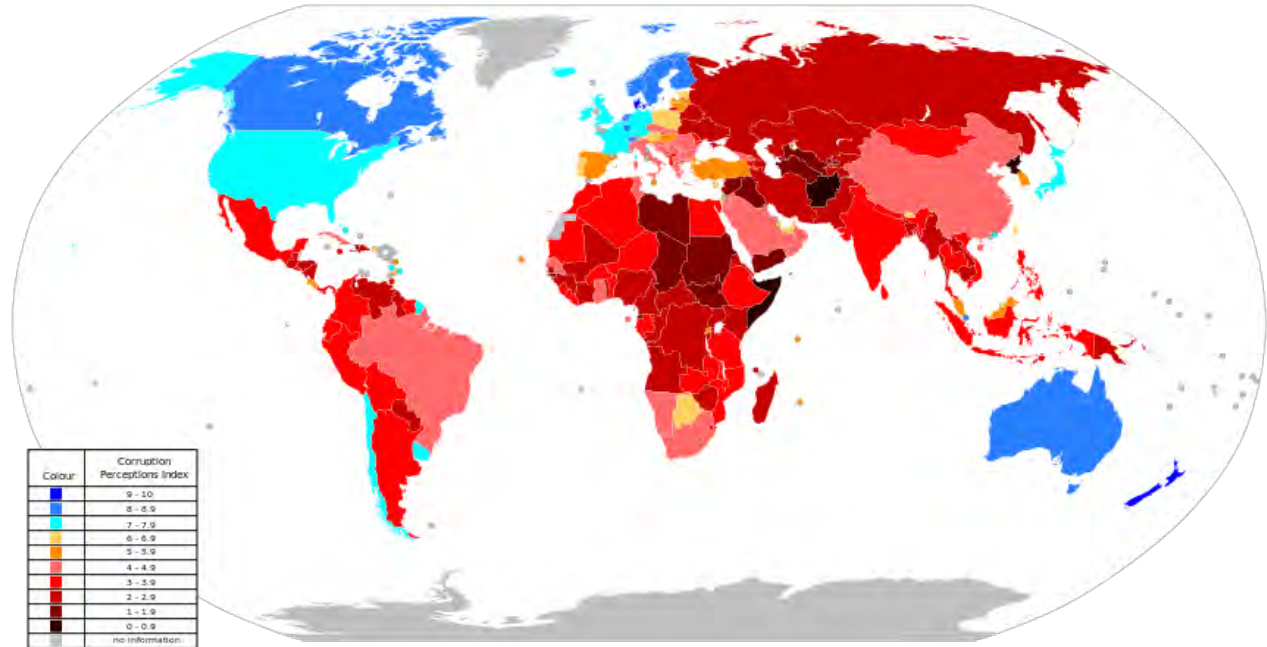


Topic 2: Development Dilemmas

Development is a term that measures how advanced a country is compared to others. It relates to standard of living, quality of life and wealth.

- GDP (Gross Domestic Product): The total value of goods and services produced by a country in a year
- Life expectancy - the average age to which a person lives
- Infant mortality rate - counts the number of babies, per 1000 live births, who die under the age of one.
- Poverty Line - the minimum level of income to meet a person's basic needs. The World Bank considers this to be \$1.25 per day.
- Dependency ratio: the proportion of people who are too young (0-14) or too old (over 65) to work. It is calculated by adding both groups together and dividing that by the number aged 15-64 (the working population) and multiplied by 100. The lower the number, the greater the number of people able to work.
- Literacy rate - is the percentage of adults who can read and write.
- Maternal mortality: The number of mothers per 100000 who die in childbirth.
- Access to safe drinking water: the percentage of the population with access to an improved water supply.



Corruption Perceptions Index: devised to help investors work out where their money would be safest. The index uses a scale from 10 (honest) to 0 (very corrupt). In corrupt countries, money is used to bribe officials.

