GEOGRAPHY

REVISION

GUIDE

GRADE 12

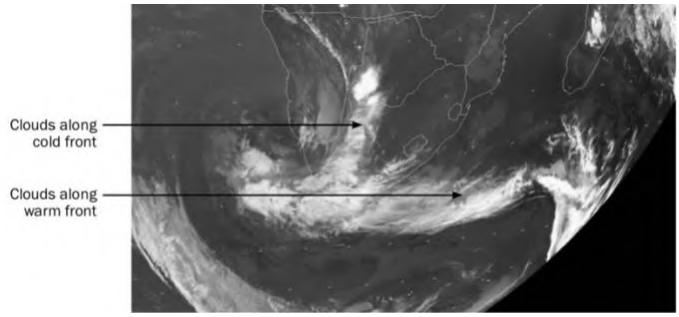
Module 1

Climate & Weather

1. Mid-latitude Cyclones

Origin:
- Polar front (60° N/S)
- Cold polar easterlies meet warm westerlies and move parallel but do not mix.

Alternate names:
- Extra tropical cyclone
- frontal depression
- temperate cyclone

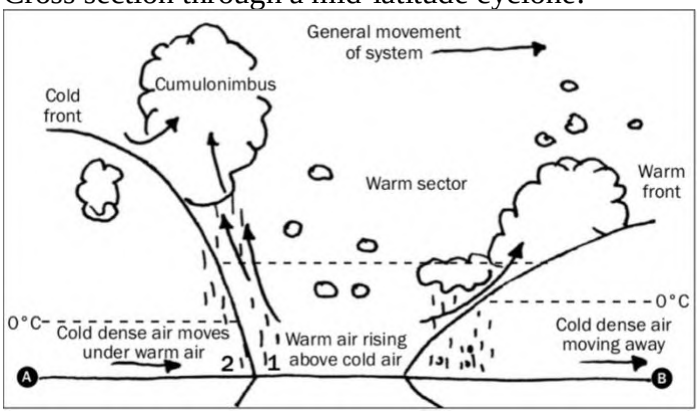


General characteristics:
- Forms between 30°-60° N/S
- Moves eastward
- Has two fronts (warm and cold)
- Large diameter
- Lasts between 4-14 days
- Steered by westerlies
- Affects SA in winter

Conditions for formation:
- Frictional drag caused by difference in temperature and speed of the two air masses.
- Air masses must move opposite to each other and parallel.
- Warm subtropical air must meet cold polar air at the polar front.

Stages in formation:
- Initial:
  - Cold polar air and warm tropical air move parallel to each other but in opposite directions at the polar front.
- Wave formation:
  - Frictional drag takes place.
  - Warm air becomes uplifted.
  - Fronts begin to form as air converges to the centre low pressure.
- Mature:
  - Wave deepens.
  - Cold and warm sectors and fronts fully developed.
  - Warm air moves up steep pressure gradient of cold front to form towering cumulonimbus clouds. (heavy rain over a small area)
  - Warm air moves up gentle pressure gradient of warm front to form a broad band of stratus clouds. (light rain over a large area)
- Occlusion:
  - Cold front catches up to the warm front at the apex. (apex is the shortest distance between the fronts)
  - *Cold front occlusion:* warm air moves up the cold front. (cold front on the ground)
  - *Warm front occlusion:* cold air moves up the warm front. (warm front on the ground)

Cross section through a mid-latitude cyclone:



Weather associated with Mid-latitude cyclones:

- Cold front weather:
  - Low air temperature
  - Thunderstorms and hail
  - Rise in air pressure
  - Low humidity
- Warm front weather:
  - Rising air temperature
  - Soft rains
  - Drop in air pressure
  - High humidity

Cyclone families:

- Mid-latitude cyclones form in groups.
- Up to 5 can pass through a certain area in quick succession.

Impact of mid-latitude cyclones:

- Rain:
  - ✓ Water for vineyards and deciduous fruits
  - × Flooding
- Snow:
  - ✓ Tourist attraction
  - × Crop damage
- Storms:
  - × A threat to fishermen at sea

Precautionary and management strategies:

- Build high
- Efficient drainage systems
- Enclose livestock
- Sufficient grain
- Update weather systems
- Secure boats

2. Tropical Cyclones

Origin:
- Warm oceans
- Between 5°-25° N/S where the Coriolis force is strong enough to form a vortex.

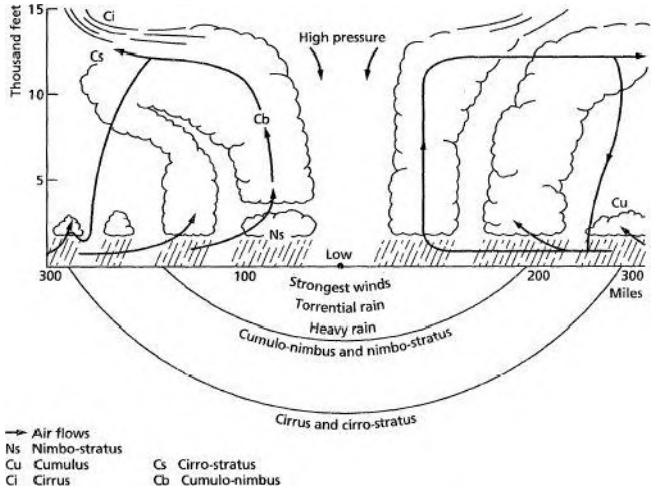
Alternate names:
- Hurricanes
- Willy Willies
- Typhoons
- Cyclones

General Characteristics:
- Shown by circular isobars enclosing intense low pressure
- Moves westwards
- Steered by tropical easterlies
- Diameter: 300-500 km
- Follows erratic paths; unpredictable

Conditions for formation:
- Temperature above 27°C (For high evaporation)
- Warm air rising; unstable atmospheric conditions (For convection)
- Latitude between 5°-25° N/S (Coriolis force is strong)
- Calm conditions (Wind will not allow vortex to form
- Upper air divergence (To maintain LP centre)

Stages in formation:
- Initial
  - Centre pressure above 1000 mb
  - Isobars far apart
  - Gale force winds
  - Cirrus and cumulous clouds
- Immature
  - Pressure drops below 1000 mb
  - Eye forms
  - Wind reaches hurricane strength
  - Diameter ±100 km
  - Cumulonimbus clouds around the eye
- Mature
  - Centre pressure well below 1000 mb
  - Isobars very close together
  - Diameter between 300-500 km
  - *Dangerous semicircle:* effects of intense winds combine with force of cyclone moving forward (bottom left).
- Dissipating
  - Centre pressure rises above 1000 mb
  - Occurs when cyclone: Encounters land
    Moves over cold oceans

Cross section through a tropical cyclone:



Weather associated with tropical cyclones:

- As storm approaches:
  - Cumulous clouds
  - rain
  - windy
  - cumulonimbus clouds
  - dangerous semicircle: torrential rain and hurricane winds
- Eye:
  - Calm
  - Cool
  - Clear

Impact of tropical cyclones:

- Flooding
- Storm surges
- Crop losses
- Transport disrupted
- Silt in dams
- Ecosystems disrupted

Precautionary and management strategies:

- Stock up water and canned food
- Keep first aid kit
- Keep livestock on higher ground
- Sandbags on river banks
- Evacuation plans
- Early warning systems

3. Factors influencing the weather of South Africa

Influence of the plateau

During summer:

- Kalahari high is weakly developed
- Subsidence is low
- Inversion layer forms above the escarpment
- Moist air ridging in from over the Indian ocean is carried over the plateau
- Cloud formation occurs
- Widespread rain

During winter:

- Kalahari high is well developed
- Subsidence is high
- Inversion layer forms below the escarpment
- Moist air ridging in from over the Indian ocean is prevented from reaching the plateau
- Clear weather

Influence of the oceans

Warm Mozambique current:

- East coast
- Raises temperatures
- High rainfall

Cold Benguella current:

- Decreases temperatures
- Dry weather

4. High pressure systems over South Africa

South Atlantic High

- West coast
- Dry, clear, stable weather conditions
- Winds that diverge are dry over the cold ocean
- Fog and mist produced

Ridging of SAH:

- In summer
- Diverts moist air from Indian Ocean onto the land
- Rain on south east coast and eastern plateau

South Indian High

- East coast
- Brings rainfall in summer
- If it lies in the path of a mid-latitude cyclone, SIH is known as blocking high

Kalahari High

- On the interior
- Dominates land in winter
- Interacts with SIH to influence climate of SA differently in summer and winter

Resultant weather of high pressure cells
Moisture front: a zone between two air masses with different moisture content.
Line thunderstorms:
- Forms over the interior
- Cold air mass over the Atlantic Ocean meets the warm air mass over the Indian Ocean but does not mix.
- Cold, dry air sinks below the warm moist air
- Cumulonimbus cloud formation occurs
- Flash floods occur on the right of the front

Impact of line thunderstorms:
- Torrential rain causes damage
- Soil erosion
- Gale force winds destroy infrastructure
- Fills dams

5. Low pressure systems over South Africa

Thermal low
- Occurs in summer
- Causes convective thunderstorms over the interior
- Usually more than one over the interior

Cut-off low
- Ridging of SAH and SIH prevents the mid-latitude cyclone from moving east
- Cold front is cut off from the cyclone and extends over the land.
- Moist air is then drawn onto the land resulting in rainfall for several days

Resultant weather of low pressure cells
Berg winds:
- Hot gusty winds that blow from interior to coast
- Air moves from Kalahari high to coastal low
- Diverging air warms at DALR

Effects of berg winds:
- Forest fires
- Livestock death
- Lethargic workers
- Respiratory problems

6. Synoptic weather maps

Isobaric patterns
Ridge- high pressure
Trough- low pressure
Saddle- between two high pressures or two low pressures

Weather stations
wind speed and direction
temperature (air and dew point)
precipitation and cloud cover

7. Valley climate

Slope aspect:
- The direction in which a slope faces
- Slopes facing the equator are warmer since they receive direct sunlight
- Shadow zones do not receive sunlight due to blocking relief

Influence of aspect:
- Economic:
  - Pole-facing slopes for forestry
  - Equator-facing slopes for fruit farming
  - Pole-facing for citrus fruit farming
- Settlement:
  - Warmer north facing slopes have higher value
  - Middle of slopes usually used
- Vegetation:
  - South facing- cool and moist- densely vegetated
  - North facing- warm and dry- sparsely vegetated

Katabatic winds:
- Downslope movement of air in a valley
- Occur at night
- Cold air sinks to the bottom and warm air is pushed up
- Results in temperature inversion within the valley
- Zone of accumulated warm air- *thermal belt*
- When valley air cools to below dew point temperature- *radiation fog* is formed
- Influence on:
  - *Farming*:
    - → citrus farms on valley floor for maturation of fruit and insect resistance
    - → deciduous fruit planted on middle slope (warm), ideal for ripening
    - → frost resistant crops on valley floor
  - *Settlement*:
    - → Land value at middle slope is high since it is located within the thermal belt
    - → Land value on valley floor is low since winds trap pollutants here
  - *Transport*:
    - → Fog may reduce driver visibility which increases the chance of vehicular accidents

Anabatic winds:
- Upslope winds
- Occurs during the day when slopes are heated causing warm air to rise
- Significance: smoke released during the day is carried away by anabatic winds

8. Urban climate

Reasons for differences between urban and rural climates:

- Cloud cover:
  - More in **urban** area
  - Pollutants act as condensation nuclei
- Precipitation:
  - More in **urban** area
  - More clouds result in more rainfall
- Humidity:
  - More in **rural** area
  - More vegetation and water bodies (surface water) encourages evaporation
- Wind speed:
  - Higher in **rural** area
  - In urban areas, tall buildings obstruct air flow
- Temperature:
  - Higher in **urban** area
  - **H**igher population- more use of geysers, stoves, heaters and more carbon dioxide
  - **A**rtificial substances- concrete and metal absorbs heat and glass reflects heat
  - **G**eometric shapes of buildings- reflects and absorbs heat
  - **U**rban activities- generates heat and pollution
  - **B**uilding density- less air flow to distribute heat
  - **E**fficient drainage- less surface water for evaporation (atmosphere remains hot)

Heat island:

- Occurs during the day
- Region of higher temperature in an urban area surrounded by lower temperatures in rural areas
- *Isotherms*: lines joining places with the same temperature
- Factors influencing heat islands:
  - Decentralisation
  - Clusters of tall buildings
  - Rivers and dams

Pollution dome:

- dominant at night
- subsiding cold air traps pollutants and compresses it over the city
- strongly developed in winter months
- can be dispersed by strong winds

Effects of heat island and pollution dome:

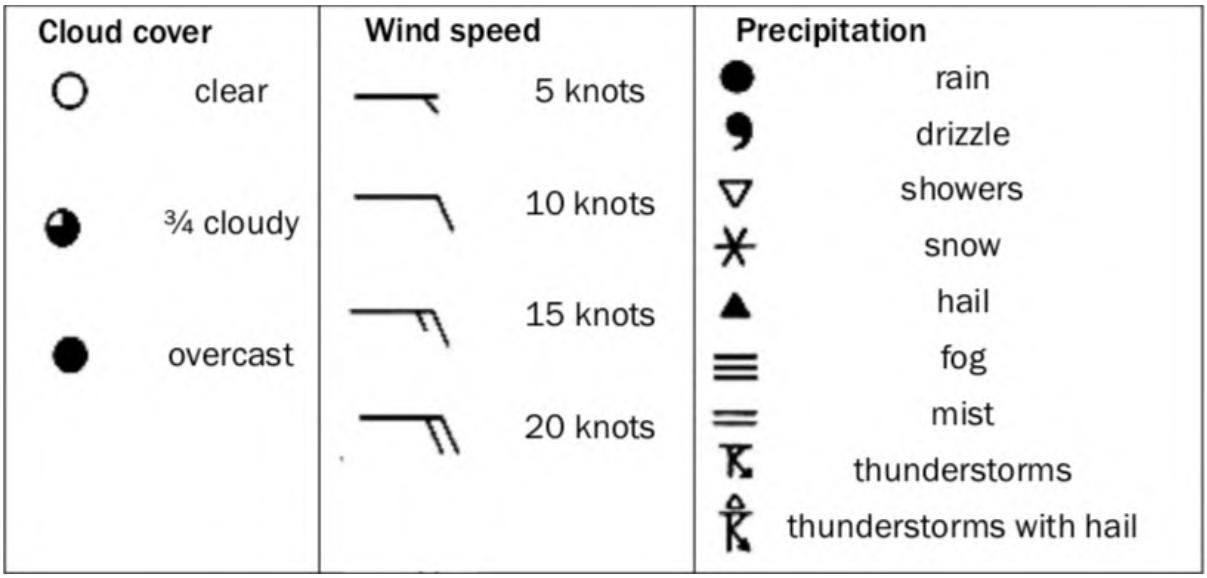
- **S**mog and fog
- **V**isibility reduced
- **A**cid rain
- **Q**uality of life reduced
- **R**espiratory problems
- **G**lobal warming

Strategies to reduce the effects of heat island and pollution dome:

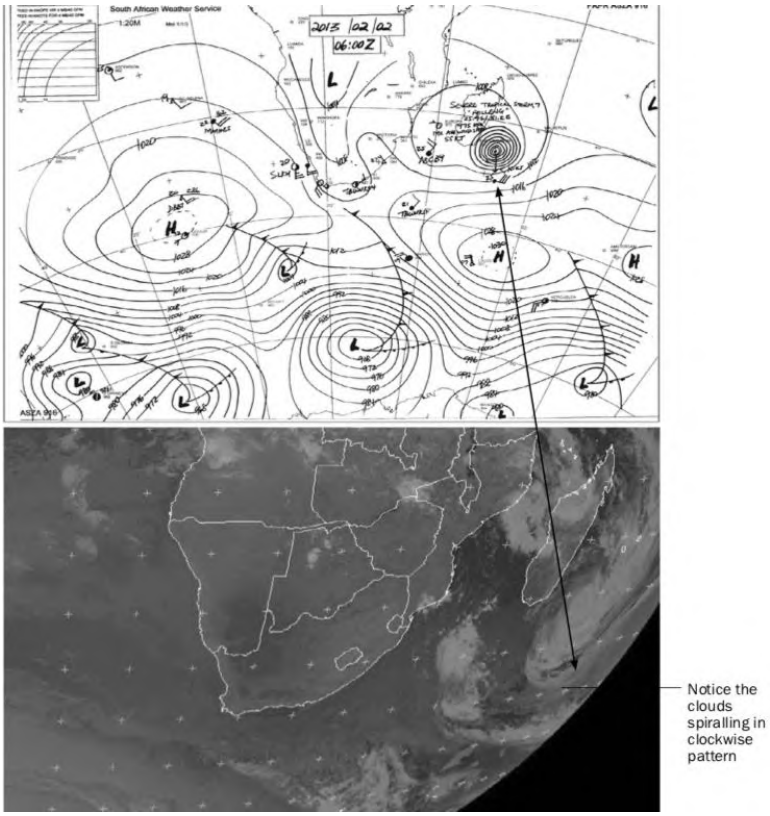
- **P**lant trees
- **R**ooftop gardens
- **R**eflective paints
- **D**ecentralisation

