GEOGRAPHY



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CLIMATIC REGIONS OF THE WORLD - PART 2

IN PART 1 DOCUMENT

Hot, Wet Equatorial Climate

Tropical Monsoon and Tropical Marine Climates

Savanna or Sudan climate

IN PART 2 DOCUMENT

Hot Desert and Mid-latitude Desert Climates

Warm Temperate Western Margin (Mediterranean)
Climate

Temperate Continental (Steppe) Climate

IN PART 3 DOCUMENT

Warm Temperate Eastern Margin (China Type) Climate

Cool Temperate Western Margin (British type) Climate

Cool Temperate Continental (Siberian) Climate

IN PART 4 DOCUMENT

Cool Temperate Eastern Margin (Laurentian) Climate

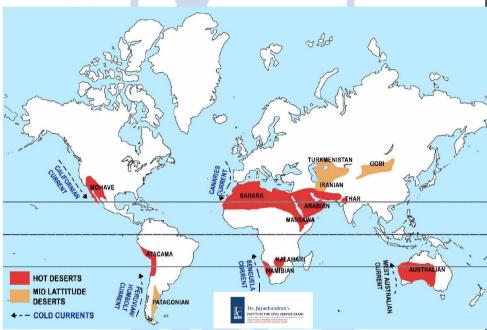
Arctic or Polar Climate

Hot Desert and Mid-latitude Desert Climates

Distribution

- Deserts are regions of scarce rainfall, they are Hot(Saharan type) or Temperate(Mid-latitude deserts – Gobi).
- * Hot desert due to off shore winds Trade wind desert.
- * Temperate desert due to extreme interiors(rainless).

 Major Hot deserts are located in western coasts of continents between latitudes 15° and 30°N and S. -> Sahara(largest), Great Australian Arabian, Iranian, Thar, Kalahari, Namib Deserts; North American(Mexico to USA) called by different names at different places, e.g. Mohave Sonoran, Californian and Mexican deserts; South America -Atacama or Peruvian Desert.
- * Temperate deserts -> Turmenistan, Gobi and Patagonian Desert.



Climate

- * Hot deserts lie on both sides of Sub Tropical High Pressure Belts (descending Air) so not favourable for rain.
- Relative humidity is extremely low, decreasing from coastal districts to desert interiors.
- * Rain normally occurs as violent thunderstorms of the convectional type.
- Hottest spots on earth with high temperatures throughout the year with no cold season
- * Average summer temperature is around 30°C, annual range is 6.6°C.
- * The diurnal range of temperature in the deserts is very great.
- * Cold current on western coast gives rise to mist and fog.





Natural Vegetation

- Vegetation are grass, scrub, herbs, weeds, roots or bulbs. lie dormant for rain.
- * Vegetation of both hot and mid-latitude deserts is xerophytic or drought-resistant scrub like bulbous cacti, thorny bushes, long-rooted wiry grasses and scattered dwarf acacias.
- * Plants have highly specialized adoptions, soil is highly saline like hardpan, deficient humus due less rate of decomposition as there is no moisture.
- * Most shrubs have long roots, plants with few or no leaves with waxy, leathery, hairy or needle-shaped foliage to reduce the loss of water through transpiration. Cacti with succulent stem to store water.



Economy

- Primitive tribes and collectors -> Nomadic hunters and food gatherers, growing no crops and domesticating no animals. Bushmen of Kalahari and the Bindibu or Aborigines of Australia.
- * Nomadic Herdsmen -> Animal riders with livestock economy, Bedouin of Arabia ride on Horses, Tuaregs of Sahara ride on camel with grass Zeriba herd, Gobi Mongols ride on horses to herd yaks. Bedouin are the best examples of a desert group who have fared well as nomadic herdsmen.
- Settled irrigation like Egypt, Indira Gandhi canal from Indus, in Israel etc. desert soil can be cultivated if with irrigation or near oasis





Mineral wealth -> Gold in Great Australian Desert, Diamonds and copper Kalahari Desert, Caliche (cemented gravels), copper in Atacama, Silver in Mexico, Uranium in Utah, copperin Nevada and Oil in many parts of the Saharan and Arabian Deserts. These have also increased immigrant inflow greatly.

Warm Temperate Western Margin (Mediterranean) Climate

Distribution

- * Found in few areas of the world between 30° and 45° N and S of equator in Western part.
- * Shifting of wind belts due to apparent movement of sun is the main reason for this climate.
- Winter rain season and found extensively in Mediterranean basin giving namesake Mediterranean climate.
- * Also found in California, in parts of Western and South and south western Australia, in south western South Africa and in parts of central Chile.
- * Mediterranean climate zones are associated with five large subtropical high pressure cells on the oceans, Azores High, South Atlantic High, North Pacific High, South Pacific High, and Indian Ocean High.



Climate

* Bright sunny weather with hot dry summers and wet mild winters.

