

Development Dilemmas

Topic Outline

The differences between the urban core and the rural periphery - Case study in India.

Top down developments - how to improve an area using top down approaches.

Bottom up developments - how to improve an area by involving the community.

How sustainable is India's development? Rules for sustainability.

Sustainable development in Kerala - how was it achieved?

Urban Core and the rural Periphery - India

Development means change - usually improvement for the people and the economy. It brings jobs and trade but sometimes the benefits only go to some people and do not reach the whole community.

India Fact file

Population 1.15 billion in 2008.

Workforce of 500 million people

5th largest economy in the world.

Rural population 72%

Life expectancy - 69 years.

Population living below the poverty line 25%

India's wealth is not shared out. The wealthiest state is Maharashtra and the poorest is Bihar. Cities are generally wealthier as they have access to facilities and services.

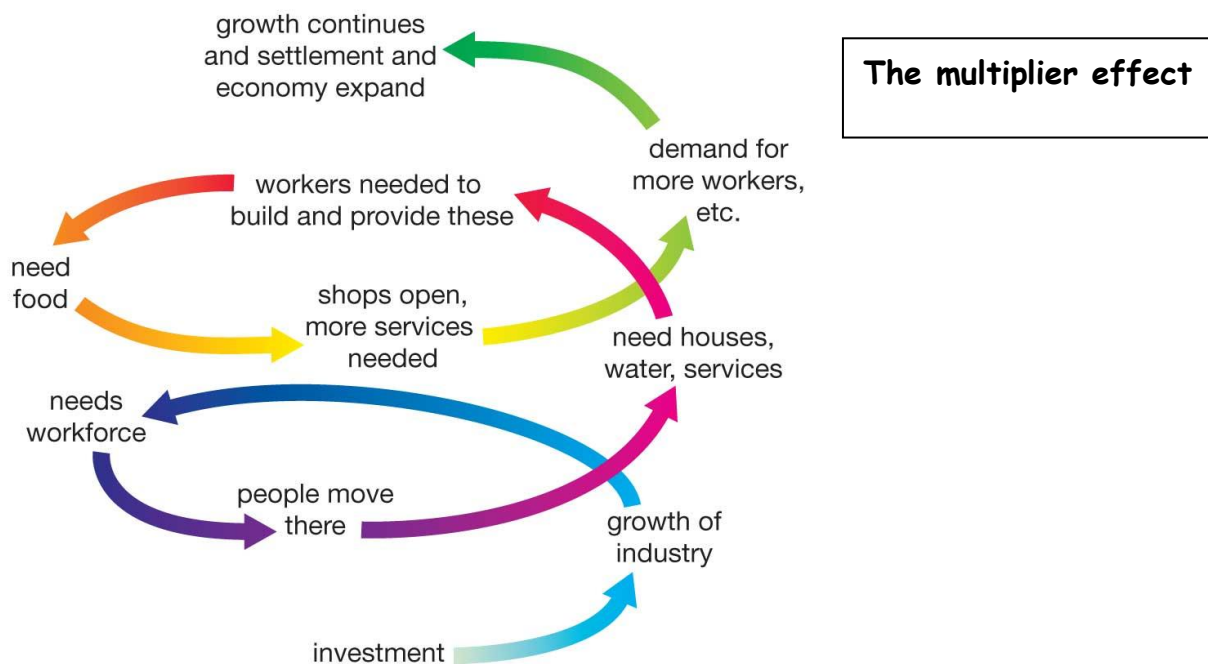
This map shows the GDP (Gross domestic product) of India's states. The darkest states are the richest and the lightest states are the poorest.



Much of India's economic growth has taken place around its ports and cities. These are called **Growth Poles**. As this happens:

- People move there for jobs
- As new workers earn they spend - creating demand for additional companies.
- They also need services such as housing which also creates jobs.

This creates an upward spiral called the **Multiplier Effect**. Over time this gets greater and greater creating a **core region**. Areas which do less well are often left behind and generally known as the **periphery regions**.



