

# Unit 17 Frameworks for development

## CHECKLIST:

Frameworks for development

- Factors that affect development
- Development models
- Community based development


## Factors that affect development

Development should also be viewed from a broad perspective, looking at the physical, economic, political and social aspects of an environment.

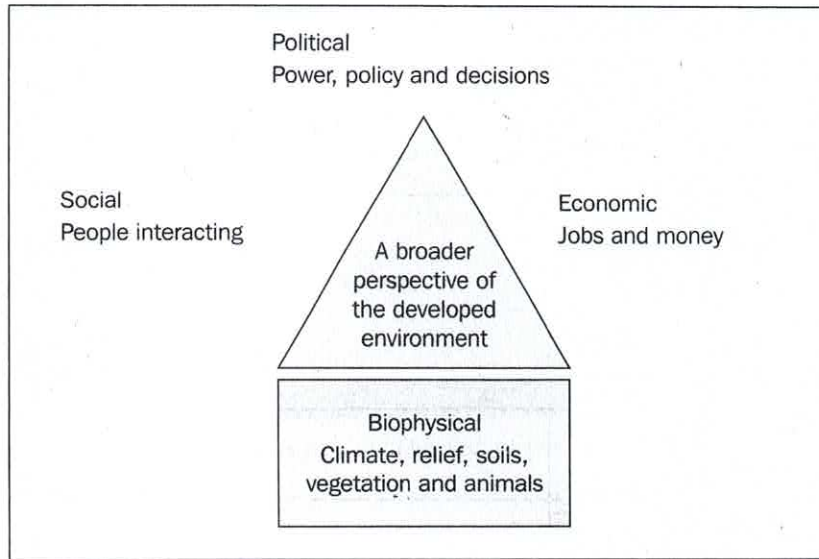


Figure 17.1 A broader perspective of the developed environment

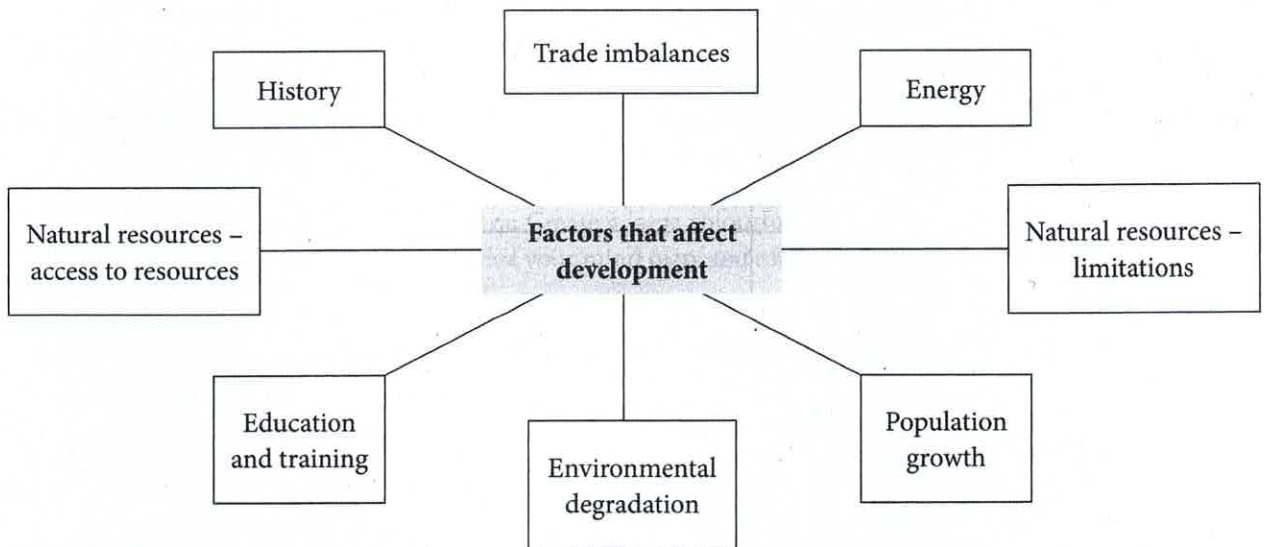


Figure 17.2 Factors that affect development



**Learning tip for visual learners:** Colour code the different factors that affect development.

## Political factors

### History

- Colonisation allowed for the extraction of resources by developed countries.
- Political instability and war may also influence development in a country.
- Large multinational companies and investors exploit natural resources, especially in developing countries.
- Local labour may also be exploited and the use of foreign expertise means skills are not transferred to the local people.
- No laws governing the use / exploitation of resources.



### Factors that affect development



## Social factors

### Population growth

- Developing countries have young, fast growing populations.
- This puts pressure on resources such as wood, water and soil.
- These resources quickly become depleted or degraded.

### Education and training

- An educated and skilled labour force is essential for the use of advanced technology.
- High illiteracy rates often hamper progress in a country.

## Economic factors

### Energy

- More than half the world's population does not have access to clean, cheap energy.
- The high use of biomass fuel in developing countries means a lack of energy for domestic use.
- A lack of energy slows down development.
- Developed countries contribute to the world's rising CO<sub>2</sub> levels from the use of fossil fuels for energy production.

### Trade imbalances

- Globalisation has made it easier for countries to trade and exchange goods.
- World Trade Organisation (WTO) has introduced a free market trade system to integrate developing countries into the world's trading and economic systems.
- Multinationals control over 70% of world trade.

## Natural resources

### Access to resources

- The world's natural resources are unevenly distributed.
- Developed countries need more resources than developing countries.
- Access to water, electricity and sanitation may be limited in many developing countries.
- Land ownership is prevented in some countries.

### Natural resources limitation

- Most development is based on natural resources, for example water, coal, land and minerals.
- Large populations put pressure on natural resources.
- If the carrying capacity is exceeded, natural resources may run out.

