

Environmental Management

Key Terms:

Oceans and Fisheries

<p style="text-align: center; border: 2px solid magenta; padding: 10px;">Ocean Resource</p>	<ul style="list-style-type: none"> • Food: fish, seaweed • Chemicals: salt, oil • Building materials: sand, gravel, rock • Gems: diamonds • Metals: gold, tin, magnesium, titanium • Energy: tidal and wave • Tourism: sport, beaches, wildlife • Transport: freight, cruises, ferries • Drinking water: desalinisation 	<p style="text-align: center; border: 2px solid blue; padding: 10px;">Euphotic Zone</p>	<p>The top 200m or so of seawater through which light can penetrate and in which photosynthesis can happen.</p>
<p style="text-align: center; border: 2px solid blue; padding: 10px;">Surface Currents</p>	<p>Movement of the surface water of the sea in a constant direction.</p>	<p style="text-align: center; border: 2px solid blue; padding: 10px;">Upwelling</p>	<p>Areas where minerals at the ocean floor are brought to the surface by currents.</p>
<p style="text-align: center; border: 2px solid blue; padding: 10px;">Prevailing Wind</p>	<p>The direction from which the wind nearly always blows in a particular area.</p>	<p style="text-align: center; border: 2px solid blue; padding: 10px;">Over-fishing</p>	<p>When the number of fish that is caught is greater than the rate at which the fish reproduce, leading to a fall in fish numbers in the area. Symptoms: reduced catch simultaneously as fishing effort increases; size caught gets smaller Due to: large population = high demand for fish; bigger boats; SONAR; detailed weather data; large nets - trawl, drift, seine, dredge. Prevention: maximum size of net; minimum mesh size of nets, quotas, pole and line fishing over nets, closed season, protected areas; international agreements and conservation laws</p>
<p style="text-align: center; border: 2px solid blue; padding: 10px;">Phytoplankton</p>	<p>Small organisms in the sea that can make their own food and upon which almost all other sea creatures depend for their food.</p>	<p style="text-align: center; border: 2px solid blue; padding: 10px;">El Niño - Southern Oscillation (ENSO)</p>	<p>Change in prevailing winds (southern oscillation) that leads to a change in the pattern of currents (El Niño) in the south Pacific. El Niño, “the boy”), is the warm phase of the cycle, occurring every 2 to 7 years, and lasts 5+ months. It impacts: ocean temps (stopping upwelling in S.Am.); speed/strength of currents; health of coastal fisheries with populations dying or migrating, devastating Ecuadorian and Peruvian economies; local weather and global climate changes (harsher winter in high latitudes, prolonged rain in S. Am./ drought to Indonesia and Oz).</p>
<p style="text-align: center; border: 2px solid blue; padding: 10px;">Limiting Factor</p>	<p>Of all the factors that might affect a process, the one that is in shortest supply.</p>	<p style="text-align: center; border: 2px solid blue; padding: 10px;">La Niña</p>	<p>Change in prevailing winds (southern oscillation) that leads to a change in the pattern of currents (La Niña) in the south Pacific. La Niña, “the girl”, is the cool phase of the cycle, giving opposite weather patterns to El Niño. Its impacts: wetter conditions in southern Africa, dryer conditions in east equatorial Africa, heavy rain in Asia, drought in west S.Am and excess rain N Brazil/central Andes., wetter west N. Am, drier east N.Am</p>

Fishery

The industry of catching, processing and selling fish.

Quotas

The legal limit on the amount of fish that can be caught.
Laws and quotas are only as good as the level of enforcement that goes with them.

Bycatch

Animals caught by fishers that are not the intended target of their fishing effort.

Shrimp fisheries (2% of all fishing) have the biggest bycatch of all (30% of world's bycatch) - 1 shrimp = 6 other fish caught.

Fish Farms

A place where fish are bred or reared for commercial purposes.

Cons: difficult to farm marine fish; the fish are more susceptible to disease and parasites than wild fish; waste from cages can pollute the environment; fish escaping can cause problems for the local environment.

Pro: a good source of food and income

Economic Exclusion Zone

The zone around a country's coastline that is under the control of that country.

United Nations (UN) Convention on the Law of the Sea (UNCLOS) designated 200 nautical miles around a country's coastline, unless there is not that space between two countries (e.g. UK and France), where the space is then split equidistant from each country's coastline, or another agreement is reached.

Cod End

The closed end of a fishing net.