Maharashtra - India's Urban Core

Economic growth in this region has come from:

- Services - banking, insurance, IT and call centres. Mumbai's universities produce well-educated, English-speaking IT graduates who are employed in large Western companies.
- Manufacturing - Half of Mumbai's factory workers work in cotton textiles for export. Other booming industries include food and computer software which have led to construction boom.
- Entertainment - Mumbai has the world's largest film industry - Bollywood.
- Leisure and business services e.g. hotels and restaurants.



Bihar - India's Rural Periphery

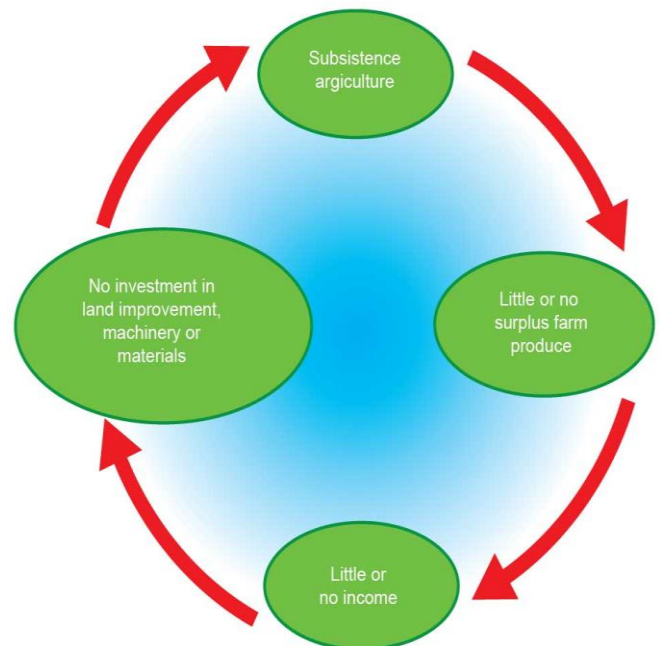


- Bihar is India's poorest state - 86% of the population live in rural areas and most work in farming.
- The average income in Bihar is only £75 per person, per year - 20% of Maharashtra's average income.
- 55% household live below the poverty line.
- Only 58.8% of households have electricity and 12% water-flushed toilets.
- 80% households use fuel wood - lung disease is common from inhaling the smoke.

Few rural families have surplus income and survive on what they grow - called **Subsistence Farming**. But with no surplus crops to sell farmers have little money to invest and improve their way of life. They are trapped in the **Cycle of Poverty** (Below).

Rural families are larger than those in cities. Bihar's fertility rate is 4.4 compared to Maharashtra's 2.1. This is because:

1. Rural families need more children to work on the land or collect water.
2. Bihar's women have low literacy rates and marry early. They are often married by 17 and have children before the age of 20.



In Bihar school attendance is poor:

- In one region, only 35% of children go to primary school.
- Bihar is a caste-based society and this affects poverty and literacy. Almost all people in higher castes are literate; almost all in the lowest castes have zero literacy.

How to improve the way of life - Top-Down Developments

Top-down developments is where decisions about development are made by governments or by private companies. The decisions are imposed on people because there will be benefits. Top-down development includes:

- Decision makers looking at the whole picture to identify a need or opportunity e.g. for national energy sources or transport.
- Experts helping to plan it.
- Local people being told about it but with no say in whether it will happen or not.
- People gain by the **trickle down** of wealth.

Top -down approach - The Narmada River Dam

Over much on India rainfall is seasonal and unreliable. Parts of north-west India are so dry that a semi-desert exists. Between May and September the Indian monsoon brings huge falls of rain that are difficult to imagine. November to March almost no rain falls across large areas of India.

As India's economy boom and the population increases - demand for water also increases. The government decided dams are needed to:

- Encourage economic development by providing drinking water and electricity.
- Open up dry lands for farming by irrigation.

Building the dams allows water to be stored from the monsoon rains to use during the dry season. The Narmada River has a series of 3000 dams and the project will take 100 years to complete.

| Benefits of the dam | Problems of the dam |
|--|--|
| Provides 3.5 billion litres of drinking water a day. | 320 000 people have been forced to move |
| Provides hydroelectric power (HEP). | Religious and historic sites have been flooded |
| Series of canals distribute water to other areas of India. | Few villages can afford the electricity generated. |
| Water used to irrigate the local farming land. | Good quality farmland has been submerged. |

How to improve the way of life - Bottom-up Developments

Bottom-up development means that experts work with the local people to identify their needs. It gives local people control in improving their lives and experts assist with the progress made.