Notes

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- **Notes**
- * All regions with Mediterranean climates have relatively mild winters, but summer temperatures are variable depending on the region.
- * Mediterranean climatic regions are mostly found near large water bodies, causing moderate temperatures with a comparatively small range of temperatures between the winter low and summer high.
- * Dry warm summer with off shore winds dominated by subtropical high pressure cells causing no or little rainfall. Sun over tropic of cancer -> westerlies moves polewards and tradewinds are off shore.
- * Winter with onshore winds, polar jet stream and associated periodic cyclones bring heavy rain in Few days, with snow at higher elevations. Almost all of yearly rainfall during winter, and summer without significant precipitation.
- * Many local finds are found here like Sirocco, Chilli, Ghibli, Leveche, Khamsin, Gharbi, Mistral, Bora, Tramontana, Gregale(Local winds dealt separately).

Natural Vegetation

- * Trees with small broad leaves that are widely spaced and not tall. Absence of shade.
- * Evergreen forest-> open woodlands, trees are low with massive trunk, deeply fissured barks, small leathery leaves. cork, oak, giant sequoia or redwood, eucalyptus, jarrah and karri trees.
- * Evergreen coniferous-> tall straight trunk with needle shaped leaves, near cooler highland that has less severe droughts. pines, firs, cedars and cypresses trees.
- Bushes and scrubs are most common vegetation due to dry hot summer.
- * Wiry and bunchy grasses, not suitable for animal rearing.







Economy

- Orchid farming with a wide range of citric fruits like oranges, lemons, limes, citrons and grapefruit are grown.
- * Cereals with hard, winter wheat as the leading food crop. Summer crop in place of irrigation. This Wheat is mainly used in making food products such as macaroni, spaghetti and vermicelli. Barely is the next most popular cereal.
- Viticulture or wine making is best developed with ripening of grapes due to long sunny summer.

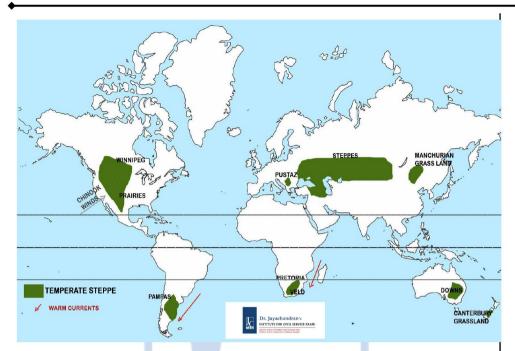
Temperate Continental (Steppe) Climate

Distribution

- Temperate grasslands are found in temperate latitudes continent interiors near Mediterranean climatic zones bordering deserts.
- * Almost treeless due to their distance from oceans though with onshore (wersterlies) belt.
- * Grasslands: Eurasia -> Steppes, Pustaz in Hungary, Manchuria plains. North America -> Prairies. South America -> Pampas of Argentina and Uruguary. South Africa -> tropical Bush-veld in Southern north, more temperate High Veld in the South. Australia -> Downs.







Climate

- * Continental climate with little maritime influence
- * Extremes of temperature. Very warm summer and very cold winter in Eurasian steppes. Southern steppe climate is not severe.
- * Annual range of temperature is great, due to continentality. Winters in Eurasia are snow covered
- * Average rainfall is about 50cms. Summer rains due to convection and winter due to depression of westerlies, In southern hemisphere eastern coast warm currents brings more than 50 cm rain but june, july and august without any rain(drought).

Natural Vegetation

- Steppe vegetation refers to scanty vegetation of sub-arid lands of continental Eurasia.
- * Their greatest difference with tropical savanna is, they are practically treeless and the grasses are much shorter.
- * Where the rainfall is moderate, above 50 cms, the grasses are tall, fresh and nutritious called prairie grass.
- * Short steppe type of grass prevails when rainfall is light (<50cms) or unreliable, or poor soil, as in Asian continental interiors.
- * Steppe grass can be dormant throughout prolonged drought.
- * Appearence of grassland varies with seasons; Summer -> yellow to brown; Autumns -> Grass die, but roots lie dormant; Winter ->harsh and long; Spring-> green, fresh, blooming with small, colourful flowers.



* Towards poles transitional zone of wooded steppe with gradual conifers due to increased precipitation, towards equator shorter and sparse grass merging with thorny scrub and dessert.



Economy

- * Temperate grasslands were once home of grazing animals; wild horses in Asiatic Steppes, swift-footed bison in Prairies and untamed buffaloes in Pampas. Then cultivation was not known.
- * But now extensive mechanised wheat becoming 'granaries of the world'. Besides wheat, maize is increasingly cultivated in the warmer and wetter areas. The tufted grasses have been replaced by the more nutritious Lucerne or alfalfa grass.
- * Rise of pastoral industry with beef, mutton, wool, hides, milk, butter, cheese and other diary production.

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