### Environmental degradation

- Lack of environmental education.
- Lack of government policy.
- An attitude of profit at all costs.
- Lack of effective pollution control.
- Air and water may be polluted.
- Forests make way for agriculture and settlements.

Table 17.1 Factors that affect development

## Unit 17 Frameworks for development

Although development means different things to different people, it does mean economic growth, improved living conditions and westernisation brought about by globalisation and trade. In more economically developed countries (MEDCs) development is associated with a growth in wealth (capital and assets) while in less economically developed countries (LEDCs) the aspects listed above are important as a measure of development. However, development does not come without taking responsibility which means that sustainability\* is important in long-term planning.

**sustainable development** – any development that will in the long term sustain itself and not deplete the natural resources of the area

Development should also be viewed from a broad perspective, looking at the physical, economic, political and social aspects of an environment. In this unit we will look at factors that affect development as well as models which provide a framework for development. We will also look at community-based development. Figure 17.1 introduces the idea that all aspects or factors should be considered in order to develop a broader perspective of the developed environment.

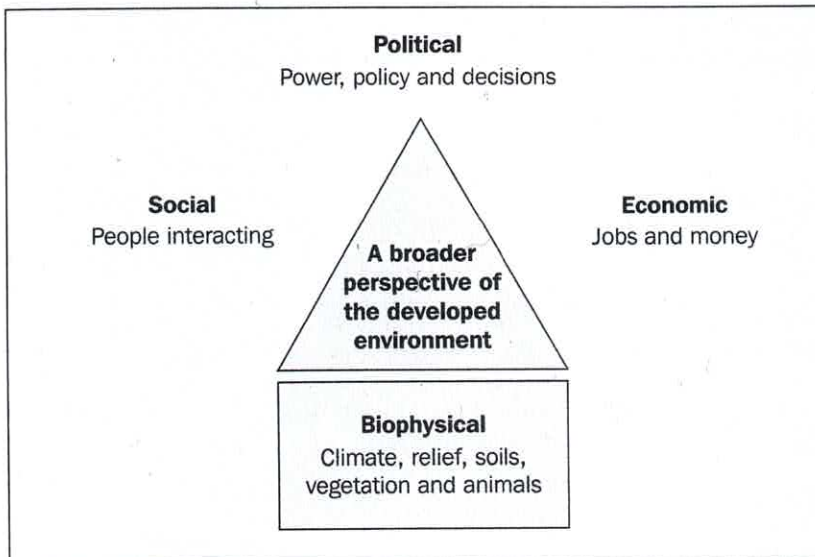


Figure 17.1 A broader perspective of the developed environment

### Factors that affect development

We can see in Figure 17.2 that a variety of factors will influence development in any area, country or region.

<b>POLITICAL FACTORS</b>	<b>SOCIAL FACTORS</b>	<b>ECONOMIC FACTORS</b>	<b>NATURAL RESOURCES</b>
<p><b>History</b></p> <p>Colonisation:</p> <ul style="list-style-type: none"> <li>• Colonisation led to the extraction of resources by developed countries</li> <li>• No laws govern the use / exploitation of resources</li> <li>• Large multinational companies and investors exploit natural resources, especially in developing countries</li> <li>• Labour is exploited and foreign expertise is used. Local labour is not skilled.</li> </ul> <p>First, second and third world economies:</p> <ul style="list-style-type: none"> <li>• In the 20th century countries were classified according to the way on which they developed.</li> <li>• First world countries developed according to capitalist systems.</li> <li>• Second world countries developed in a socialist way, but this collapsed with the breakup of the former Soviet Union.</li> <li>• Third world countries have had to catch up, achieving modern economies at a rapid economic growth.</li> </ul> <p>Today each nation has its own individual history but the general patterns of historical development have been discussed in Unit 16 from pages 193 to 195.</p>	<p><b>Population growth</b></p> <ul style="list-style-type: none"> <li>• The world's population is increasing at a rapid rate</li> <li>• This puts pressure on resources such as wood, water and soil</li> <li>• These resources are becoming depleted or degraded.</li> </ul> <p><b>Education and training</b></p> <ul style="list-style-type: none"> <li>• An educated labour force is essential for transfer of technology from developed to developing countries</li> <li>• High illiteracy rates hamper educational progress in a country.</li> </ul>	<p><b>Trade imbalances</b></p> <ul style="list-style-type: none"> <li>• Globalisation has made it easier for countries to trade and exchange goods</li> <li>• World Trade Organisation (WTO) has introduced a free market trade system* in an effort to attempt to integrate developing countries into the world's trading and economic systems</li> <li>• Multinationals control over 70% of world trade</li> <li>• Developing countries often have to export to developed countries and suffer when orders for their goods are cut back.</li> </ul> <p><b>Energy</b></p> <ul style="list-style-type: none"> <li>• More than half the world's population does not have access to clean, cheap energy</li> <li>• The high use of biomass fuel* in developing countries means a lack of energy for domestic use</li> <li>• This slows down development</li> <li>• Developed countries contribute to the world's rising CO<sub>2</sub> levels from the use of fossil fuels* for energy production.</li> </ul>	<p><b>Natural resources limitation</b></p> <ul style="list-style-type: none"> <li>• Carrying capacity* is exceeded</li> <li>• Large populations put pressure on natural resources</li> </ul> <p><b>Environmental degradation</b></p> <ul style="list-style-type: none"> <li>• There is a lack of environmental education</li> <li>• There is a lack of government policy</li> <li>• There is an objective of profit at all costs</li> <li>• There is lack of effective pollution control.</li> </ul> <p><b>Access to resources</b></p> <ul style="list-style-type: none"> <li>• There is an uneven distribution of the world's natural resources</li> <li>• Developed countries need more resources than developing countries</li> <li>• There is lack of access to water, electricity and sanitation in many developing countries</li> <li>• Land ownership is prevented in some countries</li> <li>• There is a lack of opportunities in business owing to government policies.</li> </ul>

