

Chapter 10

- Soviet Union contributes immensely to the environmental problem due to the mass industrial production that took place during primetime of communisms
- Asia's economic growth with population growth makes the environment even worse

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- Amazon rainforest continues to burn and trees are important for valuable **Biodiversity** – due to pop. pressure and foreign debt
- these forests are the source of temporary and quick money

What will be in the impact on global politics if the environment is being destroyed?

- Realist, state centered perspective – continue to find the environ a great source of conflict
 - Alters power relations but not nature of world politics
 - Example: China and India have great power due to economic growth in an area that is worried about environmental collapse due to mass industrialization and pop. growth
- Liberal belief: where there is a problem, there is system of international institutions that gives states the capacity to deal with problem AND have economic growth at the same time
- Marxist: deforestation and soil degradation due to the value system of capitalism.

Should the environment be looked at from such a superior state of crisis?

- National security and environ. argue of whether they should include each other in the same circle
- Since wars and fight over resources contribute to the deterioration of the environ. the politics of environ. SHOULD be looked at
- the situation over the environment has converged (brought together states with cooperation) and diverged (separated states with conflict over resources because of the way it has negatively affected the people)

Microenvironment: The Spread of Infectious Diseases

- microorganisms: bubonic plague, first struck Europe in 1348 and killed many
- Europe did not recover until 1500s even after the Hundred Years war
- the AIDS epidemic proves that the situation is getting worse despite the advancement of science

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- the spread of Ebola disease in Zaire, the hoof-and-mouth disease in Europe in 2001 (agricultural)

Dennis Pirages argues the following:

- The spread of the disease occurs because of:
 - the massive population concentration in one area
 - the south is more extensive and medical care is scarce
 - overpopulation leads to migration, which lead to the spread of the disease
 - EX: Rwanda refugees died from cholera in overcrowded camps
- people are living in previously wild areas because of lack of space
 - Consequence 1: new inhabitants bringing disease to Indigenous people and wildlife
 - Conse. 2: the newcomers are exposed to other new diseases which are then spread to the general population
- Human behaviour changes: 1960 to 1970s sexual revolution and introduction of drug usage est. a new way to spread diseases more rapidly
- crowded prisons spread TB due to policy shifts and increase in crime, often linked to poverty
- the change in global environment makes it difficult to control the spread of diseases

- sudden climate changes may provide microbes with a temporary advantage which could lead to an increase of a certain disease
- technological advances have increased the ability of microbes to travel [airplanes]
- a hemorrhagic fever was found in Baltimore from Seoul by way of wharf rats that made its way through cargo ships
- a truly interdependent and interconnected world economy presents as much opportunity as it does danger

The Macroenvironment: Problem of the Commons

- Global problems classified as the '**Problem of the Commons**'
- Wilfred Beckerman: the use of this common asset that is necessary to every individual means that there is lesser for another potential user of that asset. The over-use of this asset without any restrictions can lead to a scarcity of the asset, eventually not meeting the demand. [Page 312]
- counterincentives of community cooperation to conserve resource, but individual incentive to exploit it – require political intervention to secure a regulation of this without a conflict
- The question now moves onto ask not how states can simultaneously use resources, but also how to conserve and reserve them.
- Privatization (different from territorialization) of land proposed to increase environment responsibility
- Debatable only within national politics but is LESS clear when it comes to discussing it internationally
- 1982 Law of the Sea Convention gave **exclusive economic zones** which gave states benefit of resource but also environ. responsibility
- problems are encountered when resources like air and open seas cannot be designated to a certain national territory
- the signing of the UN's Law of the Sea does not mean that countries will actually ratify (practice) the laws within it

How does dealing with the commons affect national sovereignty?

- Transboundary pollution problems mean that other countries are affected due to their neighbouring country's pollution (does it infringe state sovereignty?)
- Principle Two of the Rio Declaration: "states have the sovereignty right to exploit their own resources pursuant of their own environmental and developmental policies"
- In 1962, a controversial UN declaration to the environment stated that a state had "inalienable rights" and could freely "dispose of their natural wealth and resources."
- the question of who should pay for international efforts to save the commons
- issues such as global warming and ozone layer depletion, a north-south split of responsibility occurs (Global warming in the north because of south, ozone layer depletion in the south because of the north)
- The global degradation of some countries require different environmental responsibilities and therefore, the resource-sharing should reflect these preconditions.