9. Interpretation of synoptic weather maps

Weather symbols:



Comparison between synoptic weather map and satellite image:



Module 2

Geomorphology

1. Drainage systems in South Africa

Concepts:

- **Drainage basin**: area drained by a river and its tributaries
- **Catchment area**: upper reaches of a drainage basin which supplies a river with water
- **River system**: the main river and its tributaries

- **Tributary**: smaller streams that join the main river
- **Confluence**: point where two or more rivers join
- **Watershed**: high lying area separating two different drainage basins
- **Interfluve**: land that separates streams in the same drainage basin
- **Source**: starting point of a river
- **River mouth**: point where the river enters the sea
- **Surface runoff**: water that flows on the surface after it rains
- **Ground water**: water found *within* the earth's surface
- **Water table**: the *upper limit* of water that is found underground

Types of rivers:

- Permanent (perennial)
  - Flows all year
  - Associated with high rainfall areas
- Periodic (seasonal)
  - Flows only in rainy season
  - Associated with semiarid and arid areas
- Episodic
  - Flows only after heavy rain
  - Lasts for a few hours
- Exotic
  - Originates in high rainfall area but flows through dry areas

Stream ordering:

- Fingertip streams are stream order 1
- Confluence of two stream order 1 streams results in stream order 2
- Confluence of two stream order 2 streams results in stream order 3
- The system continues until the main stream is reached
- When a lower order stream meets a higher order stream, the resultant stream is the same as the higher order stream

Types of drainage patterns:

- Dendritic
  - Resembles branches of tree; tributaries join at acute angles
  - Uniform erosion of horizontal sedimentary and massive igneous rocks
- Rectangular
  - Main stream has 90° bends and tributaries join at 90°
  - Forms on igneous rock that has many joints and faulted sedimentary rock
- Radial centrifugal
  - River flows away from a central point
  - Forms over domes or volcanoes and is associated with massive igneous rock
- Radial centripetal
  - River flows towards a central point
  - Associated with massive igneous rocks
- Deranged
  - Haphazard pattern with many lakes
  - Forms over geologically young areas
- Trellis
  - Main streams are parallel and short tributaries join at 90°
  - Forms on rocks that have varying resistance to erosion
  - Associated with alternating hard and soft sedimentary rock
  - Found in mountainous areas
- Parallel
  - Tributary streams stretch out as if parallel
  - Occurs in areas of major faults and steeply folded bedrock

Drainage density:

- A measure of the total length of streams per unit area.

Factors affecting drainage density:

- **Vegetation**- more vegetation → lower drainage density
- **Amount of rainfall**- more rainfall → higher drainage density
- **Gradient**- steeper gradient → higher drainage density
- **Soil moisture**- higher soil moisture → higher drainage density
- **Porosity**- higher rock porosity → lower drainage density
- **Permeability**- higher rock permeability → lower drainage density

River discharge

- *Downslope flow of water in a river due to gravity*
- Laminar flow:
  - No obstacles
  - Low rate of erosion
  - Riverbed even
- Turbulent flow:
  - High rate of erosion
  - Obstacles present
  - Uneven riverbed
- Removal of vegetation, concreting and tarring of surfaces and dams influence stream flow

2. Fluvial processes

A: River profiles

Cross profile:
- Bank to bank
- Shows depth and width of river

Longitudinal profile:
- From source to mouth
- Shows gradient and length

Relationship of profiles with stages of river and characteristics:
- Upper course:
  - V- shaped valley
  - Turbulent flow
  - Low volume
  - Vertical erosion
  - Waterfalls and rapids
- Middle course:
  - Open V-shape (gentler slopes)
  - Less turbulent, becoming laminar
  - Volume and load increases
  - More lateral erosion
  - River begins to meander
- Lower course:
  - U- shape valley
  - Laminar flow
  - Large volume
  - Lateral erosion
  - Meanders, oxbow lakes, floodplains, braided streams, levees

B: River grading

Graded profile:
- Smooth concave profile
- Rate of erosion and deposition are equal
- Laminar flow

Ungraded profile:
- Has many obstacles
- Young river
- Turbulent flow

Base levels of erosion:
- Temporary: features that prevent a river from further vertical erosion
- Permanent: the lowest level to which a river can erode (sea level)

C: River rejuvenation

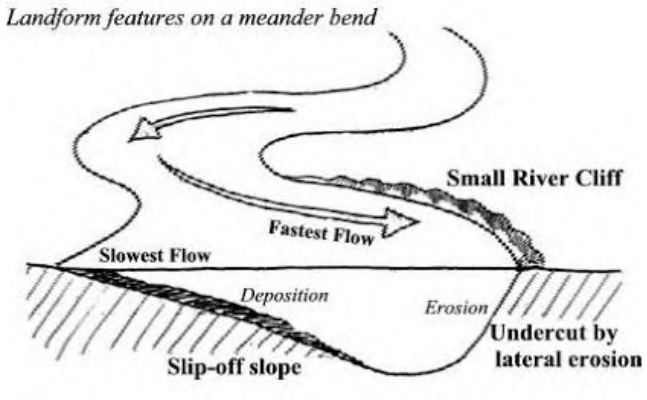
The process whereby a river which has reached a base level, regains energy and begins to erode vertically once again

Reasons for rejuvenation:
- Uplift of land
- Increase in volume of water by river capture or high rainfall
- Drop in sea level

Features of rejuvenation
- Knick point: A sharp change in slope of a river
- Terraces: old valley floor forms a terrace on either side of the river due to down cutting
- Valley in a valley: new valley is carved into old valley
- Entrenched meander: meander formed that cut a deep valley into the bedrock

D: Fluvial landforms

Meander:
- Lower course
- A curve or bend along the course of a river
- Outer bank → undercut slope → rapid water flow → high rate of erosion → concave
- Inner bank→slip-off slope→slower moving water→ high rate of deposition→ convex



Ox-bow lake:
- Form from meanders
- Meander neck becomes narrow over time
- During periods of high rainfall, water flows straight, avoiding the meander
- *Meander scar:* dried up ox-bow lake due to no water supply

Braided stream:
- Seasonal river with abundant bed-load deposited in the lower course
- Gentle gradient and decreased river flow forces deposition of sand islands
- Sand islands obstruct the river's own path and branches into *distributaries*

Flood plain:
- Flat land on banks of river made up of layers of silt

Natural levees:
- Forms on riverbanks subjected to repeated flooding
- After water recedes, a raised bank is left behind (higher than flood plain)
- *Yazoo streams:* tributaries that cannot join the main river due to the obstruction of levees

Waterfalls:
- Upper course of river
- Hard rock overlies soft rock
- Plunge pool forms base of waterfall

Rapids:
- Sections of turbulent water
- Upper course
- Alternating hard and soft rock causes riverbed to become uneven resulting in turbulent flow

Delta:
- River enters the sea and deposits its load
- Sediments are kept in suspension in fresh water but flocculate in salt water
- Conditions for formation:
  - Weak ocean currents
  - Large amounts of sediment
  - Shallow river mouth

Use of landforms:
- Flood plain:
  - Fertile soil for farming
  - Flat land allows for use of machinery
  - Good water supply for farming
- Waterfalls:
  - Tourist attraction
  - Generation of hydroelectric power
- Rapids:
  - Tourist attraction
- Delta:
  - Fertile land for farming
  - Fishing
  - Drinking water
  - Domestic use of water
  - Tourist attraction
  - Transport

Disadvantages of landforms:
- Floodplain: difficult for construction
- Waterfalls and rapids: dangerous due to fast flowing water
- Deltas:
  - Water is dirty and polluted and attracts mosquitoes
  - Vulnerable to see levels

E: River Capture

- Abstraction:
  - process whereby watershed changes its position due to uneven steepness on either side.
- River capture:
  - one river captures the headwater of another river thereby increasing the size of its own drainage basin.