Figure 17.2 Factors that affect development

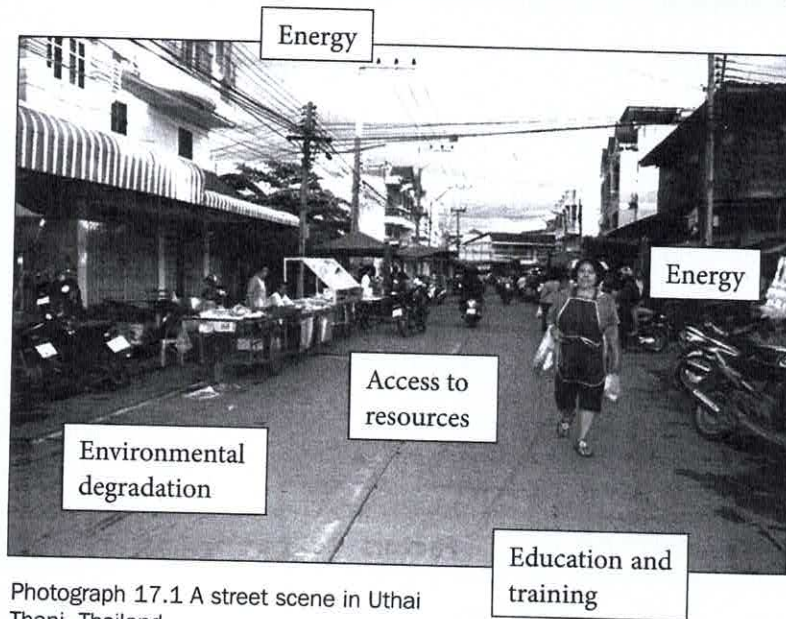
**Fossil fuel** – coal, oil and natural gas which are all hydrocarbons, formed in past geologic periods

**Free market trade system** – trading between countries without having to pay tariffs, such as within the EU. Port areas may become free trade areas

**biomass fuel** – organic matter such as fuel wood, dung and crop residue that is burnt and converted to energy

**carrying capacity** – the maximum population that resources in a given environment can support

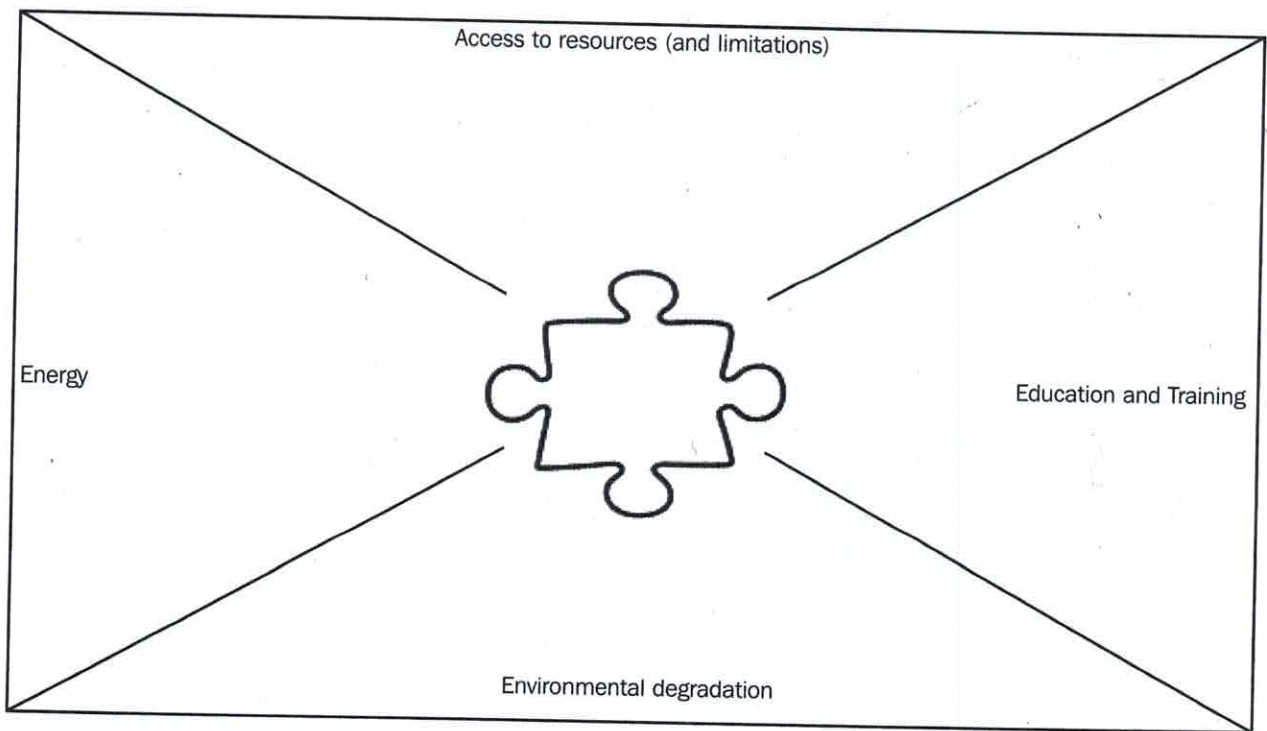
## Skill: Analysing a photograph



Photograph 17.1 A street scene in Uthai Thani, Thailand

Hint: always ask the following of a photograph:

Who, what, when, where, why and how?



## Development models

A model is a simple representation of reality and usually contains a set of rules or statements which can be used to explain different situations.