The Human Development Index (HDI)

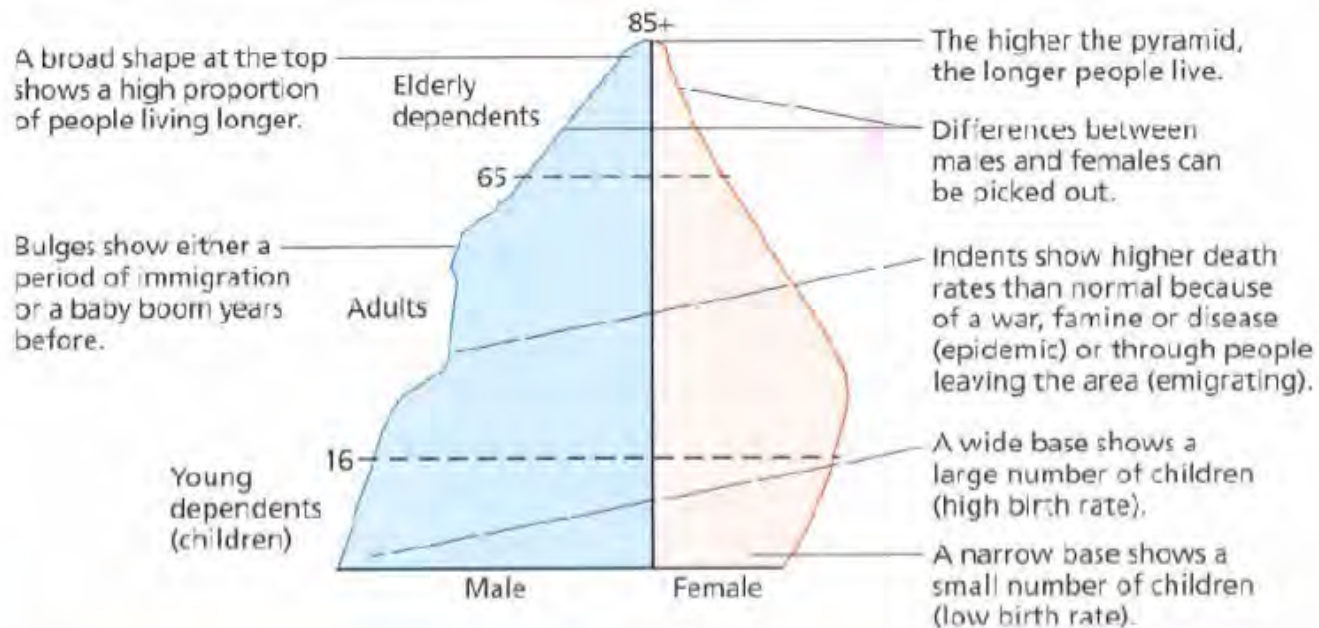
Some countries with a high GDP have a very unequal distribution of wealth e.g. Qatar and the United Arab Emirates. The UN created the HDI to measure development. It consists of a single figure between 0 and 1 (the higher the number, the better). HDI is calculated using 3 indicators.

- Life expectancy
- Literacy rate
- GDP per capita (using PPP\$)

GDP and HDI are closely linked - poorest countries in the world for GDP have the lowest HDI.

Example Exam questions

1. Describe one example of an economic measure of development (2 marks)
2. Explain some of the problems of only using economic measures of development (4 marks)



Population pyramids:
 They show the structure of a country's population in terms of gender and age. Wide bases – high fertility. Decrease as you go up the pyramid shows high infant and child mortality rates. Life expectancy is low due to high death rate in all ages. Straight-sided base – decline in fertility rate but still lots of young adults in child bearing years. Narrow base – low fertility rate. Triangle shape – high infant mortality rates. Death rate is high in all age groups so life expectancy is low. Square shape – working age population with a long life expectancy. Upside down triangle – population is highest for older people. Death rate is higher than birth rate so country experiences natural population increase.

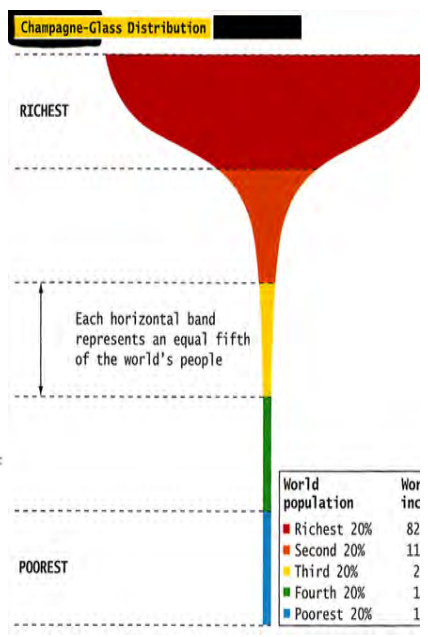
- Causes of global inequalities**
- Physical environment
 - History – colonialism
 - Political and economic policies

