GEOGRAPHY

Revision

Rural and urban settlements
STUDY OF SETTLEMENTS
What is a Settlement?

A grouping of:
- people
- buildings
- communication networks
- activities

Function as a single unified system on a daily basis
How are settlements classified according to size?

**RURAL**
- Isolated farmstead
- Hamlet
- Village

**URBAN**
- Town
- City
- Metropolis
- Conurbation
- Megalopolis

Via Afrika
How do you distinguish between urban and rural settlements?
## Why are dispersed settlements better from an economic point of view?

<table>
<thead>
<tr>
<th>NUCLEATED</th>
<th>DISPERSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings close together</td>
<td>Buildings widely separated</td>
</tr>
<tr>
<td>- LOOSE patches of land</td>
<td>- LARGE SINGLE farm</td>
</tr>
<tr>
<td>- FOREMAN manages</td>
<td>- Manages farm HIMSELF</td>
</tr>
<tr>
<td>- NO independent DECISIONS</td>
<td>- Independent DECISIONS</td>
</tr>
<tr>
<td>- Lives in VILLAGE</td>
<td>- Lives on FARM</td>
</tr>
<tr>
<td>- Lots of TRAVELLING</td>
<td>- No TRAVELLING</td>
</tr>
<tr>
<td>- MEGANIZATION difficult</td>
<td>- MEGANIZATION easy</td>
</tr>
</tbody>
</table>
RURAL SETTLEMENT
Factors influencing site

- Water
- Fertile soil
- Fuel
- Building material
- Face the sun (aspect)

- Woodland gives fuel and building material
- Hilltop makes good defensive site
- Water from river
- Dry sites above marshy land
- Fertile soil
- Good grass for cattle farming
- Meeting place of roads

Via Afrika
<table>
<thead>
<tr>
<th>SHAPE</th>
<th>ROUND</th>
<th>CROSSROAD</th>
<th>LINEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Around central point</td>
<td>Where roads cross</td>
<td>Along road or river</td>
</tr>
</tbody>
</table>
What do you remember?

1. What is the pattern of the settlements at D and A?
2. What is the shape of the settlements at B and D?
3. Explain the factor that influenced the shape at B and D.
4. State and explain the climatic factor responsible for the location of settlement C.
Increase in urban population (red columns)

Decrease in % rural share (blue line)

Why?
Rural Depopulation

RURAL-URBAN MIGRATION:
Movement from rural to urban areas

WHAT CAN BE DONE?
• Advertise town
• Recreation
• Tourism
• Restore buildings
• Rural schools
• Cheap Indus sites

CONSEQUENCES
• Empty farmhouses
• Crime (Farm murders)
• Unemployment
• Few new investments
• Many old people
• Few young men
• Low value of properties
• Shops close
• Empty schools
• Services below standard

FACTORS

PULL FACTORS
• Better jobs
• Salaries
• Education
• Medical fac.
• Bright lights

PUSH FACTORS
• Mechanization
• Low salaries
• Droughts
• Crime
• Unemployment

FORCE FACTORS
• People to the cities
• People to the cities
LAND REFORM

Injustices of Apartheid where people were forcibly removed from their land are addressed

LAND RESTITUTION
To return land to its original owners. It compensates those who lost land during apartheid years.

LAND REDISTRIBUTION
Government buys land and makes it available to the previously disadvantaged people.

LAND TENURE REFORM
To secure the rights of those living on land owned by others. Are protected from eviction.
URBAN SETTLEMENT
Cape Town was established as a Dutch settlement in 1652. The harbour, available fresh water, mild climate, and well-drained land allowed farming to provide provisions to passing ships.