Antarctica

- a hole in the ozone layer was discovered over Antarctica, found in 1985
- Antarctica's environment provides us with a planetary early warning for global warming

- The Antarctic Treaty signed in 1959, allocated land to several nations so that they may assume responsibility of its perseverance.
- Antarctic Treaty System (ATS) contains CCAMLR, known for its resource management
- Antarctic is protected as whole and not as territorial lines
- Living resources can only be harvested on three conditions:
 - ecological relationships are unchangeable
 - ecological changes are reversible within two to three decades
 - If harvesting does not interfere with the recovery of depleted populations.
- The CRAMRA was highly controversial because it allowed managed mining for exploration and eventually, exploitation in Antarctica
- Limited mining would destroy the fragile mineral Antarctic ecosystem.
- A resolution passed by the UN to protect the exploitation of Antarctica was not signed by major consultative parties because they felt like their protocol ATS was being scrutinized against.
- The treaty also questioned the decision making power of the states because they were not trusted to make the right choice (non-signatories were assumed to want to exploit Antarctica)
- the consultative states felt like they had the right to the **global commons** (belongs to no one state or entity) and so the signing of the treaty was ineffective
- there has been no agreement to protect against the exploitation of Antarctica
- No one wants to hold the responsibility of a landmass that is deemed worthless in terms of economic resources
- The global protection of Antarctica is deemed unnecessary because many would not want to exploit a region that has little resources that are vital in today's society (easy mineral access, oil and fresh water too hard to contain)

Climate Changes

- global warming and ozone layer depletion are major sources of the world climate changes
- the effect would be floods, tropics being uninhabitable, scarce agriculture in once rich areas etc.
- insurance companies were worried about the change in climate and urged national delegates to hold a conference to reduce carbon emissions
- the Kyoto Accord proposed the self-imposed limitation by the year 2000 in 1997
- the implications on each state varies according to the political and economical status of the country.
- some states refused to sign the accord because they believed that southern states who contribute a lot more pollution because of mass industrialization should ratify the protocol first instead
- the competitive nature of the world economy will limit states' willingness to sacrifice the economy for global environmental protection unless other states also comply
- although Canada signed and the US did not, Canada's proposition has not even been met with in the slightest
- One of the chief Reasons for Global Warming is deforestation (burning trees emit carbon...)
- global carbon emissions is expected to increase by 2020
- to protect the atmosphere for other cultures (transborder pollution) and for those unborn, it is a difficult task because everyone is thinking about now.
- Some believe that global warming is only a natural effect that mother nature alters and changing it will only hurt the economy and the natural cycle

- *Ozone-Layer depletion* is contributed to by a chemical agent known as chlorofluorocarbons (CFCs), commonly used in refrigerators, industrial production, and aerosol cans.
- the chemicals trap the greenhouse gases within the atmosphere and do not allow the infrared radiation to exist, therefore, warming up the earth's temperature
- other effects affect humans on a person a level by causing skin cancer, eye problems and adverse (modified) agricultural products
- Montreal Protocol in 1987 was the major treaty signed in protecting the ozone layer from depleting
- many states agreed on the destruction of the usage of the chemical "CFCs"
- Freon, commonly used in car air conditioning, was banned because of its ozone depletion properties
- Freon is bought and sold in a major black market, whose supplies come majorly from Mexico.
- the cost of reducing on CFCs are much lower than reducing greenhouse gas emissions in general
- Global warming and ozone-layer depletion both raise the question of who should pay for the damage that industrialized nations have and are releasing on the world.
- Although the north were the main contributors to today's environmental position, China, Brazil and India will play their role by effecting global warming and ozone-layer depletion.
- The problem is of the commons is the contamination of major necessities in human life.