History – colonialism occurred mainly in the 18th and 19th centuries as European powers, such as the UK, France and Spain, expanded their territories around the world. They exploited their colonies for economic gain, and unequal trading relationships distorted local economies, which meant that many colonies received little benefit. In the modern world, the term '**neo-colonialism**' is used to describe how rich countries can still dominate poorer countries. This now happens in an economic and political sense.

The physical environment – access to the sea is an important influence. For example, many landlocked and mountainous countries have developed more slowly than coastal nations because trade is more difficult for them. Climate is also influential. Tropical countries have grown more slowly than those in temperate latitudes because they experience a higher incidence of climate-related diseases, which are often carried in the water. Natural hazards, such as earthquakes, hurricanes, floods and drought, can also slow or reverse development in some countries.

- Example Exam questions**
1. Explain why infant mortality rates vary between countries (4)
 2. Explain two ways in which population structure can influence social issues (4)

Political and economic policies – open economies, such as the UK, encourage foreign investment and have developed faster than **closed economies**, such as North Korea, where imports and exports are not allowed. Investment creates jobs and helps to fund infrastructure. Political mismanagement and corruption can slow or reverse development. Zimbabwe, once one of the most developed African countries, has suffered severe setbacks in welfare and human rights because of poor government and the impact of HIV/Aids.

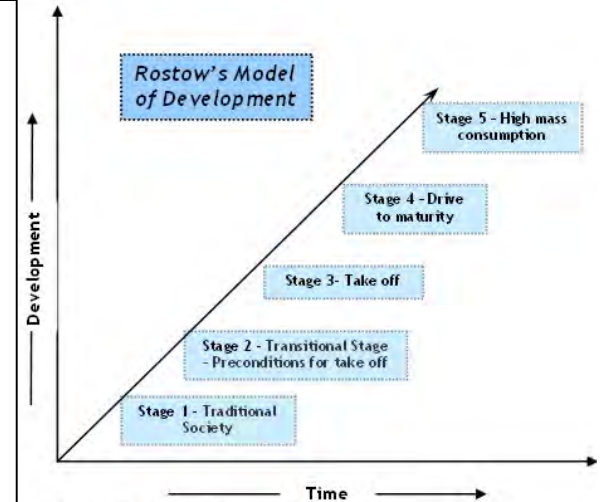


Rowstow's theory

Rowstow was an American economist who published his theory in 1960 based on the experiences of North America, Europe and Australasia. He believed that all countries pass through five stages of development and it is a path that countries like Malawi have to follow.

1. **Traditional society:** most people work in agriculture, but produce little surplus (extra food which they could sell). This is a 'subsistence economy'.
2. **Pre-conditions for take-off:** there's a shift from farming to manufacturing. Trade increases profits, which are invested into new industries and infrastructure. Agriculture produces cash crops for sale.
3. **Take-off:** growth is rapid. Investment and technology create new manufacturing industries. Take-off requires investment from profits earned from overseas trade.
4. **Drive to maturity:** a period of growth. Technology is used throughout the economy. Industries produce consumer goods.
5. **Age of high mass consumption:** a period of comfort. Consumers enjoy a wide range of goods. Societies choose how they spend wealth, either on military strength, on education and welfare, or on luxuries for the wealthy.

The Rostow model has been criticised for being based on European countries and overlooking other ways in which countries can develop. It also assumes that all countries start with the same resources and geographical factors e.g. population and climate



Frank's dependency theory

Frank's dependency theory believed that development was about two types of region – core and periphery.

The core represented the developed countries (North America, Europe and Australasia) and the periphery consists of other areas which produce raw materials to sell to the core.