ASTRA (application of science and technology in rural areas) has been a major development project in rural India in recent years. It started as a research project at the University of Bangalore. Researchers went into villages in the rural areas to find out what their lives were like. They talked to families and recorded how they spent their time etc.

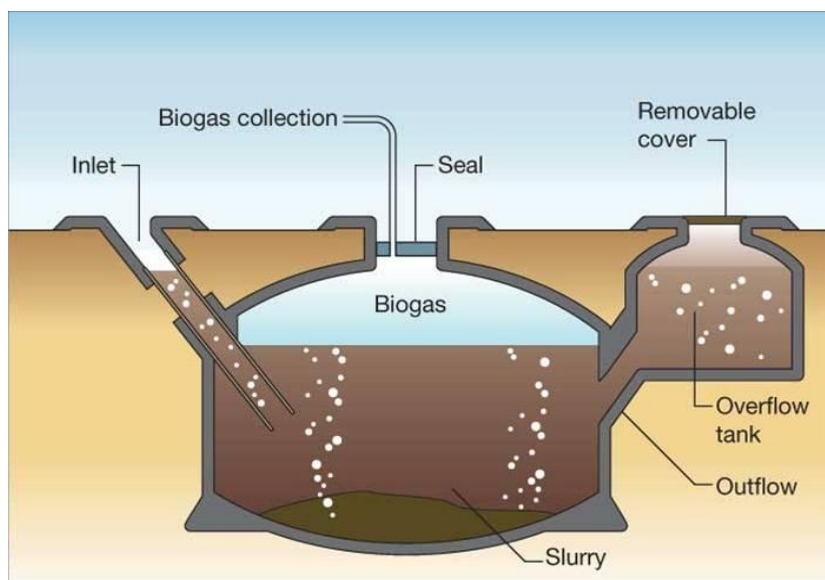
Problems of rural India

1. **Time** - the daily routine takes too long - especially for women and girls. In each family here is cleaning, fuel collection, preparing and cooking food, fetching water, tending to animals, looking after the vegetable patch and paid work in the fields.



2. **Fuel wood Crisis** - Each family needs 25-30Kg of fuel wood per week. As the population is increasing, fuel wood is becoming more scarce and families have to walk further to find it. Cow dung is increasingly being used as an alternative fuel. Women collect it and shape it into fuel logs. Aside from the health risks involved, the dung could be better used on the land as fertiliser. Burning wood and dung on traditional stoves means that women often suffer from lung and eye problems.
3. **Lack of education** - Traditionally women are responsible for food and the home as well as 1/3 of paid work. Rural girls help their mothers and therefore have little education - few complete primary school. This further traps them in a cycle of poverty.

Solutions to the Rural Problems



Cow Dung - Cow dung has become a highly valued resource; it can be used to provide gas called biogas for cooking and for powering electricity generators.

It is fed into a brick lined pit and sealed by a metal dome, under which the dung ferments to produce methane and the gas can be piped into people's homes.

| Benefits if biogas for the people | Benefits of biogas for the environment |
|--|---|
| Results in smoke free kitchens and reduces eye and lung problems. | Slurry which remains after the fermentation can be used as manure which increases crop yields. |
| Women and children are freed from the chore of collecting fuel wood and allows children the time to attend school. | 277 tonnes of carbon emissions savings have been achieved from the biogas plants. |
| 80% families use the extra time to earn money and families have increased their income by 25%. | Cattle are no kept in the family compound. Previously they could graze in the forest, eating samplings and preventing woodland from regenerating. |

Sustainable Development in India

Sustainable: Meets the needs of the present without compromising the ability of future generations to meet their own needs.

10 rules for sustainable development

1. Involve the local people in decision making.
2. Be affordable - not put people or countries into debt.
3. Promote good health - no adverse effects on other people.
4. Protect and encourage native plants and animals, not contaminate plant or animal genes.
5. Use land that's been developed before where possible (Brownfield sites in urban areas).
6. Minimise waste and encourage recycling.
7. Minimise energy use and use natural energy sources (solar power).
8. Minimise water use
9. Minimise pollution.
10. Offer benefits to the poor and disadvantaged.