<table>
<thead>
<tr>
<th>PHYSICAL FACTORS</th>
<th>SOCIAL FACTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh water</td>
<td>Transport routes</td>
</tr>
<tr>
<td>Underlying rock</td>
<td>Bridging points rivers</td>
</tr>
<tr>
<td>Relief</td>
<td>Harbours</td>
</tr>
<tr>
<td>Drainage</td>
<td>Defensibility</td>
</tr>
<tr>
<td>Aspect of slope</td>
<td>Building materials</td>
</tr>
<tr>
<td>Resources</td>
<td>Food supply</td>
</tr>
</tbody>
</table>

Cape Town was established as a Dutch settlement in 1652. The harbour, available fresh water, mild climate, and well-drained land allowed farming to provide provisions to passing ships.
1. CENTRAL PLACES

Supplies urban goods and services to surrounding rural areas

**Lower order goods and services**
- Need often (bread, milk, doctor)
- Smaller threshold population.
- Several shops/services

**Higher order goods and services**
- Need less often (health spa)
- Larger threshold population
- Less shops/services

2. TRADE/TRANSPORT TOWNS OR CITIES

Develop where transport routes meet

**Break of bulk**
- Transport change:
  - eg from sea to land
  - Cape Town

**Junction**
- Intersection of two main transport routes.
  - De Aar

**Gap**
- Pont of access at physical barrier (mountain pass)
  - Worcester

3. SPECIALISED TOWNS OR CITIES

Develop because of one main function in the area

**Mining**
- Welkom

**Education**
- Stellenbosch

**Industrial**
- Secunda

**Resort**
- Margate

**Commuter**
- Soweto
Classify each of the urban settlements A-F on the diagram according to their function.
**URBAN HIERARCHIES**

**URBAN HIERARCHY**
The ranking of urban areas according to the criteria of size, number of functions and the degree of specialisation of the functions.

**CENTRAL PLACE**
A town that supplies urban functions to the surrounding rural area.

**SPHERE OF INFLUENCE**
The area served by a central place.

**THRESHOLD POPULATION**
The number of people a function must serve to be profitable.

**RANGE OF GOODS**
The maximum distance that people are prepared to travel to obtain goods or a service.

**CONCEPTS**

- Conurbations
- Large Cities
- City
- Town
- Small Town
- Village
- Hamlet
- Isolated Farmhouse

The population of each type of settlement increases as the number of settlements of that type decreases.
<table>
<thead>
<tr>
<th></th>
<th>Low order functions and services</th>
<th>High order functions and services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition</strong></td>
<td>A function or goods you need to buy often</td>
<td>A function/goods not needed regularly</td>
</tr>
<tr>
<td><strong>Functions/services</strong></td>
<td>Less specialised</td>
<td>Highly specialised</td>
</tr>
<tr>
<td><strong>Threshold population</strong></td>
<td>Smaller number of people</td>
<td>Larger number of people</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>Small</td>
<td>Large</td>
</tr>
<tr>
<td><strong>Sphere of influence</strong></td>
<td>Small</td>
<td>Large</td>
</tr>
<tr>
<td><strong>Distance travelled</strong></td>
<td>Near</td>
<td>Far</td>
</tr>
<tr>
<td><strong>Number of shops or services</strong></td>
<td>Many – needed on a regular basis</td>
<td>Few – not needed very often</td>
</tr>
<tr>
<td><strong>Examples</strong></td>
<td>Bread, milk, petrol station, bottle store, doctors, mechanics</td>
<td>Lounge suites, cars, computer hardware, health spas, specialist doctors</td>
</tr>
</tbody>
</table>
• More lower order centres.
• Few higher order centres
• Position of settlement determined by number of functions and not the size of the population.
URBAN STRUCTURE AND PATTERNS
LINIAR SHAPE
## Street Patterns