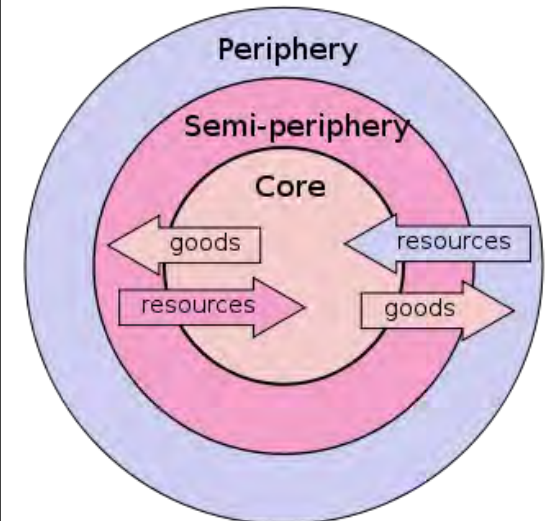
Low value raw materials are traded between the periphery and the core. The core processes these into higher value products and become wealthy. Frank believed that historical trade had made these countries poor in the first place and are weaker members of the global society.

Support for the dependency theory:

- Rich countries interfering with the internal politics of developing countries
- Unbalanced trade – developing countries sell materials cheaply but buy expensive goods
- Selling of non-essential products to developing countries e.g. Coca Cola
- Aid being tied to wider agreements so developed countries get something in return
- Developing countries getting into debt after borrowing too much from the developed world

Criticism for the dependency theory:

- Some countries that were never colonised (e.g. Ethiopia) are still poor
- Socialist systems do not help them to develop (e.g. Tanzania)
- Very poor countries (e.g. South Korea) have managed to develop
- Develop country influences e.g. (neo-colonial) may be positive
- Campaigns e.g. 'Make Poverty History' and 'Free Trade' are positive links between core and periphery

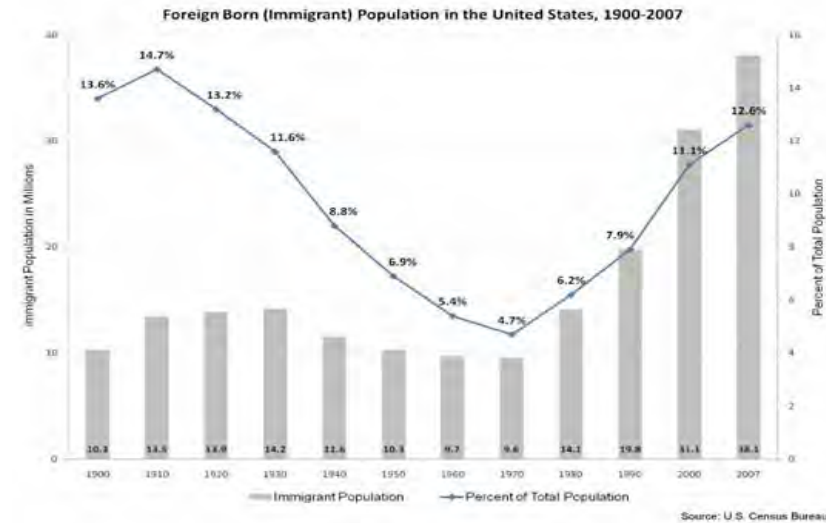


Consequences of global inequality

- **Economic** - About 1 in 5 of the world's population live on less than \$1 a day, almost half on less than \$2 a day. Developing countries frequently lack the ability to pay for food, agricultural innovation and investment in rural development.
- **Social** - More than 775 million people in developing countries cannot read or write. Nearly 1 billion people do not have access to clean water or sanitation. Many developing countries do not have the ability to combat the effect of HIV / AIDs.
- **Environmental** - Developing countries have increased vulnerability to natural disasters. They lack the capacity to adapt to climate-change-induced droughts. Poor farming practices lead to environmental degradation. Raw materials are exploited with limited economic benefit to developing countries and little concern for the environment.
- **Political** - Some developing countries have non-democratic governments or they are democracies that function poorly.

Migration

International migration can be a major consequence of inequality between countries. Globalisation has led to increased awareness of opportunities in developed countries. With advances in transportation and a reduction in the relative cost, the potential mobility of the world's population has never been higher.



Factors contributing to development

Trade: Trade and investment play a key role in economic development. Investment is important in increasing its trade. However, 2 billion people live in countries where trade has fallen in relation to national income. This results in less links to global systems and therefore means less FDI for the country.