Development models and theories try to explain and predict how:

- national economies develop (or not) over time
- obstacles to development can be identified and overcome
- governments can develop appropriate development policies.

## Rostow's model of economic growth (1950s)

WW Rostow was an American economist who proposed a model of economic growth in 1955. This model identifies five stages of development.

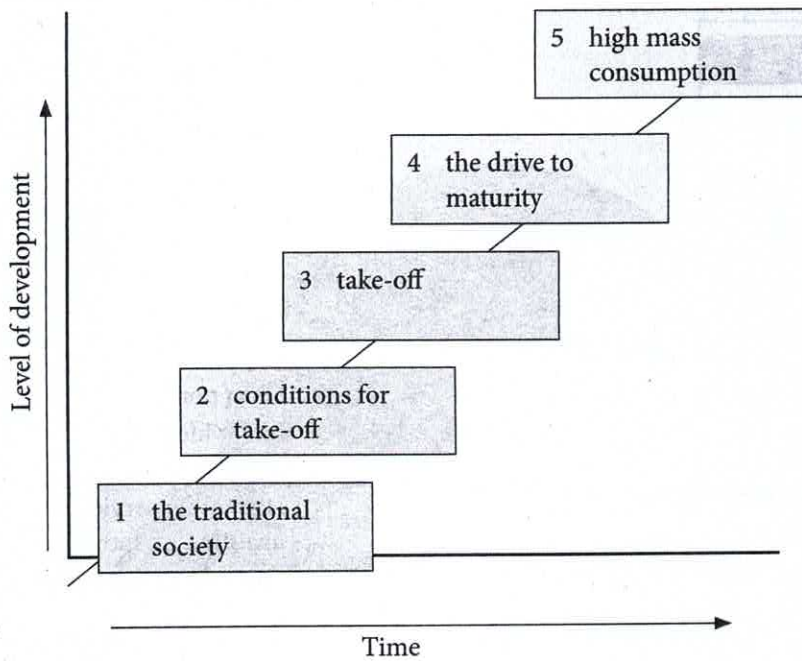


Figure 17.3 Rostow's model of economic growth

### Key characteristics of each stage of Rostow's model of economic growth are:

1. **Traditional society** – each society starts with living off the natural resources, with limited technology and a lack of capital.
2. **Preconditions to take-off** – a formal economy starts to grow and the infrastructure develops. Trading of natural resources starts.
3. **Take-off** – industry develops and the transport network is expanded and becomes more efficient.
4. **Drive to maturity** – industrial development spreads and a variety of types of industry are found. Services are efficient and a market economy develops. This creates a multiplier effect.
5. **Mass consumption** – a highly developed industrial economy with mass production and consumption. The tertiary and service sectors expand.

### MY OWN NOTES

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## Friedmann's core-periphery model (1960s and 1970s)

J Friedmann put forward his model of economic development in 1966. This took into account the spatial context of a country's developing regions. The model is useful as the principles can be applied both on a local and a global scale.

### KEYWORD

**Core** – an area of concentration of economic development. This may be the dominant or most developed region in a country

**Periphery** – an area of low economic development or declining economic development. This usually occurs further away from the core areas.

Applying Friedmann's core-periphery model to South Africa:

- The Pretoria-Witwatersrand-Vereeniging area (1) is a single strong core that has developed as a result of large-scale industrialisation. Centralisation of industry has also taken place as labour and capital move to the core.
- A number of peripheral sub-cores have developed because of natural resources or a large regional market or because of a harbour location (2 – 4).

In the future, an independent system of major cores should develop, with a maximum growth potential for the whole country.