Features:
- Captor stream:
  - River that has captured the headwater of another river
- Captured stream:
  - River that has its water diverted into another river
- Misfit stream:
  - Stream that has too little water for the valley in which it flows
- Elbow of capture:
  - Right angle bend indicating the point where one river captures the water of another
- Wind gap:
  - Dry river valley found immediately after the elbow of capture

Conditions for river capture:
- Difference in gradients of rivers
- One river must receive higher rainfall
- One river must flow down softer rock

Impact of river capture:
- Captor stream:
  - Drainage basin increases
  - Volume increases
  - Flows faster
  - Erosive ability increases
  - River could be rejuvenated
- Captured stream: opposite to captor stream

Implications of river capture:
- Captured stream:
  - Less water for agriculture
  - Hydroelectric power cannot be sustained
  - Less water for domestic and industrial use
  - Water quality will decrease
  - Aquatic organisms die resulting in disrupted food chains
- Captor stream: opposite to captured stream

- Superimposed: young river forms on old landform
- Antecedent: new landform found under an old river

F: Catchment and River Management

Importance:

- **T**ransport of goods using rivers
- **H**ydroelectric power needs rivers
- **E**cosystems in rivers
- **F**lood control
- **F**arming uses rivers
- **L**eisure activities in rivers
- **S**ustainable use of water from rivers
- **T**ourist attraction
- **D**omestic and industrial use of rivers

Impact of people on drainage basins: *(www.idome.au)*

- **W**aste disposal- pollution affects water quality
- **W**etlands- being destroyed by human activities (farming, alienation, pollution)
- **W**ater transfer schemes- affect river flow and aquatic ecosystems
- **I**rrigation- reduces water downstream
- **D**ams- affects river flow
- **O**vergrazing- removal of vegetation reduces infiltration
- **M**ining- acid level in water increases
- **E**mbankment- holds back sediment which prevents delta formation
- **A**fforestation- reduces stream discharge and encourages infiltration
- **U**rbanisation- artificial substances encourage runoff

- River pollution:
  - Domestic sewage
  - Agricultural wastes (herbicides and pesticides)
  - Industrial wastes (including heated water)
- Impact of river pollution:
  - Loss of oxygen in rivers due to excessive decomposition of pollution
  - Eutrophication

Management strategies:

- **B**uffer zones
- **A**wareness campaigns
- **R**ecycling
- **F**ines
- **T**esting of water quality
- **V**egetate
- **E**ducate farmers
- **W**etlands must be conserved

Module 3

Rural & Urban Settlements

1. Study of Settlements

- Settlement: a place where people live which includes buildings, economic activities and transport networks
- Site: the exact physical land on which a settlement is placed
- Situation: the location of a settlement in relation to its surrounding area
- Rural: farmsteads, villages or hamlets where there is limited development and technology
- Urban: densely populated settlements with a lot of manmade structures and a few open spaces such as towns or cities
- Site factors:
  - Water
  - Relief
  - Soil
  - Climate
  - Accessibility
  - Tradition
  - Natural resources
- Situation factors:
  - Transport and accessibility

2. Rural Settlements

Influence of site and situation on rural settlements:

- Wet point settlement:
  - found where there is a shortage of water
  - located near a water source
- dry point settlement:
  - found where water is a threat
  - located on higher ground to avoid flooding
- defence:
  - located on high ground or in meander loop or between mountains
  - for safety reasons
- accessibility:
  - bridging point: located near the shallow point of a river for easy crossing
  - gateway: in gap hills

Classification of rural settlements according to pattern:

- ***dispersed***
  - houses or farms are far apart or scattered and isolated
  - *advantages:*
  - ✓ farmers can experiment with new machinery
  - ✓ larger profit capability
  - ✓ privacy
  - *disadvantages:*
  - ✗ lack of social life
  - ✗ easy target for criminals
  - ✗ services far

- ***nucleated***
  - houses or farms found close together
  - *advantages:*
    - ✓ ability to share equipment
    - ✓ social advantages
    - ✓ safety higher
  - *disadvantages:*
    - ✗ lack of privacy
    - ✗ small profits
    - ✗ smaller plots of land
- ***linear/ ribbon***
  - houses located in a line along a road, narrow valley or river
- ***planned***
  - houses are grouped around a specific feature e.g. Market
- ***crossroads***
  - accessibility to transport causes settlements to develop along meeting roads
- ***semi-circular***
  - settlement found along the coast
  - sea acts as a physical barrier

Classification of rural settlements according to function:

- rural areas are uni-functional
- associated with primary activities
- dispersed or nucleated
- farmsteads, hamlets or villages

Land use in rural areas:

- subsistence farming
  - farmer grows crops to meet his family's needs
  - small scale and traditional methods
  - variety of crops planted in small quantities
  - no contribution to economy
- commercial farming
  - large farms that are capital intensive
  - main purpose is to make profits
  - one main crop planted on a large scale
  - uses modern equipment and farming methods
- intensive farming
  - every available piece of land is used for farming
  - high yield per hectare
  - labour and capital intensive
- extensive farming
  - occurs over a large area
  - yield per hectare is comparatively lower
  - occurs where land is less fertile

3. Rural Settlement Issues

- rural-urban migration: movement of people from farms to urban areas
- rural depopulation: decreasing number of people that live in rural areas due to rural-urban migration

causes of rural depopulation:

- people leave rural areas because:
  - hard work, long hours and low pay
  - poor quality housing
  - basic services are far away
- people want to move to cities because of:
  - greater variety of jobs and higher pay
  - improved housing and services
  - access to basic services
  - efficient transportation
  - food security

consequences of rural depopulation

- in rural areas:
  - basic services will close down
  - production in rural areas decreases
  - arising of ghost settlements
  - brain drain
  - resources under-utilised
- in urban areas:
  - growth of informal settlements
  - crime increases
  - traffic congestion
  - insufficient services
  - waste management uncontrollable
  - diseases spread as hygiene decreases

strategies to address rural depopulation:

- improve roads and transport facilities
- create more job opportunities through decentralisation
- improve salaries and working conditions
- improve basic services
- increase capital for farmers
- provide training courses

reasons to manage rural depopulation:

- rural areas provide food for the country
- rural areas influence GDP
- rural areas provide the country with raw materials
- employment can be found in rural areas

Social Justice Issues in Rural Areas

access to resources:

Water

- reasons for water shortages
  - low rainfall
  - few lakes
  - rivers are non-perennial
  - high evaporation
  - dams dry up
  - domestic wastage
  - pollution of clean water
- conserving water
  - farmers should use drip irrigation
  - mix fertilisers with water
  - use treated wastewater
  - use tanks to catch and store rainwater
  - use boreholes

Soil

- reasons for soil erosion
  - deforestation
  - overgrazing
  - over-cropping and monoculture
  - high rainfall
- soil management strategies
  - afforestation on steep slopes
  - terracing
  - contour ploughing
  - use of natural manure

Land reform:

- land restitution:
  - compensating people for the land they lost due to forced removals
  - compensation by money or land
- land tenure reform:
  - provides security to South Africans regarding land ownership
  - prevents unfair eviction
- land redistribution:
  - providing land to previously disadvantaged people for housing or farming

purpose of land reform:

- redresses injustice of apartheid
- promotes economic growth and alleviates poverty

challenges with land reform:

- willing buyer/seller clause delays negotiating prices
- costly
- lack of training given to new owners