Fair Trade: Poor countries argue that world trade is unfair. Under fair trade small-scale producers group together to form a cooperative. The cooperatives cut out the 'middlemen' and deal directly with companies in developed countries. This gives farmers more money and therefore a better standard of living. They also then have additional money to reinvest into their farms.

Aid – assistance in the form of grants or loans at below market rates. Aid forms a vital part of the income for many poor countries. Most developing countries have been keen to accept foreign aid for several reasons:

Foreign exchange gap – countries do not have enough money to pay for imports e.g. machinery that is needed for development

Savings gap: population pressures mean there is not enough finance to invest in industry and infrastructure

Technical gap – caused by a shortage of skills needed for development

Two types of international aid – official government aid and voluntary aid. What is important is how the aid is spent, not necessarily the amount. Critics of foreign aid say it can be wasteful and create a culture of dependency

Importance of remittances: International migrants send money back to their families in the country of origin. These remittances can be very important in fighting poverty and helping economic development.

Debt relief - Western governments (USA) encourage conservation by agreeing to cancel some of the debt they are owed if the other country (Costa Rica) spends that money protecting their environment. Heavily Indebted Poor Countries (HIPC) Initiative established by the IMF and World Bank approves debt reduction in developing countries. 36 countries, with debts of US\$7 billion have had debt-service relief since 199.

Location of India

India is located in Asia. Its neighbours are China, Nepal, Pakistan. It has a border with the Indian Ocean and the Arabian Sea. India is large! With 3.3 million sq km, it is 13 times larger than the UK, though it's only a third the size of the USA. But as a country, it's much more significant than size alone!

Environment of India:

- Rich biodiversity. While elephants and tigers are well known, its diversity includes 6% of the world's bird and plant species. However, population and economic growth threaten them.
- Worst environmental problems, with land, air and water pollution. India is the world's third greatest emitter of greenhouse gases.
- India has a range of landscapes and climates with a powerful monsoon.



Culture in India:

- Is the birthplace of four of the world's religions, Hinduism, Buddhism, Jainism and Sikhism.
- Is diverse. In 2011, 78% of the population practiced Hinduism, 15% Islam, 2.5% Christianity, and 2% Sikhism.
- Has amongst the world's most ancient cultures, with Hindu civilisations traced back over 5000 years.
- Now has the world's largest film industry, Bollywood, producing over 1200 films each year!

Politics in India

- The world's largest democracy - in 2015, 672 million people were registered to vote.
- A growing global influence. It was one of the founding members of United Nations and of the G20 industrial nations. It takes part in UN peacekeeping missions and contributes the second-largest number of troops to the UN.

Society in India

- The world's second largest population, 1.25 billion in 2015! By 2022, that will probably overtake China to become the world's largest.
- The world's 4th and 5th largest cities - Mumbai (population 16 million) and Kolkata (15 million).
- Some of the world's worst urban slums, housing 40 million people, a quarter of its urban population.
- Indian society is divided into social ranks known as 'castes' – a person's caste is determined at birth by their parents' status. The bottom of the groupings are known as 'untouchables'. They have no caste and do the most menial of jobs. The system is controversial and many people want it to be scrapped.
- India is a former British colony; this has helped India become important globally due to the millions of people who speak English.
- There are 20 million Indian people living in over 100 countries (a diaspora). In 2014, they sent back \$71 billion in remittances. This is a very important source of income for India's economy.

How has the government and globalisation influenced economic change in India?

- In 1991 the government introduced 'Economic Liberalisation'. Before 1991 the government decided which industries produced what and where. Liberalisation changed it to a market economy where the 'market' decided:
 - What people will buy based on demand
 - Where goods can be made most cheaply
 - Where investment in products will make most profits
- Governments supporting a market economy encourage foreign investment and reduce or abolish:
 - Import tariffs.
 - Controls on how much money is brought into, or out of a country.
 - Taxes, especially on company profits.
- India is one of the few emerging countries that gives more aid than receives it. It gives to Sri Lanka, Bhutan and Nepal and still receives some 'technical assistance' from the UK.
- Globalisation has helped the economic growth as a result of India's connectivity.
- Containerisation and shipping developments have helped the trade of textiles, clothing and footwear from India
- India now produces more sophisticated and valuable items e.g. computer software and hardware.
- The low cost labour and high-level technology are attractive for Western countries.
- The tourism sector is growing rapidly – 39 million people are employed in tourism.