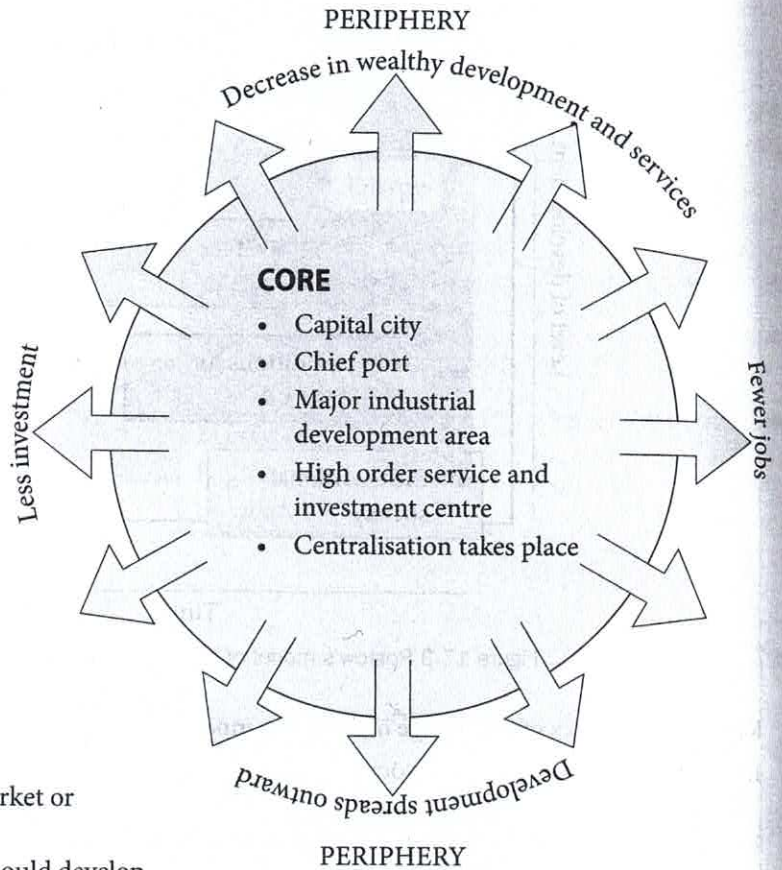


Figure 17.4 Friedmann's core periphery model

South Africa's core regions. The PWV is the dominant core region

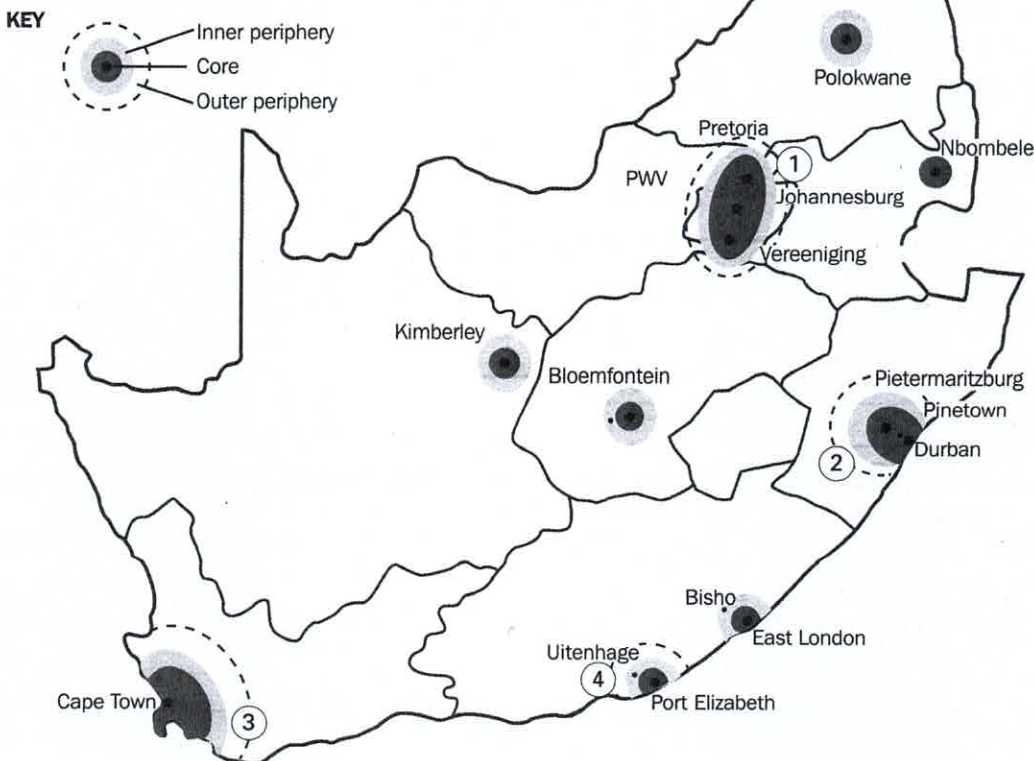


Figure 17.5 South Africa's core regions

source: adapted from upetid.up.ac.za





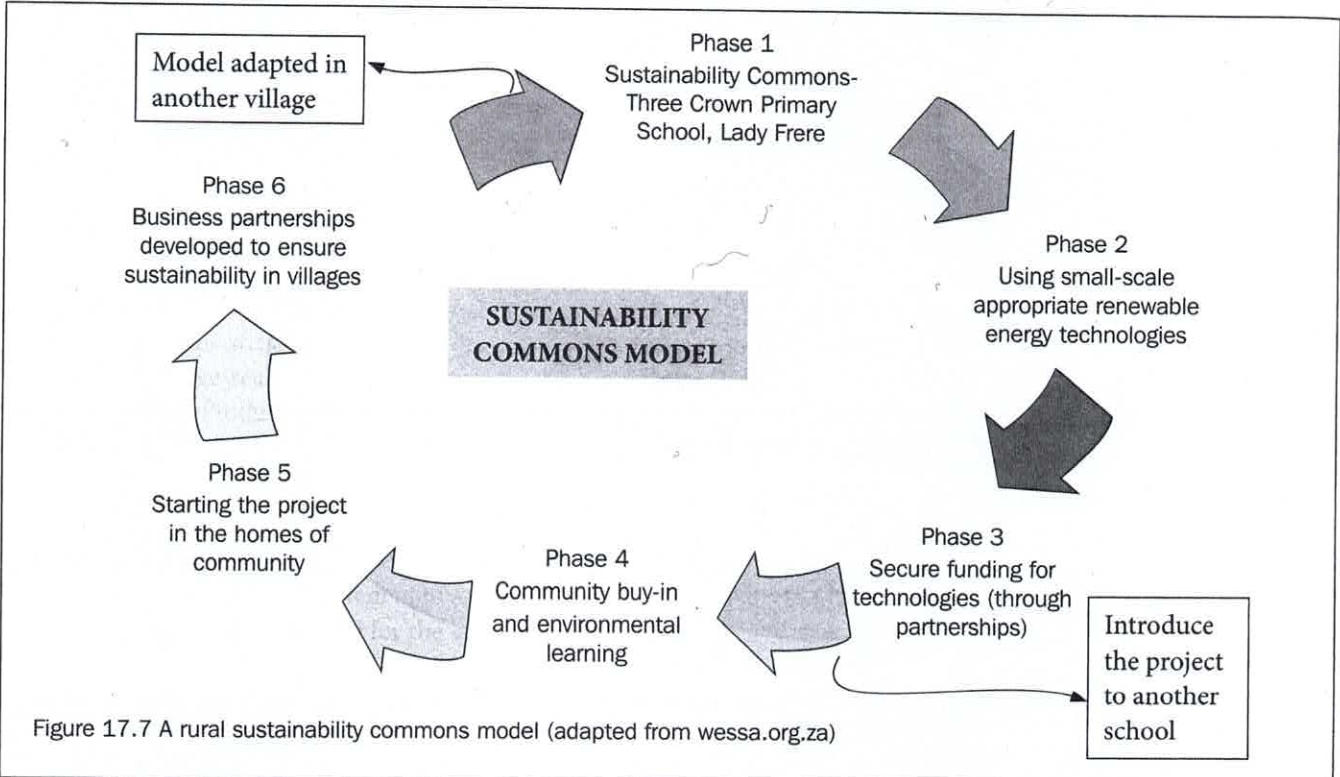
**CASE STUDY OF A RURAL SUSTAINABILITY COMMONS PROJECT IN THE EASTERN CAPE**

The Three Crowns Primary School, in the rural area of Lady Frere within the Chris Hani District Municipality (CHDM) was selected as the first sustainability commons site 9 years ago. The aim of the project is to:

- provide communities with home-based economies to assist in reducing poverty
- generate energy which is an alternative to the electricity supplied
- build sustainable communities that can be self-reliant
- enable the people in the rural sector a chance to learn through co-operation and sharing

**KEYWORD**

**A sustainability commons**  
– a space where ideas and technologies for sustainable development can be tested.



The project used local materials and skills to achieve the following:

- **Building a biogas digester and facultative pond** - to process waste into gas which is used in the kitchen for cooking. The anaerobic effluent from the digester is introduced into the pond. Carbon dioxide is available to support growth in pond.
- **Green house and nursery** - built by using two liter plastic bottles. This keeps the house warm during the cold night and cool during the hot day. The plant nursery is inside the green house.
- **Vermiculture** - uses commercial worms that produce a liquid which can be used as a fertiliser in the garden or flower beds.

[Source [http://financialresults.co.za/2011/eskom\\_ar2011/eskom\\_foundation2011/flagship\\_sustainability.php](http://financialresults.co.za/2011/eskom_ar2011/eskom_foundation2011/flagship_sustainability.php)]

**MY OWN NOTES**

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**peri-urban** – found in the rural-urban fringe; or on the outskirts of an urban area

Commercial sugar farming

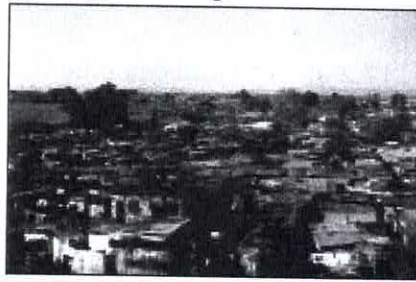


Small-scale peri-urban\* farming



Photograph 17.2

Informal housing



Low-cost housing scheme



Photograph 17.3

## Development models

A model is a simple way of explaining events in reality. A model usually contains a set of rules or statements which can be used to explain different situations. Development models and theories try to explain and predict how:

- national economies develop (or not) over time
- obstacles to development can be identified and overcome
- governments can develop appropriate development policies.

Models are generalisations of real-life situations. This means that their rules are applied in the same way to all situations. However, whenever a model is used, it must be remembered that each country's economic, social, cultural, and historical experience is unique and the application of a given theory may vary widely from country to country.

We will look at three different models of development which can be used to look at economic growth, growth of specific areas or regions and sustainable development.

## Rostow's model of economic growth (1950s)

WW Rostow was an American economist who proposed a model of economic growth in 1955. This model identifies five stages of development (see Figure 17.3). The key characteristics of each stage are summarised in Table 17.1.

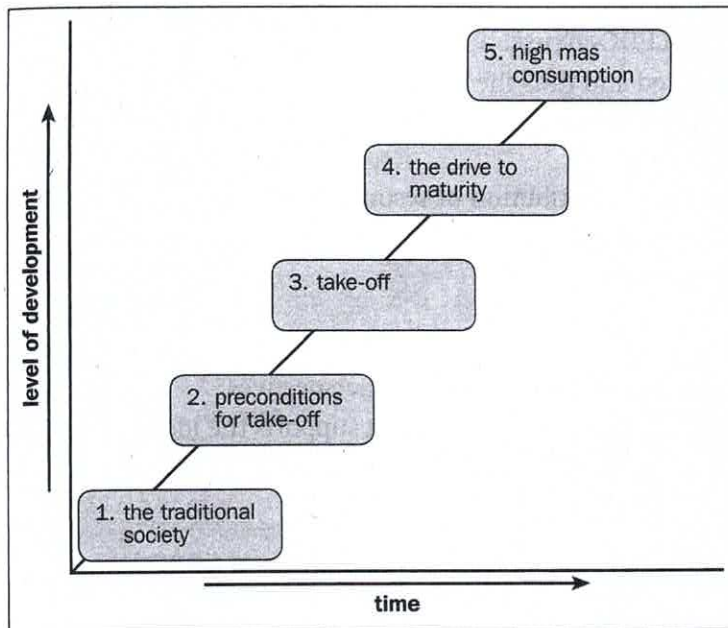


Figure 17.3 Rostow's model of economic growth

**capital** – refers to goods produced by human labour before it can be a factor of production

**colonialism** – the establishment, maintenance, acquisition and expansion of colonies in one territory by people from another territory

**Eurocentric** – the practice of viewing the world from a European perspective

**imperialism** – the creation of an unequal economic, cultural, and territorial relationship between countries or states usually based on domination (building an empire)