<table>
<thead>
<tr>
<th>Name</th>
<th>Gridiron/Rectangular</th>
<th>Radial</th>
<th>Irregular</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics</td>
<td>Roads intersect at right angles</td>
<td>Roads radiate outwards from central point like spider’s web</td>
<td>No clear structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Can be planned or unplanned</td>
</tr>
<tr>
<td>Advantages</td>
<td>Easy to plan</td>
<td>Easier flow of traffic</td>
<td>Improves traffic flow</td>
</tr>
<tr>
<td></td>
<td>Land divided easily</td>
<td>All roads lead to central point</td>
<td>Fewer intersections</td>
</tr>
<tr>
<td></td>
<td>Easy to find way</td>
<td></td>
<td>Accommodates topography</td>
</tr>
<tr>
<td>Disadvantages</td>
<td>Traffic congestion</td>
<td>Traffic jams</td>
<td>Difficult to plan</td>
</tr>
<tr>
<td></td>
<td>Monotonous</td>
<td>Traffic is slow</td>
<td>Easy to get lost</td>
</tr>
<tr>
<td></td>
<td>Accidents</td>
<td>Wasted space</td>
<td>Not easy to expand or subdivide</td>
</tr>
</tbody>
</table>

**STREET PATTERNS**
STREET PATTERNS

GRID PATTERN
- On Gentle slopes
- Older

IRREGULAR PATTERN
- On Steeper slopes

NB ADVANTAGES AND DISADVANTAGES
Urban Profile

The view of an urban area from the side

Urban profile takes note of:
• The height of the buildings
• The density of the buildings
• Land value
Why does the height and density of the buildings decrease as you move further away from the city centre?

- Cheaper land
- Lower density of buildings
- Horizontal buildings
- Industries
- Residential

- Land very expensive
- Competition
- High density of buildings
- Vertical buildings
- Offices
- Commercial
LAND
USE
ZONES

CBD

Industrial

Residential

Commercial

Zone of decay

Rural-urban fringe
### Land-use zones

**CBD**

<table>
<thead>
<tr>
<th>Where?</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Most accessible</td>
<td>• Highest land values</td>
</tr>
<tr>
<td>• Where transport routes meet</td>
<td>• Highest building density</td>
</tr>
<tr>
<td>• In the city centre</td>
<td>• Tallest buildings</td>
</tr>
<tr>
<td></td>
<td>• Concentration of shops and offices</td>
</tr>
<tr>
<td></td>
<td>• High-order commercial functions</td>
</tr>
<tr>
<td>Land use zone</td>
<td>Where?</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>(a) Light</td>
<td>• Often near CBD or residential areas &lt;br&gt; • In planned industrial</td>
</tr>
<tr>
<td>industry</td>
<td>estates &lt;br&gt; • Near road transport</td>
</tr>
<tr>
<td>(b) Heavy</td>
<td>• On outskirts of the city on cheap land &lt;br&gt; • Near major road and</td>
</tr>
<tr>
<td>industry</td>
<td>rail networks &lt;br&gt; • On flat land &lt;br&gt; • Near water source</td>
</tr>
</tbody>
</table>
Discuss the factors that influenced the location of industries in Paarl?
<table>
<thead>
<tr>
<th>Land use zone</th>
<th>Where?</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Middle to high income</td>
<td>• Found away from CBD</td>
<td>• Larger properties</td>
</tr>
<tr>
<td></td>
<td>• Good view</td>
<td>• Good services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Recreational areas</td>
</tr>
<tr>
<td>(b) Low income</td>
<td>• Closer to CBD</td>
<td>• Houses close together</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Fewer facilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Poor services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Smaller properties</td>
</tr>
<tr>
<td>(c) Informal settlement</td>
<td>• On the city outskirts</td>
<td>• Houses built out of plastic, wood, zinc</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Unhealthy conditions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No service delivery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Poverty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Crime</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• NB also positive characteristics</td>
</tr>
</tbody>
</table>
Land-use zones COMMERCIAL

CBD the commercial heart of the city

Decentralised to shopping malls like Canal Walk
<table>
<thead>
<tr>
<th>Land use zone</th>
<th>Where?</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone of decay (Transition zone)</td>
<td>• Just outside the CBD</td>
<td>• Mixed functions (residential, commercial, light industry)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Decayed buildings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Renewal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Valuable land</td>
</tr>
</tbody>
</table>

**HOW MANAGED?**
- Renovation
- Renewal
- Reduce housing density
ZONE OF DECAY

- Residential
- Commercial
- Old buildings
- Mixed functions
- Renewal
- Industrial park
- Industries
Land use zones