How TNCs operate in India (Outsourcing)

- BT have located their call centres in Bangalore.
- Indian graduates are paid £3000 a year (20% of what they pay in the UK).
- Call centre workers earn more than doctors and teachers so a 'brain drain' is feared.
- TNCs are attracted to Bangalore as the Indian government offers reduced taxes.
- The workforce are not only cheaper but also well educated and can speak very good English.
- The expertise in areas such as software development has encouraged Samsung, Microsoft and Intel to locate there.
- Communications technology like Skype can help BT and other TNCs have business meetings with India without having to fly their employees there.
- Other industries include Manufacturing (Toyota) and Aerospace (Boeing).
- Walmart (ASDA), Gap and Zara all use Indian labour to make their clothes as the minimum wage for garment factories is 87% lower than the UK.
- India has the second largest wireless network after China.

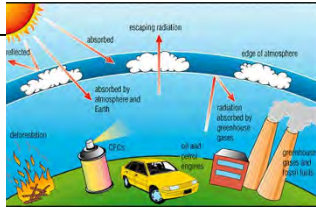
Economic impacts due to economic change in India

- Since 1991 (Economic liberalisation) TNCs were attracted to India. By 2015 clothing was India's largest manufacturing industry, employing 80 million people and earned \$300 billion in GDP.
- People are willing to work 100-hour weeks for average wages of £35.
- No equal pay between men and women – 70% of garment workers are women on the lowest pay.
- The growth of IT in places like Bangalore has created increasing numbers of well paid 'middle classes' in India – estimated to be 200 million by 2020!
- India's economy has grown by 7% per year since 1997.
- India is likely to have the 2nd biggest GDP in the world by 2050.
- Between 1991 and 2014 India's GDP per capita went from \$1150 to \$5800.
- GNI per capita has risen from \$2522 in 2000 to \$5497 in 2014
- HDI has risen from 0.496 in 2000 to 0.609 in 2014.
- Agriculture is no longer as important to the GDP – fallen from 37.2% in 1980 to 14.5% in 2011.
- Manufacturing has fallen slightly from 16.9% in 1980 to 18.4% in 2011.
- Services have risen rapidly in importance from 45.8% in 1980 to 67.1% in 1991.
- Key exports are now petroleum products, gems and jewellery, pharmaceutical products and transport equipment. Over 50% of exports go to Asia.
- Key imports are oil, gold and silver and electronic goods. The largest source of imports are from China.
- FDI is increasing with over \$250 billion worth of investment into India from foreign companies like BT and over \$120 billion worth of investment overseas by Indian TNCs like Tata.

Social impacts due to economic change in India

Urban expansion increases the number of single professionals living alone.

- Large scale rural to urban migration is occurring but the level of urbanisation is way behind the global average (India – 32.7% in 2015, World – 54% in 2015)
- For educated urban women, they choose to develop a career and marry later. As a result, birth rate has fallen from 30 (per 1000) in 1991 to 19.9 in 2014. Also, fertility rate has fallen from 4 in 1991 to 2.5 in 2014.
- Life expectancy has increased from 60 years in 1991 to 68 in 2014.
- India's infant mortality rate has fallen since 1991 by over 50%.
- Average no. of years in school has increased from 2.4 in 1991 to 12 in 2011.
- 40 million people live in urban slums in India.
- India's population was 1.25 billion in 2015. This has increased by 48% since 1990.



Environmental impacts due to economic change in India

- Air pollution reduce life expectancy by 3 years for the 660 million urban residents in India
- Delhi is the most polluted city in India
- 275 rivers in India are polluted with sewage
- Deforestation is becoming a major problem with the ever-rising demand for forest-based products
- In 2014 the Indian government stated that 25% of India's land is experiencing desertification.
- 68% of the country is prone to drought.
- India is the world's third largest emitter of carbon dioxide – due to it being heavily reliant on coal.
- India is looking to create a carbon sink by planting large areas of forest.
- Climate change is a big threat to India's economy. The increasingly erratic monsoon rains threatens the farming sector worth \$370 billion and hundreds of millions of jobs.