Traditional Society	Preconditions for take-off	Take-off	Drive to Maturity	Mass Consumption
<ul style="list-style-type: none"> <li>• Subsistence farming</li> <li>• Produce only enough to survive</li> <li>• Hunters and gatherers</li> <li>• Natural resources provided for their basic needs</li> <li>• Limited technology</li> <li>• Little capital for development</li> <li>• Move to bartering.</li> </ul>	<ul style="list-style-type: none"> <li>• Bartering</li> <li>• Exchange of goods for cash</li> <li>• Producing more for cash</li> <li>• Agriculture becomes commercialised and industrialised</li> <li>• Trade develops</li> <li>• Markets develop</li> <li>• Simple infrastructure such as roads and railways.</li> </ul>	<ul style="list-style-type: none"> <li>• Processing raw materials</li> <li>• Infrastructure develops</li> <li>• Industry confined to nodal points</li> <li>• Market expands</li> <li>• Exporting and importing.</li> </ul>	<ul style="list-style-type: none"> <li>• Spread of development (axes of development)</li> <li>• Various types of industries develop</li> <li>• Creates a multiplier effect*</li> <li>• Services are efficient</li> <li>• Market economy.</li> </ul>	<ul style="list-style-type: none"> <li>• Consumer markets</li> <li>• Mass production</li> <li>• Production line</li> <li>• Mass consumption</li> <li>• Greed</li> <li>• Waste</li> <li>• Huge growth of tertiary and service sectors.</li> </ul>

Table 17.1 Key characteristics of each stage of Rostow's model of economic growth

## Limitations of Rostow's model

- A key element of this model is the receipt of capital\*, most often from a MEDC. People in developing countries were led to believe that progress depended on capital.
- As a result, many African and Asian countries borrowed extensively, but a consequence for these developing countries has been the large build-up of national debt.
- The model is simplistic and represents economic development of western countries in the early twentieth century. Therefore, it is not an ideal model for LEDCs to use.
- The pre-conditions for growth are too generalised and thus the model becomes limited in its effectiveness.
- As this model relies on predictions, it means policy makers are unable to clearly identify stages as they merge together.
- This model does not take into account the uneven distribution of resources. Reference to Figure 16.2 will remind you of some of the areas in which this takes place.
- It assumes that all countries start at Stage 1.
- Debt-laden LEDCs struggle to move from Stage 2 to Stage 3.
- This is essentially an economic growth model and therefore does not address the issue of development in the wider context, such as from the social, political and environmental perspectives.
- The model ignores the influences of imperialism\* and colonisation\*, but supports the idea of capitalism\*.
- The model is Eurocentric\*.

**multiplier effect** – when an economic activity creates employment and a market which attracts further development

**core** – an area of concentration of economic development in Friedmann's model. This may be the most prosperous or developed region in a country

**periphery** – an area of low or declining economic development. This usually occurs further away from the core areas

### NOTE PAD

#### Limitations of Friedmann's core-periphery model

- Core\* regions grow at the expense of the peripheral regions
- Higher wages are earned in the core regions, while in the periphery\*, owing to lack of employment opportunities, wages are kept low.
- Areas decline due to exhaustion of resources because of industrial demand
- Uneven development occurs
- This model represents a capitalist model of development
- This model is essentially resource and economic driven and does not address the needs of an equal society
- The development gap between the poor and rich may widen.

## Friedmann's core-periphery model (1960s and 1970s)

In 1966 J Friedman put forward his model of economic development. This took into account the spatial context of a country's developing regions. His model progresses through four stages of development (see Figure 17.4). The key characteristics of each stage are summarised in Table 17.2. The model is useful as the principles can be applied to both a local and a global scale. We will look at how this is applied to a local scale.

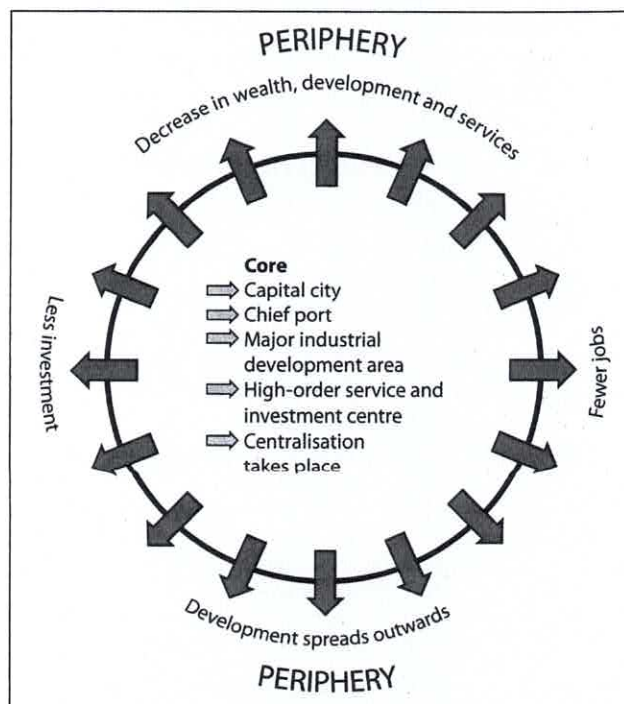


Figure 17.4 Friedmann's core-periphery model

Stage 1	Stage 2	Stage 3	Stage 4
<ul style="list-style-type: none"> <li>• A number of relatively independent local centres with no hierarchy*.</li> <li>• Each town is the centre of a sphere of influence*.</li> </ul>	<ul style="list-style-type: none"> <li>• A single strong core develops as a result of industrialisation.</li> <li>• Centralisation* takes place as labour and capital move to the core.</li> </ul>	<ul style="list-style-type: none"> <li>• Single national core with a number of peripheral sub-cores.</li> <li>• These sub-cores may develop because of natural resources or a large regional market.</li> </ul>	<ul style="list-style-type: none"> <li>• An independent system of cities, with a maximum growth potential for the whole country.</li> </ul>

Table 17.2 Friedmann's core-periphery model

**hierarchy** – the arrangement of features such as settlements in order of importance

**centralisation** – a natural phenomenon where concentrations of people and activities occur

**sphere of influence** – the area served by a central place

**SDI** – a Spatial Development Initiative or SDI is part of an economic strategy by government to unlock economic potential, encourage new investors and create jobs in selected corridors

**IDZ** – an industrial development zone which links nodes in a spatial development; to promote economic growth and job opportunities, (for example the Coega Development Zone and Pinetown Development Zone).

