

Edexcel A Geography GCSE

Topic 6B: Water Resource Management

Definitions Flashcards

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Abiotic components



Abiotic components

Non-living environmental factors that have influence over the ecosystem (e.g. climate, light exposure, soil type).



Air Pollution



Air Pollution

The level of toxic gases and particulates in the air.



Aquifer



Aquifer

A permeable or porous rock which stores water.



Biodiversity



Biodiversity

The variety of species of plants and animals within a region.



Biotic components



Biotic components

Living organisms that interact with the environment and other organisms within an ecosystem.



Channel Flow



Channel Flow

The movement of water flowing in a rivulet, stream or river.



Convictional Precipitation



Convictional Precipitation

Solar radiation heats the air above the ground, causing it to rise, cool & condense forming precipitation (often as thunderstorms).



Deforestation



Deforestation

The permanent (and usually large-scale) removal of trees.



Degradation



Degradation

The act or process of damaging or ruining the environment.



Depression



Depression

A system of low pressure, with fronts of precipitation where low and high pressure air masses meet.



Desalination Plant



Desalination Plant

The conversion of seawater to freshwater, suitable for human consumption happens here.



Drainage Basin



Drainage Basin

Often called a catchment area, it is an area of land where all water, precipitation and streams flow and drain off into a single river, bay or out to sea.



Drainage Density



Drainage Density

The total length of all rivers and streams divided by the area of the drainage basin.



Drought



Drought

A prolonged dry period in the natural climate cycle that can occur anywhere in the world (WHO Definition).



Economic Water Scarcity



Economic Water Scarcity

When water resources are available but insufficient economic wealth limits access to it.



ENSO Cycles



ENSO Cycles

El Niño Southern Oscillations - naturally occurring phenomena that involves the movement of warm water in the Equatorial Pacific.



Evapotranspiration



Evapotranspiration

The combined total moisture transferred from the Earth to the atmosphere, through evaporation and transpiration.



Forestry



Forestry

The management of woodland and forests.



Fossil Fuels



Fossil Fuels

Fuels made up of the remains of organic material, such as oil, coal and gas.



Frontal Precipitation



Frontal Precipitation

Where air masses of different temperatures meet at a front, one mass will be forced over another, causing precipitation beneath the front.



Global Hydrological Cycle



Global Hydrological Cycle

The continuous transfer of water between land, atmosphere and oceans. The Earth is a closed system.



Groundwater Flow



Groundwater Flow

The horizontal movement of water through permeable or porous rock deep below the water table.



Hydrological Drought



Hydrological Drought

When reduced precipitation impacts water supply. There is a decrease in streamflow, soil moisture, reservoir, lake and groundwater levels.



Industrialisation



Industrialisation

The development of the industrial sector in a country or region.



Infiltration



Infiltration

The movement of water vertically through the pores in soil.



Interception



Interception

Raindrops are prevented from falling directly onto the ground, instead hitting the leaves of a tree.



Meteorological Drought



Meteorological Drought

When the amount of precipitation received in an area is below average.



Monsoon



Monsoon

The drastic variation between wet and dry seasons for subtropical areas, caused by a change in the prevailing wind. It can lead to annual flooding.



Percolation



Percolation

Water moving vertically from soil into permeable rock.



Physical Water Scarcity



Physical Water Scarcity

A physical lack of available freshwater which cannot meet demand.



Relief Precipitation



Relief Precipitation

Precipitation produced when air masses are forced to rise over high land, determined by the relief/ morphology of the land.



River Regime



River Regime

The pattern of river discharge (flow) over a year.



Runoff



Runoff

Water flowing over the surface of the ground e.g. after precipitation or snowmelt.



Salinisation



Salinisation

When salt water contaminates freshwater stores or soils, creating saline conditions and reducing human use/ consumption.



Saltwater Encroachment



Saltwater Encroachment

The movement of saltwater into freshwater aquifers or soils. This may be caused by sea level rise, storm surges or over-extraction



Smart Irrigation



Smart Irrigation

Providing crops with a water supply less than optimal, to make crops resistant to water shortages.



Soil Erosion



Soil Erosion

Removal of soil particles, causing a loss of nutrients and moisture, leading to a reduced number of plants.



Storm Hydrograph



Storm Hydrograph

A graph that shows the variation of river discharge over a short period of time (days).



Throughflow



Throughflow

Water moving horizontally through the soil, due to gravity.



Transpiration



Transpiration

The process through which water evaporates through the stomata in the leaves of plants.



Urbanisation



Urbanisation

The increase in the proportion of the population living in urban areas.



Watershed



Watershed

The boundary between neighbouring drainage basins.



Water Conservation



Water Conservation

Strategies to reduce water usage and demand.



Water Recycling



Water Recycling

The treatment and purification of wastewater, in order to increase supply and meet demands.



Water Security



Water Security

The ability to maintain and access a sustainable water source that adequately meets demand.



Water Pollution



Water Pollution

The levels of toxic substances and litter in waterways and underground water stores.



Water Sharing Treaty



Water Sharing Treaty

International agreements for transboundary water sources.



Water Transfer



Water Transfer

Hard engineering projects, such as pipelines or aqueducts, which divert water between basins to meet demand.