Unequal development – Regions

Maharashtra - GDP per capita \$2561 (2014) – India average = \$1627 (2014)

- Maharashtra's economic growth has come from:
- Service industries - e.g. banking, IT, call centres (see section 2.10).
- Manufacturing - half of Mumbai's factory workers make clothing. Other industries include food processing, steel, and engineering.
- Its port, which is the second largest in the country.
- A booming construction industry, building factories and offices.
- Entertainment. Mumbai hosts the world's largest film industry, Bollywood.

Bihar – GDP per capita \$682 (2014)

- Part of the 'rural periphery'
- 86% of its population is rural. Many are subsistence farmers, trapped in a cycle of poverty, shown in Figure 4.
- Half of its households earn less than 80p a day, and 80% work in low-skilled jobs.
- Even with 100 million people, Bihar gets little investment, because people can't afford basic services - only 59% of its population has electricity.
- Bihar is also a traditional caste-based society. Those in higher castes are literate, whereas those in lowest castes are mostly illiterate. It is difficult for someone to marry outside their caste, so it explains why those who are poor stay poor.
- School attendance is low. Only a third of children complete primary school, and 2% reach Years 12 and 13. Overall, literacy in Bihar is 47%.
- Women are poorest in Bihar, and have India's lowest literacy rates (33%). They rarely own land, and most are low-wage labourers.



A top-down project – The Narmada River Scheme

The Sardar Sarovar Dam on the Narmada River. It is one of the world's largest dams. When complete, it will store monsoon rains for use during the dry season. Originally, 80 metres high, the government plans to raise it to 163 metres to increase its capacity. The dam has been funded by IGOs – which involves governments and agencies working together. The Dam was funded by the World Bank, Japanese Banks and the Indian government.

Who benefits?

- India's cities. The dam is multipurpose, providing 3.5 billion litres of drinking water daily and hydroelectric power (HEP).
- Farmers in western India. A network of canals will irrigate 1.8 million hectares of farmland in Gujarat, Maharashtra, Rajasthan and Madhya Pradesh. These states suffer drought-causing loss of crops and animals each year.

Who loses?

- Local residents. 234 villages have been flooded by the dam, forcing 320 000 people out. Few rural families can afford electricity from the scheme - only cities benefit.
- Local farmers. Good quality farmland has been flooded. Damming the river means that fertile sediment, deposited on flood plains each year, is also lost.
- Western India. Religious and historic sites have been flooded.
- People downstream. The region has a history of earthquake activity. Seismologists believe that the weight of large dams can trigger earthquakes, which could destroy the dam and cause massive loss of life.

A bottom-up project: Biogas

- Cow dung is a valued resource, because it produces gas, called biogas.
- The gas is used for cooking by day, and powering electricity generators at night.
- The dung is fed into a brick, clay or concrete-lined pit that forms part of a biogas plant.
- The pit is sealed with a metal dome and the dung ferments to produce methane. As pressure builds, methane piped into homes.
- It is simple, uses local materials, and is an example of intermediate technology. It uses little space, uses materials available in India, and can be located in a village without impact.
- By 2010, four million cattle dung biogas plants had been built in India. These created 200 000 permanent jobs, mostly in rural areas, as well as other benefits:
- Unlike firewood, cooking with gas produces smoke-free kitchens so there are fewer lung infections.
- Heat is instant, so cooking is quicker.
- There is no ash, so there is less cleaning.
- No longer is time spent gathering wood or dung, so girls now have more time to go to school.
- Cattle are now kept in the family compound, making dung collection easier. Previously, cattle would graze local woodland, eating saplings and preventing trees from regenerating.
- When cattle dung is fed into the digester, micro-organisms that cause disease are destroyed as the dung ferments.
- After digestion, the sludge is richer in nutrients than raw dung, so it makes a better fertiliser.
- Many villages now use biogas to power electricity generators that provide light at night and pump drinking and irrigation water from underground. Farmers can now get three crops of vegetables a year using pumped water.

India – Which way next?

- India is now a major international player
- It is part of the emerging country groups called the BRICS (Brazil, Russia, India, China and South Africa)
- The BRICS account for 42% of the world's population and ¼ of the global GDP.
- India is a member of the G20 (alongside the UK, USA, France, Germany etc) and also supports the World Bank and Asia Development Bank.
- India wants to be a permanent member of the UN Security Council and more global organisations such as the IMF and WTO.