RURAL-URBAN FRINGE

<table>
<thead>
<tr>
<th>Land use zone</th>
<th>Where?</th>
<th>Characteristics</th>
</tr>
</thead>
</table>
| Rural-urban fringe          | • On edge of urban area | • Urban functions invade rural area  
• Both Urban and rural functions  
• Large properties because of cheaper land  
• Plots and small holdings  
• Airports, cemeteries, power stations, golf courses, sewage works |
RURAL-URBAN FRINGE OF PAARL

URBAN

Cemetery
Power station
Small holdings
National road

RURAL

Paarl Mall
Golf course

NB -Where?
-Functions
Residential CBD Commercial
Rural-urban fringe
Industries
Zone of decay
CBD
Commercial
This street pattern is a major cause of traffic congestion.

TRUE

FALSE
The CBD will be found at ....
Not found in the rural urban fringe
Statement: The buildings are at its highest and most dense in the city centre.

Reason: The value of the land increases as you move further away from the city centre.

Choose from the following:
A  The statement as well as the reason is correct.
B  The statement as well as the reason is incorrect.
C  The statement is correct, but the reason is incorrect.
D  The statement is incorrect, but the reason is correct.
Models of urban structure

Concentric zone

Concentric rings around the CBD

Multiple-nuclei

Centres (nuclei) around which activities grow

Sector

Sectors radiating from the city centre
URBAN SETTLEMENT ISSUES
## URBAN SETTLEMENT ISSUES

<table>
<thead>
<tr>
<th>CONGESTION</th>
<th>URBAN DECAY</th>
<th>OVERCROWDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too many cars on the road</td>
<td>Where part of the city or are over-used</td>
<td>Too many people moving into the city</td>
</tr>
</tbody>
</table>

### CAUSES

<table>
<thead>
<tr>
<th>CONGESTION</th>
<th>URBAN DECAY</th>
<th>OVERCROWDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Too many people using own cars</td>
<td>• Too many people living in the city</td>
<td>• High demand for land in city</td>
</tr>
<tr>
<td>• Not enough public transport</td>
<td>• Empty buildings</td>
<td>• Too many people living in the city</td>
</tr>
<tr>
<td>• Old street pattern</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### EFFECTS

<table>
<thead>
<tr>
<th>CONGESTION</th>
<th>URBAN DECAY</th>
<th>OVERCROWDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Air pollution</td>
<td>• Slums develop</td>
<td>• Increased pollution</td>
</tr>
<tr>
<td>• More accidents</td>
<td>• Services decline</td>
<td>• Health problems</td>
</tr>
<tr>
<td>• Stress, health problems road rage</td>
<td>• Increased pollution</td>
<td>• Destruction of environment</td>
</tr>
<tr>
<td></td>
<td>• Area becomes dirty</td>
<td>• Production of too much waste</td>
</tr>
</tbody>
</table>

### SOLUTIONS

<table>
<thead>
<tr>
<th>CONGESTION</th>
<th>URBAN DECAY</th>
<th>OVERCROWDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Improve public transport</td>
<td>• Renovation</td>
<td>• Decentralisation of functions</td>
</tr>
<tr>
<td>• Lift schemes</td>
<td>• Renewal</td>
<td>• Green belts</td>
</tr>
<tr>
<td>• Decentralisation of businesses</td>
<td>• Reduce housing density</td>
<td>• Stricter control of pollution</td>
</tr>
<tr>
<td>• Synchronise traffic lights</td>
<td>• Improve services</td>
<td></td>
</tr>
</tbody>
</table>
Informal Settlements

What is it?
Sometimes illegal settlement of make-shift dwellings made from scrap materials.

Where is it?
On the edge of cities. Some can be up to 30 km away from the CBD.

Problems
- Lack of infrastructure
- No proper sanitation, clean water, electricity, refuse removal.
- Lack of amenities.
- Fire
- High population density

NB How managed?