### NOTE PAD

Stamps often reflect the economic, environmental, social and political history of a country.



## ACTIVITY 17.2 A case study - comparing economic development in South Africa with reference to Rostow and Friedmann's economic models (Individual)

### Case Study 1

1820s	Traditional society up to 1820s
1821-1933	Development of the Cape until 1933 Infrastructure: roads and railways Discovery of minerals: diamonds in 1867 (Kimberley) Gold in 1886 (Johannesburg) Union of South Africa in 1910
1933-1945	Gold mining increased, ISCOR developed Foreign capital flowed into country, political stability
1946-1990	South Africa became more independent Isolated because of apartheid policies Manufacturing industry grew
1990s to present day	
1994	Dawn of a democratic society Creation of SDIs* and IDZs* - with the focus on job creation and industrial growth New sub-peripheral core regions developed
2010	South Africa hosts the Fifa World Cup Soccer and the first link of the Gautrain opens to the public



Figure 17.5 South Africa's timeline for economic development

1. a. What is the development gap? (2)
  - b. Why do you think it is important for a country like South Africa to close the gap? (2)
  2. Rostow developed a model of economic growth. Write down the stages of his model and link the facts in South Africa's timeline (Figure 17.5) for economic development to each of these stages. (10)
  3. Refer to the timeline in Figure 17.5.
    - a. Write a paragraph outlining the features which related to Friedmann's core-periphery model. (6)
    - b. Name 1 region which represents the core in South Africa. (2)
  4. In your opinion, which model best suits South Africa's growth and development? Justify your answer. (6)
- [28]**

Hand in your completed work for your teacher to assess.

### Sustainability models

The use of sustainability models developed in the 1990s to 2000s. These models reflected the economic, social and environmental elements of development and, as a result, the emphasis was on well-being, justice, human resources and environmental sustainability. A requirement of these models was that development addressed the basic needs of people, namely:

- water
- sanitation
- food
- shelter.

In Figure 17.6, we see how the economic, social and environments overlap. In order to reduce poverty, the areas of overlap must be addressed as they show where conflict and poverty may occur and where the environment becomes degraded.

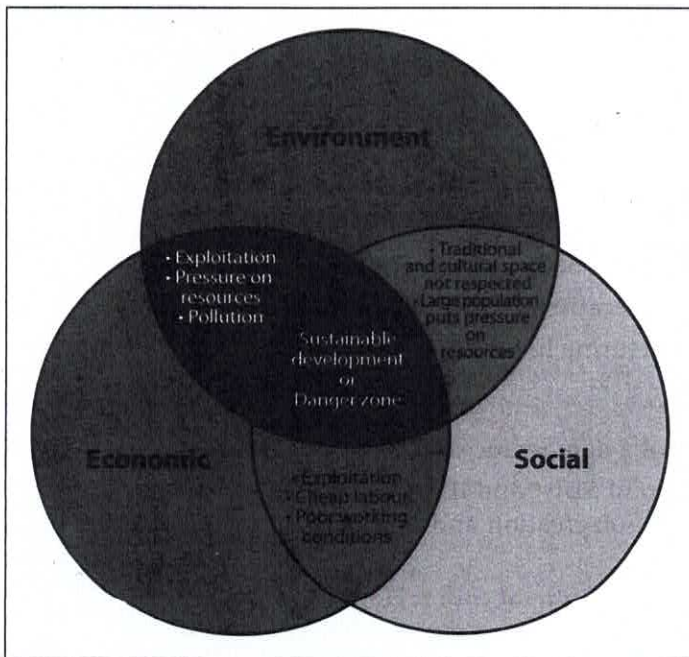


Figure 17.6 A model of sustainable development

## Community based development with reference to rural and urban development

### Rural development

#### Example: A rural sustainability commons\* project in the Eastern Cape

The project involved setting up a sustainability commons at a communal building in the village. The Three Crowns Primary School, in the rural area of Lady Frere within the Chris Hani District Municipality (CHDM), was selected as the first sustainability commons site 5 years ago.

The aim of the project is:

- to give communities home-based economies to assist in reducing poverty
- to generate energy which is an alternative to the electricity supplied
- to build sustainable communities that could be self-reliant
- to give the people in the rural sector a chance to learn through doing and sharing. Figure 17.7 shows how the model works.

In this project the partnership involves the Chris Hani District Municipality, the Development Bank of South Africa and the ESKOM Energy and Sustainability Programme in conjunction with WESSA (an environmental NGO\*).

The programme emphasises the use of appropriate renewable technologies\*, tools and learning to benefit the community and environment. A sustainability commons is set up at a communal building (space) in the village. The local community is supported and encouraged to use the renewable energy technologies and sustainable practices in their homes.



Photograph 17.4 The sustainability commons at Three Crowns Primary School

Source: [http://financialresults.co.za/2011/eskom\\_ar2011/eskom\\_foundation2011/flagship\\_sustainability.php](http://financialresults.co.za/2011/eskom_ar2011/eskom_foundation2011/flagship_sustainability.php)

**sustainability commons** – a space where ideas and technologies for sustainable development can be tested

**NGO** – non-governmental organisation

### NOTE PAD

#### Biogas digester and facultative pond

The overall purpose of the digester is to process waste into gas which is used in the kitchen for cooking. The anaerobic effluent from the digester is introduced into the pond. Carbon dioxide is available to support growth in the pond.

#### Green house and nursery

The green house is built by using two litre plastic bottles. This keeps the house warm when the day is cool and cool when it is hot. The nursery is inside the greenhouse.

#### Vermiculture

Vermiculture uses commercial worms. These worms produce a liquid which can be used as a fertiliser in the garden or flower beds.