Sustainable development in Kerala

Kerala focussed on education and health. Its 32 million people average US\$293 income per year and it is one of India's poorest states. GDP per person is 90% lower than the USAs. The life expectancy is high in Kerala and the literacy rate is 91%, compared to 61% for India as a whole.

The areas relies less on farming than other states and has a strong service sector - particularly in tourism. It also gets an extra 20% of its GDP from people who work in the Middle East and send their wages home - known as **remittance payments**.

Glossary

GDP - the value of all goods and services produced in one year in a country. It is shown as a total or per person by dividing the total by the population.

Multiplier Effect - the upwards spiral which results after initial investments into an area.

Core region - areas focussed on development and economic progression - usually urban areas.

Periphery region - areas that fall behind and do not attract investment - usually rural areas.

Top down development - decisions about development are made by governments or by private companies.

Bottom up development - experts work with the community to identify their needs.

Past Exam Questions

7 Study Figure 7.



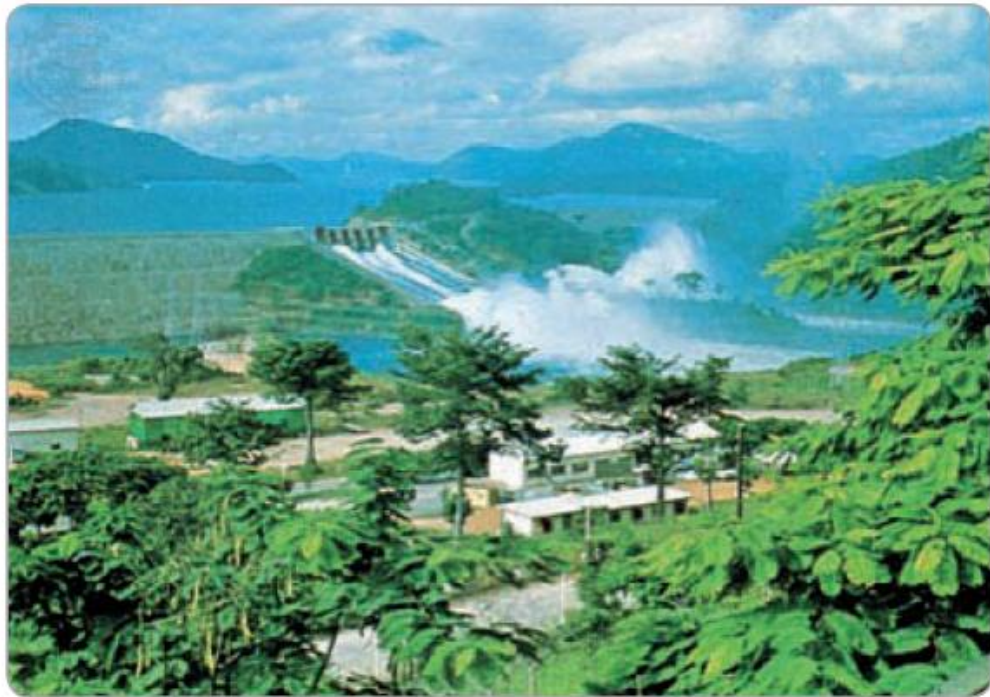
Figure 7 – Regional variations in the Gross Domestic Product (GDP) per capita for China in 2004

Identify the region with the lowest GDP per capita (1) _____

Explain why coastal regions, such as those in China, are often more economically developed than inland regions.(2) _____

Using examples, explain why **top-down** development schemes are sometimes seen as being inappropriate (6)

7 Figure 7 shows a photograph of the Volta Dam in Ghana. It was built with western help in the early 1970s to bring development to Ghana.



(Source: Jacques Jangoux, www.britannica.com)

Figure 7

(a) Study Figure 7.

Suggest **one** way such a dam could help a country like Ghana develop (1)

Explain how the dam could have had **negative** impacts on some people in Ghana (2).

Using **named examples**, explain how bottom-up schemes meet the needs of developing countries, and how successful these have been (6).