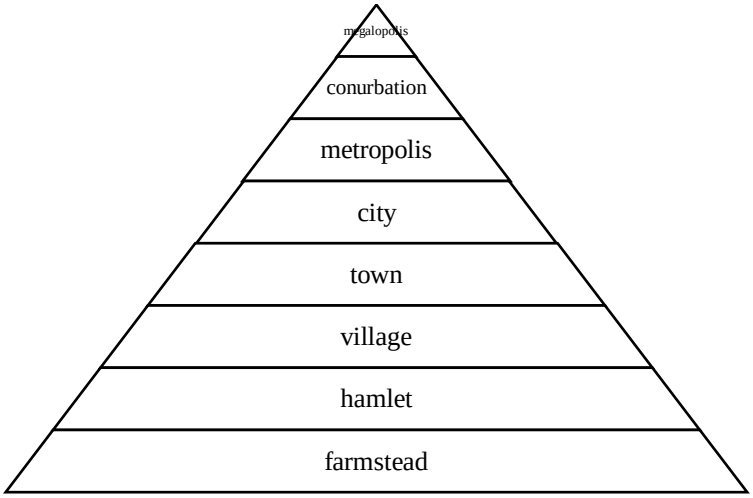
4. Urban settlements

- urbanisation: process whereby an increased percentage of people live in urban areas
- urban growth: increase in the absolute number of people in urban areas
- urban expansion: the physical growth of an urban settlement
- urban sprawl: formless uncontrolled growth of urban areas
- rate of urbanisation: percentage by which an urban population increases
- level of urbanisation: percentage of people that live in urban areas

Classification of urban settlements (according to function):

- central places
  - provide goods and services to the surrounding rural population
- trade and transport towns (develop where transport routes meet)
  - break-of-bulk points- goods transferred from one form of transport to another
  - gap/gateway towns- originate due to physical barriers; transport routes converge
  - junction towns- located at transport junctions
- specialised towns
  - settlements with one dominant function

5. Urban Hierarchies



Urban hierarchy:

- hierarchy refers to the arrangement of settlements in an area from smallest to largest
- based on population, range and number of offered services and sphere of influence

Central place:

- refers to a settlement that provides goods and services to the surrounding rural population
- central place theory explains the relative size and spacing of settlements

Threshold population:

- the minimum number of customers needed to make a business profitable

Sphere of influence:

- the market area from where an urban settlement draws its customers
- dependent on the size and number of functions offered by the centre

range of goods:

- maximum distance that people are willing to travel to buy goods or services

low order goods and services:
- goods used daily
- have a small range
- have a small sphere of influence

low order centres:
- offer low order services or functions
- small threshold population

high order goods and services:
- goods and services that are required infrequently
- have a large range
- have a large sphere of influence

high order centres:
- variety of services or functions offered
- large threshold population

6. Urban Structure and Patterns

A: Street Patterns

- grid iron/rectangular
  - streets intersect at right angles
  - found on land that is flat
  - hampers traffic flow
  - does not work on steep land
- radial
  - roads radiate away from central point
  - joined by ring roads
  - traffic congestion at the centre
  - ring roads allow for traffic bypass
- unplanned/irregular
  - maze of streets with no order
  - associated with broken relief
- planned irregular
  - new urban developments
  - ensures a smooth flow of traffic
  - hilly relief

B: Building Density

- number of buildings per unit area
- density decreases from city centre outwards
- due to high land values in the city centre, buildings are close together and tall

C: Urban Profile

- the side view of a city showing building density and building height
- land value influences the shape of an urban profile
- building density and height is greatest where land value is highest

D: Land Use Zones

Factors influencing location of urban land use zones:

- accessibility:
  - the ease with which a place can be reached
  - CBD has greatest accessibility
  - Heavy industries locate near transport routes
- Compatibility:
  - Degree to which functions attract each other
  - Recreational areas are found near residential areas- high compatibility
- Specialised requirements:
  - Some land use zones require special features to develop e.g. a water source
- Land values
- Centrifugal force (push factors)
- Centripetal forces (pull factors):
  - Functional magnetism: functions that benefit each other
  - Functional convenience: CBD highly convenient since close to work
  - Functional prestige: a certain area becomes well known for a specific function offered

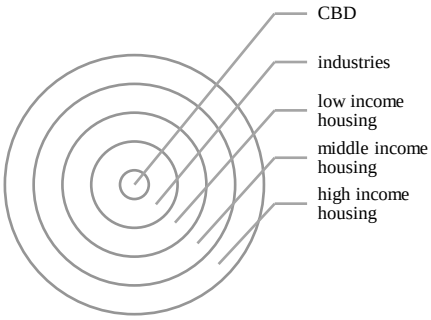
Urban land use zones:

1. ***CBD (central business district)***
   - Found in city centre
   - High degree of accessibility
   - Tallest buildings and highest building density
   - Combination of high and low order goods offered
   - Grid iron street pattern
   - High traffic congestion
   - Commercial decentralisation:
     - City is invaded by illegal immigrants, becomes dilapidated
     - Forms:
     → Isolated store cluster (low order centre)
     → Commercial ribbon development (along main roads)
     → Outlying business centres (high and low order centre located in densely populated area)
     → Planned neighbourhood shopping centre (found in residential area)
     → Planned regional shopping centre
     → Informal trading (low order goods sold by unlicensed businesses)
2. ***Transition Zone***
   - Located on the edge of CBD
   - Mixed land use zone
   - Buildings are old and dilapidated
   - Characteristics:
     - Informal traders on pavements
     - Lots of street children
     - Many foreigners
     - High crime rate

3. ***Residential Zone***
   - Occupies the most amount of urban land
   - Wealth segregates this zone:
     - High income residential
       - → Away from CBD and heavy industries
       - → Good views
       - → Well maintained
       - → High land value
       - → Many recreational facilities
     - Middle income residential
       - → Medium size houses
       - → Location varies, but approximately 15-20min from CBD
       - → Mostly occupied by government workers
     - Low income residential
       - → Located near industrial areas
       - → Close to CBD
       - → Small houses found close together
       - → Little to no recreational facilities
       - → Houses are old and neglected
       - → Informal settlements found in LEDC
         - Unplanned, built with various materials, lack of basic services, no proper roads and poor hygiene
       - → Ghettos or slums found in MEDC
         - Found in transition zone
         - Old and densely populated buildings
4. ***Industrial Zone***
   - Heavy industrial zones
     - Pollution
     - Far from high income residential zones
     - Found on outskirts of urban areas due to requirement of large spaces
     - Close to transport facilities
     - Produce heavy goods
   - Light industrial zones
     - Occupies small spaces
     - Little pollution
     - Locate near to customers
     - Produce small and comparatively lighter goods
5. ***Green Belts***
   - Piece of land found within a city that has natural vegetation
   - Protects natural environments
   - Improves air quality
6. ***Rural-urban Fringe***
   - Outskirts of city
   - Mixture of rural and urban functions
   - Land here is cheap
   - Sewage, cemeteries, airports etc. found here

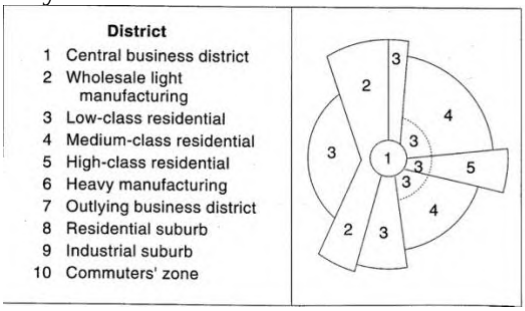
E: Models of Urban Structure

Burgess- concentric zone model:



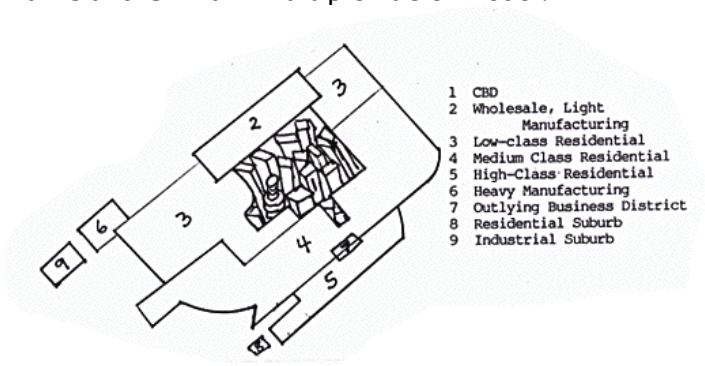
- inner zones invade outer zones in a process called invasion and succession
- does not have all land use zones
- no commercial decentralisation
- no consideration of relief
- little accessibility

