend to be **smaller projects**, focused at helping small **families** and communities rather than a region or country. Bottom-up projects are organised by **non-government organisations** (NGOs): charities, universities, etc.

Some examples of **bottom-up projects** include:

		
Source: Heifer **Heifer** - A charity that gives a family a goat for milk for food and to make money.	*Source: BBC News* **Water Aid** - Constructing water pumps to provide a small village with water	*Source: University of Manchester* **Team Uganda** - University-led team of student volunteers that work to improve a community

Once again, bottom-up projects have **advantages** and **disadvantages**:

👍 Bottom-up projects tend to focus on helping the **poorest families** in a country. The project could reduce **poverty** and so reduce the **inequality** between the poorest and wealthiest countries.

👍 Bottom-up projects are relatively **cheap** so NGOs can help a large number of families in different countries. The families that can benefit from NGOs work are spread across the globe!

👎 NGOs rely on **voluntary donations** rather than government funding, which limits the amount of people that charities can afford to help.

👎 Without proper **training & planning**, these projects could be unsuccessful. For example, cows given to families in hot climates may die of dehydration if the family doesn't take care of it. Also, if there are no engineers in the village, if the water pump breaks it cannot be repaired.

The **costs** and **benefits** of each scheme - top-down or bottom-up - should be carefully considered by the **key players** (governments, charities, etc) that organise them. A country trying to improve their levels of development should look at a **mixture** of top-down and bottom-up schemes, to try to benefit a large proportion of their population.