Deforestation and Land Degradation

- every year, an area the size of Belgium is cleared of the rain forest, often by slash and burn methods
- Rainforests continue to be depleted in the Brazil's Amazon Basin, Indonesia, Colombia, Thailand, and Philippines. In Haiti, more than 90% the rain forest has disappeared.
- Rainforest depletion occurs for many reasons: local desire for pastureland, cropland, fuel, and a foreign market for hardwood.
- Rainforests cannot completely be restored once there are depleted. This is because the ecosystems and biodiversities developed over a 1000 years
- Forests are usually cleared out to make way for pastureland or cropland and these usually exhaust the soil after a few years. The land cannot renew itself because it does not have the natural means to do so.
- Removing trees means that oxygen cannot be produced and carbon dioxide cannot be used, which causes a change in the environment: Rainfall patterns are affected, soil erosion increases because of lack of root structures.
- removing trees also means in soil degradation (losing of nutrients) and this is usually because of human activities like deforestation, overgrazing, and agricultural mismanagement
- desertification means that the land is useless and to form a top layer of soil, it would take thousands of years
- Conclusion: deforestation leads to degradation of soil. both have huge implications on earth's landmass

Species Impoverishment

- The division of the earth into nation-states disrupts the migration of mammals who do not recognize such borders.
- Are the plants and animals who are currently endangered part of the commons, regardless of where they live?

- the decline of the number of whales and tigers and the inability to save them is one of biodiversity [species impoverishment]
- Human greed and misunderstanding of species survival has led to their extinction. 20th century saw more extinctions than ever before in the wild world.
- The extinction of the dinosaur was probably caused in the imbalance of the food chain when the tropical marine regions were affected, so the sea mammals and so the big land mammals, it was not preventable
- the development of agriculture changed the human-nature relationship in that economic activities could affect the ecosystem and biosphere
- overfishing, pollution, introduction of alien species caused the extinction of 200 species of fishes in Lake Victoria of Africa
- Reduction of species pop. affect their reproduction; it may benefit others who survive because of more availability to resources but it might be collectively bad
- having a good gene pool diversity ensures the health of the species and such low levels are a long-term threat to the environment
- the elimination of a species means that the ecosystem reduces the genetic capacity of other species
- this results in an overall reduction of species of animals and therefore, long term changes in the environment may destabilize the ecosystem, which furthers the extinctions of species
- economically, the reduction of these species represents the permanent loss of renewable resource of unknown value: medicine, scientific research, human food, education and recreation
- the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in contrary to the ivory ban in 1989.
- torn between the northern states asking for complete security of species and southern states wanting to trade animal parts as a part of a broader conservation strategy.
- The Biodiversity Treaty (signed in Rio de Janeiro) in 1992 committed northern states to pay the southern states for the use of genetic material found in their biodiversity
- the treaty meant that delegates from the 160 countries meet once a year to discuss:
 - conservation of biodiversity
 - sustainable use of biological resources
 - equitable sharing of the benefits arising from such use
- These treaties may be useless if the broader problem is not addressed like the preservation of the habitat, which requires a lot more than the regulation of fishing and banning of exploitation of animals for products.
- it requires a condition in which humankind no longer has the need to destroy the natural habitat.

Protecting the Global Environment: From Stockholm to Rio

- the World Bank and the IMF promote industrialization rather than preserving the environment
- however, they are beginning to get serious about the environment and initiatives like the Global Environmental Facility are distributing to the development of environmental technology along with UN Environmental Program (UNEP) and UN Development Program (UNDP)
- In 1972, the UNEP was created in Stockholm (not an institution or agency of the UN) which is a collection of the activities of the UN that deals with the environment
- **United Nations Conference on Environment and Development (UNCED)**, was the biggest summit and received a lot of attention:
 - Est. of UN Commission of Sustainable Development (CSD) which meets regularly and follow up on a major five-year plan review of the UNCED

- forestry conservation emerged as a treaty
- Convention of Climate Change and other action plans on various aspects for environmental protection