Hoyt- sector model:



- sectors develop along main transport routes
- unrealistic due to circular CBD- relief not considered

Harris and Ullman- multiple nuclei model:



- cellular pattern allowing for growth into each other
- caters for decentralisation, relief and all land use zones
- shows the true complexity of cities

Modern American-western city:
- multi-centred
- CBD called downtown
- High level of commuting
- Decentralisation
- Sharply defined land use zones

Third world city:
- Land use zones are mixed
- Lots of informal trading
- City centres are compact
- Poor infrastructure
- Social problems in excess

South African city:
- Influenced by colonialism and apartheid
- Land use zones influenced by group areas act
- Post-apartheid- income determines where people live, not race

7. Urban Settlement Issues

A: Urban issues related to rapid urbanisation

Inner-city problems:
- Rise of squatter settlements
- Industrial expansion is slower than the rate of urbanisation
- Unequal provision of services
- Poverty and unemployment
- Environmental pollution
- Crime and violence

Urban blight:
- Deterioration of parts of an urban area
- Area of decay is transition zone
- Owners do not maintain buildings in this area
- Solutions:
  - Slum clearance- demolishing old buildings and starting from scratch. Housing provided for residents
  - Regeneration- improving physical environment by renovating old buildings, creating employment and improve quality of life
  - Invasion and succession- replacing the original function with a new function
  - Gentrification- low cost housing bought by wealthy people and are modernised
  - Façadism- front of building preserved for heritage remembrance but the rest of the building is renovated

Lack of planning:
- Low income residential areas found on outskirts
- Results in high rate of commuting putting pressure on transport
- Poor service provision results in protests

Traffic congestion:

- Build-up of vehicles on roads occurring mostly during peak hours
- Causes:
  - People live far from work
  - Inefficient public transport
  - Poor road safety
  - Excessive use of private vehicles
  - Expensive parking
  - Grid iron street patterns
- Solutions:
  - Monitoring of public transport
  - Introduce rapid and safe transport
  - Decentralisation
  - Cycle lanes
  - Ring roads
  - Park and ride facilities
  - Multi-storey parking bays

Overcrowding and housing shortages:

- Shortage of living space due to rapid urbanisation

Service provision:

- Municipalities are struggling to provide basic services due to rapid urbanisation
- Resulting in protests for better service delivery

B: Informal Settlements

- Illegally built settlements due to lack of housing by poor people
- Lack basic services
- Mostly found in LEDCs
- Problems:
  - → Vulnerable to elements
  - → Susceptible to wild fires
  - → Spread of diseases
  - → Crime, drugs, poverty
  - → Unhygienic
- Solutions:
  - → Relocation
  - → Self-help schemes
  - → Provision of basic services

C: Justice Issues in Urban Areas

Social injustices:

- Causes of unequal access to resources and services
  - Greed and corruption
  - Nepotism
  - Lack of public participation

- Impact
  - Xenophobia
  - Violent protests
  - Crime

Economic injustices:

- Poverty
  - Causes
    - → Lack of education
    - → Wages in primary sector too low
    - → Unemployment
  - Solutions
    - → Basic income grant
    - → Increase support to farmers
    - → Skills programmes
  - Impact
    - → Increased crime
    - → Malnutrition
    - → Increased illness
    - → Low standard of living
- Poor public transport
  - Impact
    - → Frequent accidents
    - → Pollution
    - → Traffic congestion
  - Solutions
    - → Improve bus routing
    - → Upgrade taxi ranks
    - → Dedicated public transport lanes
    - → Introduce eco-friendly transport systems
    - → Subsidies for public transport improvement

Environmental injustices:

Type	cause	effect	solution
Air pollution	○ CO ○ Sulphur ○ Power stations ○ Domestic activities	○ Health problems ○ Acid rain ○ Destruction of ecosystems ○ Global warming	○ Electricity saving campaigns ○ Strict control of pollution by government ○ Use ozone friendly products ○ Extend green belts
Noise pollution	○ Industries ○ Airplanes ○ Traffic ○ Fire crackers	○ Hypertension and hearing loss ○ Reduces quality of life	○ Noise barriers ○ Altering flight paths ○ Restrict times of day for certain noise levels
Destruction of ecosystems	○ Population growth ○ Settlement expansion	○ Soil erosion ○ Pollution of freshwater	○ Legislation ○ Education

Module 4

Economic Geography

1. Structure of the Economy

Primary sector:
- Concerned with extraction of raw materials from the environment
- E.g. farming, fishing, forestry, mining

Secondary sector:
- Activities that process raw materials into useful goods
- E.g. steel making, food canning, construction

Tertiary sector:
- Provision of services
- E.g. doctors, accountants, teachers, lawyers

Quaternary sector:
- Hi-tech sector linked to research and development
- E.g. scientists and researchers

GDP- total goods and services produced in a country in one year
GNP- total goods and services produced in a country by the permanent inhabitants in one year

2. Agriculture

Contribution to SA economy:
- Food production- sufficient to meet demand rids need of imports
- Earner of foreign exchange- 10% of exports
- Contribution to GDP- farmers pay taxes
- Job creation- 10% of labour force employed
- Industrial development- stimulation of industries by high volume of raw materials

Role of small-scale and large-scale farmers:

	Small-scale farmers	**Large-scale farmers**
Description	Small but economically viable piece of land used with the purpose of making a profit.	Production of crops for local and overseas markets to make a profit
Inputs	○ Limited fertiliser ○ Manual labour ○ Some capital ○ Intensive farming	○ Fertilisers ○ Machinery ○ Large amounts of capital ○ Paid labour ○ GM seeds
Farm size	○ Small plots of intensive farming ○ Irrigation: weirs, small dams and pipes	○ Large plots of extensive farming ○ Irrigation schemes ○ Highly mechanised
Yield	○ High per hectare ○ Monoculture	○ Medium per hectare ○ Variety of crops
Importance	○ To reduce poverty in rural areas ○ To provide employment ○ Promotes food security	○ To produce large quantities of food for local and international markets ○ To provide employment
Problems	○ Poor infrastructure ○ Poorly financed ○ Lack of trained farmers	○ Climate change ○ Increasing cost of labour ○ Lack of subsidies

Main products produced:

- Cattle:
  - EC, FS, KZN, LP and NC
  - Problems:
    - → Foot and mouth disease and tick problems
    - → Variable price of beef
    - → Limited grazing due to SA's hot conditions
- Maize:
  - Highveld
  - Staple food of population
  - Earner of foreign exchange
  - Creates job opportunities
- Sugarcane:
  - Provides employment
  - Hulett, Illovo, TSB
  - Ideal growing conditions:
    - → Long, warm growing season
    - → Lots of sunlight and moisture
    - → Dry, sunny and cool conditions for ripening

Factors favouring agriculture:	**Factors hindering agriculture:**
○ Trade opportunities (well-developed transport infrastructure) ○ Research ○ Climatic variation ○ Available labour supply ○ Government support	○ Climate change (effects on soil, water and temperature) ○ Droughts and floods ○ Diseases and pests ○ Fluctuating prices ○ Wild fires ○ Crime ○ Labour strikes ○ Lack of funding and training

Food security:

- When enough nutritious food is produced to meet the needs of people
- Famine: lack of food, giving rise to starvation and malnutrition
- Importance:
  - Needed to maintain good health of people
  - Prevents social uprising
  - Prevents hunger and famine
  - Malnutrition can be prevented
- Factors affecting food security:

Negatively	Positively
○ Thin and infertile soils, soil erosion ○ Droughts and floods ○ Pests and diseases ○ Deforestation ○ Lack of capital ○ Poor infrastructure in rural areas ○ HIV infected workers	○ Greater variety of crops due to climatic variation ○ Government incentives ○ GM seeds

3. Mining

Contribution to SA economy:

- Earner of foreign exchange- export of minerals
- Contribution to GDP- mining companies pay tax
- Job creation
- Industrial development- demand for tools and machinery stimulates industries