Transborder Environmental Issues

- **Pollution** crosses over borders through streams, lakes, rivers and air
- power differentials usually occur between neighbouring states so some are more industrialized than others
- some may also have geographical advantages like being upstream
- realists argue that transborder pollution will be the cause of future violent wars
- Canada and the US have the **International Joint Commission (IJC)** that co-manage their mutual frontiers on an ongoing basis.
- atmospheric nuclear tests in the 1950s created radioactive fallout that travelled thousands of km, raising concern over the discover of cesium-137 and strontium 90, carbon 14 and various isotopes of plutonium in the environment
- this pushed the US to sign the Partial Test Ban Treaty which limited nuclear testing to underground facilities
- the Chernobyl nuclear reactor in Ukraine in April 1986 exploded and a fire spread airborne a radioactive as far away as Italy and Sweden
- The Canadian Nuclear Safety Initiative was est. in 1992 to ensure that Soviet based nuclear plants function efficiently
- Eastern Europe and the Commonwealth of Independent States cannot discontinue the production of atomic energy because they depend on it for light and heating
- **Industrialization** Other transborder pollution have occurred due to
- agreements result in reducing acid rain, which damages trees
- without enough funding for effective scrubbers for smokestacks for industries burning lignite (highly sulphurous coal), acid rain will continue to be a problem
- **Pesticides** are a major factor in transborder pollution and show the complexity of modern science and world economy
- pesticides are banned and so many of it was shipped to other countries from the US
- it is difficult to regulate the international commerce in products that are highly hazardous to human and ecosystem health
- the cycle of using pesticide on primary resources from one destination can lead to the manufacturing these resources to another destination and lead into many tertiary products that are shipped all over the world [hard to regulate]
- **Fresh Water** is a local and regional problem. only 3% of the world's water is fresh water and much of it is frozen in the Arctic icecaps
- less than 1% of fresh water is easily accessible
- global water use doubles every 21 years and water now exceeds sustainable consumption limits
- more than 1 billion people lack safe water supply
- demand of fresh water: 66% agriculture; industry 25% human consumption 9%
- diverting river water to agricultural lands instead of it leading to the Aral sea in the Soviet Union caused the lake to shrink and the excess salt solidified and was swept up by the wind and deposited in over wide areas, poisoning the land and people
- **hydropolitics:** war or conflict over water resources have been major between states like Israel and Palestine because of their arid climates

- some argue that shared resources can bring states together because they need to cooperate together to achieve mutual benefit
- wars are usually fought on non-renewable resources (minerals and oil) and it is hard to find a war that has been over renewable resources, so wars cannot happen
- but resource wars are common and it does not outlaw the potential causes and the factors in long-range geostrategic thinking

Transboundary Resource Conflicts: The Case of the Fishing Dispute

- cod-war between Britain and Iceland in 1960 to 1970 portray the wars over dwindling resources.
- Spanish fleets always fished off the Newfoundland coast but Canada seized a ship in 1995, outside the territorial waters.
- 1994- **Northwest Atlantic Fisheries Organization (NAFO)** set limits as to how much Greenland halibut could be caught as a national quota for this resource
- Canada put a restriction due to the concern of depleting halibut stocks and seized the ship stating that it was violating quota rules and was using illegal fishing nets.
- Canada was violating international law because the ship was actually out of territory as the Law of the Seas states
- foreign ships are straining the already depleting fleets of fish and seal right beyond the limits of the Grand Banks
- Canada finally made it legal to physically stop ships near the 200 nautical mile of range from fishing
- in 1997, Canada had a dispute with the US over the Pacific salmon quotas and the failure of efforts to negotiate a new Pacific salmon treaty

Nongovernmental Actors and the Environment in Global Politics

- NGOs usually lobby against Multinational Corporations to ensure that the environment is a top priority in their funding
- they influence government policy at the national level

The Role of Science in Global Politics

- **GMO – Genetically Modified Organisms**
- *An Agenda of Science for Environmental and Development into the 21st Century (ASCEND 21)* is a published summary of an environmental conference. It featured presentations that would contribute to the UNCED process and created public awareness for the importance of using social and natural sciences to solve complex problems
- science plays a major role in determining what type of action politics must take to ensure that human activities do not affect the environment disastrously
- by stating that global warming is due to human consumption of products that destroy the environment, it forces governments to make policies that control these consumption
- the scientific community pushes for precautionary-principles for environ. management
- Rio Declaration (Principle 15) in 1992; Agenda 21; UN Framework on Climate Change and Convention on Biological Diversity; Montreal Protocol on Substances that Deplete Ozone Layer all push governments to take on the responsibilities of preventing environmental degradation