Significance of mining to development of SA:

- Discovery of diamonds started the mining industry
- Contributed to rapid urbanisation
- Established the JSE
- Led to development of secondary and tertiary industries as well as infrastructure

Main products produced:

Coal mining:	Platinum:	Gold:
○ Most of SA's electricity is coal generated ○ Used by Mittal, SASOL and is exported ○ Challenges: • Labour strikes • Limited resource • Environmental issues	○ Large contribution to GDP ○ Labour strikes said to impact contribution to GDP ○ Challenges: • Declining competitiveness • Labour strikes • Union disputes • Hesitant investors	○ Largest foreign income earner ○ Challenges: • Labour strikes • Diseases spreading in workforce due to mine conditions • Poor working conditions • Environmental problems

Ways to reduce mine strikes:

- Profit sharing
- Communication improvement between management and workforce
- Improve working conditions
- Skills development programmes

Factors favouring mining	**Factors hindering mining**
○ Variety of minerals ○ Large mineral reserves ○ Low production costs of surface minerals ○ Lower rock temperatures allow for deeper mining ○ Access to cheap labour ○ Government assistance	○ Strikes and protests ○ Minimum wage increase ○ Transport costs ○ Fluctuating prices due to foreign exchange ○ Mine disasters ○ Distance to markets

4. Secondary Sector

A: Contribution to SA economy

- Contribution to GDP- money is generated in the form of taxes
- foreign exchange- money from exports are used on imports for development of the country
- job creation- increases purchasing power of people and improves life quality

B: Types of industries

Heavy industries:
- large scale
- generates pollution
- outskirts of settlement
- close to bulk transport facilities
- uses lots of raw materials and energy
- e.g. Iscor (steel), oil refining, engineering

Light industries:
- small products manufactured
- close to CBD
- small areas used
- little pollution generated
- road transport used
- e.g. clothing manufacturers

Raw material orientated industries:
- locate close to source of raw materials since they are bulky and expensive to transport
- e.g. sugar mill

Market orientated:
- locate close to market/customers since goods produced are perishable
- e.g. cheese industry

Footloose industries:
- location not dictated by access to materials or markets
- service orientated
- no pollution generated
- highly skilled
- e.g. research companies

Ubiquitous industries:
- can locate anywhere
- fulltime services offered
- e.g. telecommunication services

Break-of-bulk industries:
- located between source of raw materials and customers, where transport type changes
- e.g. sugar refineries

C: Factors favouring industrial development in SA

Raw materials:
- wide range available in abundance

Labour supply:
- access to skilled and semiskilled labour
- access to tertiary education to skill labour force

water supply:
- close to water supply for industrial use (manufacturing or cooling machinery)
- water transfer schemes supplement water supply

Energy supply:
- large coal reserves for electricity generation
- industries locate close to source of energy

transport:
- well established transport infrastructure
- 8 seaports and 4 international airports

Political intervention:
- Government policies in place to support local industries
- Incentives given to industries

Competition and trade:
- International trade facilitated by harbours and airports
- No trade barriers
- Access to local and international markets promotes competition and trade

D: Factors hindering industrial development in SA

Over-concentration:
- Traffic congestion
- Higher rentals due to demand for land- lower profits
- Higher salary demands

Transport:
- Unreliable
- Repair of roads and railways is costly
- Markets are far away
- Isolated from most world markets
- High export costs make it hard for local industries to compete with industries close to large international markets

Labour supply:
- Brain drain results in loss of skilled workers, making it necessary to employ foreigners at high costs
- Lack of funding to uplift education results in lack of skilled labour force
- Workers demand higher pay by striking which hinders production

Air pollution:

- Industries have the responsibility to reduce air pollution since it is the main contributor.
- Effects of industrial pollution:
  - Negative impact on human health
  - Kills animals and plants
  - Causes imbalance in ecosystems
  - Degrades air quality
  - Damages buildings
  - Reduces quality of life
- Causes of air pollution:
  - Lack of policies to control air pollution:
    Allows industries to bypass laws
  - Unplanned industrial growth:
    In industrial towns, pollution level increases above norm
  - Use of outdated technology:
    Industries rely on old technology that generates large amounts of waste
  - May small scale industries:
    Escape environmental regulations and release more pollution than normal

Water supply:

- Water is scarce in SA
- Large companies forced to recycle water
- Pollution is dumped into usable water
- Solutions:
  - Recycling and reusing water
  - Lowering toxicity in operations involving water
  - Make production process more water efficient

Raw materials:

- Use of imported raw materials increases production costs
- Cost of imports fluctuates with foreign exchange rate

Competition and trade:

- Local industries cannot compete with imported goods from china
- Fluctuating rand value creates instability

E: Four Core Industrial Areas of South Africa

PWV- Pretoria Witwatersrand Vereeniging (Gauteng):

Factors favouring location	Factors hindering development	Main industrial activities
○ Market • Dense population resulting in high demand for goods • High buying power ○ Transport • Dense network of roads and railways ○ Labour • Dense population- larger labor force ○ Raw materials • Gold • Iron ore • Maize • Platinum ○ Water • Eastern half- receives adequate rainfall • Vaal river water supplemented by TUVA water transfer scheme ○ Electricity • Cheap since coal is mined here • Short distance from source ○ Relief • On Highveld where land is flat	○ Overuse of water from Vaal river ○ Pollution ○ Great distance from ports	○ Chemical ○ Iron and steel ○ Metal processing ○ Explosives

Port Elizabeth- Uitenhage

Factors favouring location	Factors hindering development	Main industrial activities
○ market • import and export of goods made easy by harbour ○ transport • good links with the rest of SA • harbour ○ raw materials • wool • subtropical fruit • cotton ○ relief • flat land	○ periodic drought ○ no coal fields so electricity is expensive ○ expensive labour and frequent strikes	○ Car assembly ○ Leather goods ○ textiles

Durban-Pinetown (eThekwini)

Factors favouring location	Factors hindering development	Main industrial activities
○ Market • Densely populated • High demand for manufactured goods ○ Transport • Harbour • Many links to rest of the country ○ Labour • Large labour force due to large population ○ Raw materials • Sugarcane • Dairy • Meat • Subtropical fruit ○ Water • Abundant rain • Presence of perennial rivers (Tugela & Umgeni)	○ Capacity of harbour is limited ○ Hilly topography restricts growth of harbour 	○ Oil and sugar refining ○ Ship building ○ Food and drink ○ Textiles ○ Footwear ○ Soap making

South Western Cape

Factors favouring location	Factors hindering development	Main industrial activities
○ Market • High purchasing power • Coastal- access to large overseas markets ○ Transport • Table bay for overseas trade • Dense railway network for local links ○ Labour: • Dense population of skilled and unskilled ○ Raw materials: • Deciduous fruit • Grape • Fish ○ Relief: • Flat land	○ Electricity is expensive since coal fields are far away ○ Water shortages- located on the western half that receives less rainfall ○ Few mineral resources	○ Food processing ○ Textiles ○ Fish and fruit canning ○ Wine ○ Petrol refineries

F: Strategies for industrial development in SA

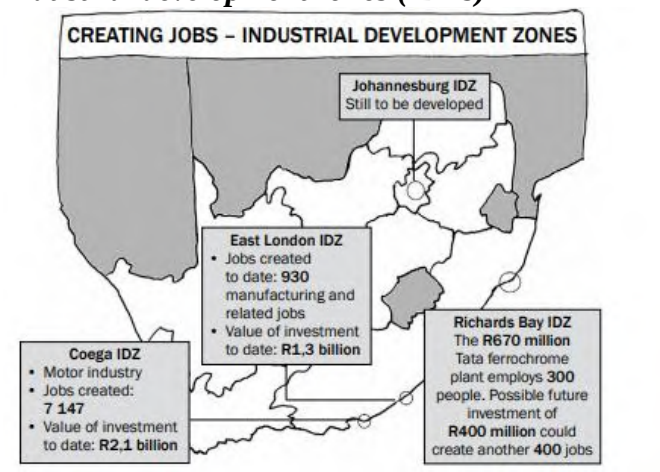
Overview of apartheid industrial development strategies

- *Good hope plan*
  - To spread economic wealth in SA
  - Lead to the regions making up the 9 provinces
  - De-concentration points created
  - Isolated industrial development points
  - Tax incentives to encourage industrial growth
  - Border industries created on homelands

Overview of post-apartheid industrial development strategies

- *Reconstruction and Development Programme (RDP)*
  - Improved quality of life
  - Redistribution of wealth, healthcare, jobs, and basic services
  - Aimed at local development
- *Growth, Employment and Redistribution (GEAR)*
  - Macro-economy policy
  - Focuses on redistribution of wealth to eliminate poverty
  - Attracts foreign investment
  - Focuses on country as a whole by:
    - → Creating jobs
    - → Increasing exports
    - → Developing infrastructure
- *Accelerated and shared growth in SA*
- *National development plan*

Industrial development zones (IDZs)

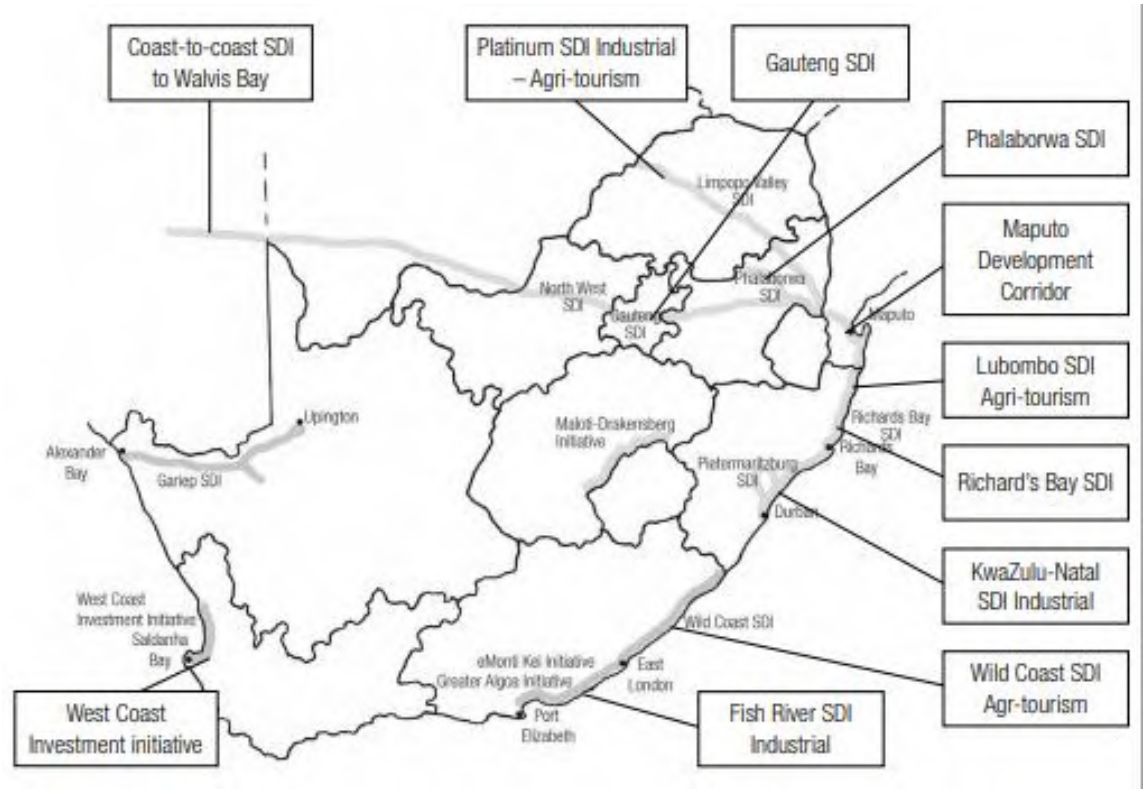


- Specialised industrial zone
- Promotes competition and attracts foreign investment
- Locate near harbours and airports
- World-class infrastructure and industrial parks
- Government incentives offered (tax deductions and reduced import costs)

- East London IDZ:

Industry types	○ Automotive ○ Marine aquaculture ○ Agro-processing ○ Pharmaceuticals ○ ICT & electronics and business processes
Advantages of location	○ Excellent transport ○ Automotive industry provides economic growth ○ Clustered industries reduce logistics cost ○ Close to ports
Incentives	○ Duty free imports for goods used in manufacturing ○ Zero VAT on supplies used to manufacture export goods ○ Discounted utility services and affordable land prices
Flaws	○ Lack of skilled labour ○ Poor harbour facilities ○ Limited electricity supply ○ High demand for water

Spatial development initiatives (SDIs)



- Development corridor: development along a major transport route
- Links IDZs
- Provides communities with opportunities to participate in economic activities
- Promotes job creation
- Promotes use of local resources to generate economic growth

- Phalaborwa SDI

Location	○ Limpopo ○ Favourably situated for economic links with other countries ○ Runs through Great North Road
Resources	○ Platinum, iron ore, coal, diamonds ○ Wood ○ Mangoes, papayas, avocados, potatoes
Objectives	○ Use underutilised resources sustainably ○ Develop small-scale mining ○ Integrate urban and rural areas ○ Promote tourism
Challenges	○ Poverty and unemployment ○ Unmaintained roads ○ Poor infrastructure ○ Lack of clean water 

- West Coast SDI

Location	○ Stretches from Cape Town to Northern Cape border
Resources	○ Rich in avian resources- Lambert's Bay Waterfront ○ Cultural heritage ○ Fish ○ Rich in biodiversity ○ fruit
Objectives	○ protect west coast environment ○ promote job opportunities and economic growth ○ develop social well-being of people ○ promote infrastructure development
Challenges	○ lack of technical skills ○ inadequate marketing ○ growing informal settlements ○ xenophobia ○ sand mining decreases tourism

G: Industrial centralisation and decentralisation

Advantages of centralisation	Disadvantages of centralisation
○ 4 core areas highly developed ○ Clustering of similar industries ○ Infrastructure and service network establishment ○ Good market ○ Large labour force	○ Uneven spread of wealth ○ Peripheral areas remain underdeveloped ○ Congestion and pollution ○ Social problems ○ Labour issues due to poor living conditions ○ Demand for housing ○ Declination of rural towns

Decentralisation			
Reasons to move out of urban areas	**Effects**	**Reasons to move into rural areas**	**Effects**
○ Depletion of primary resources ○ Decreased demand ○ Functional magnetism	○ Job losses ○ New office parks ○ Urban blight	○ Available land ○ Cheaper land ○ Closer to market	○ Improved infrastructure ○ Improved services ○ Job creation

5. Tertiary sector

- Involve selling of goods and provision of services
- Hairdressers, doctors, internet cafes, repair companies

Contribution to SA economy:
- Provides employment to skilled population
- Contributes to GDP via tax
- Provides population with higher incomes and better standard of living
- Encourages growth of financial and business services

The role of international trade in economic development:
- Benefits of international trade
  - Access to foreign currency
  - Variety of goods for consumers
  - Promotes competition
  - Better international relations
  - Exchange of technical knowhow
  - Increases sales and profits
- Disadvantages of international trade:
  - Local production suffers
  - Rich countries influence poorer nations and take control

The role of transport in economic development:
- Dense transport infrastructure results in high level of development
- Better accessibility to markets
- Efficient transport reduces costs
- Provides employment
- Encourages domestic and international trade

6. Informal sector

- Definition: unregistered workers

- Characteristics
  - Self-employed workers
  - Casual labour
  - Unskilled or semiskilled workers

- Importance:
  - Provides income and reduces unemployment
  - Consumers can buy goods in small quantity cheaply
  - Allows for people to grow entrepreneurial skill

- Reasons for development:
  - Large scale job losses due to mechanisation
  - Many people lack formal qualifications and they cannot get jobs in formal sector
  - Immigrants cannot find legal employment

- Problems faced:
  - Traders harassed by authorities
  - Traders lack assess to proper trading facilities
  - Unreliable income
  - Banks do not grant loans to traders

- Measures to improve informal sector:
  - Introduce licensing requirements
  - Dedicate areas for informal trading
  - Provide infrastructure for traders
  - Provide easier access to bank loans

Written by Zaid Ganie, in accordance with The Department of Basic Education, Geography Examination Guidelines, Grade 12, 2017.