Topic 1: Foundations of Environmental Systems and Societies

1.1 Environmental value systems (EVS)

1.1.1 Environmental movement and influence

What is the environmental movement?

→ EM originated in the 1960s although people have been concerned before.
Who has influence over our norms of behavior?

- Influential individuals (eg Greta Thunberg)
- Governments
- Businesses
- Pressure groups (eg extinction rebellion)
- Inter-governmental organizations (eg UN)

Environmental Movement - Major Events

Agenda 21: Plan of action to achieve sustainable development to combat environmental damage	**Copenhagen (Cop 15):** Bringing together the majority of worlds leaders to consider climate change and listing mitigation actions for developed and developing countries
An Inconvenient Truth 2006: Illustrated talk on climate aimed at alerting public to increased global warming	**James Lovelock's Gaia:** gaia Hypothesis proposes that the earth is like a fast self-regulating organism
Bhopal India 1984: gas leak at a Union Carbide pesticide plant. Ground and water were polluted. 500,000 exposed, 20,000 died	**Johannesburg World Summit on Sustainable Development:** Opportunity to strengthen world views on sustainable development, 20,000 people attended
Chernobyl 1986: Result of a flawed reactor design that was operated with adequately trained personnel	

Environmental Movement - Major Events (cont.)

Kyoto Climate Change Protocol: Implement objection of UNFCCC to reduce greenhouse gases to quarter level to prevent something	**Rachel Carson's Silent Spring:** Environmental science book about the use of pesticides. It won the NATO award. It inspired a revolution and lead to the nationwide ban on DDT.
Minamata Japan 1965: Disease caused by methylmercury poisoning. Fish go to mercury poisoning and humans eat these fish. It drove victims insane	**Sinking of the Rainbow Warrior:** French foreign intelligence in Auckland New Zealand. It was sunk because of French nuclear weapons and people protested
Our Common Future: Targets were multilateral vision and interdependence of nature	**The Club of Rome:** Report limits to growth that suggested that economic growth could not continue as resources would run out
UN Earth (Rio) Summit: first UN Summit to focus on sustainable development. Attended by 172 nations and lead to Agenda 21	

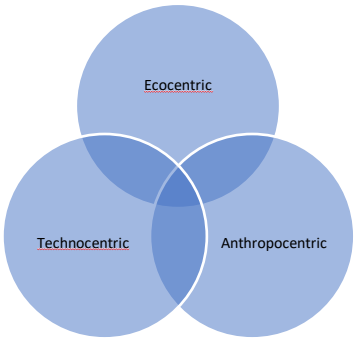
1.1.2 Social Systems

EVS: Worldview/paradigm that shapes the way in individual or group of people perceives and evaluates environmental issues. It has inputs and outputs.

Inputs: education, experience, culture, media, religion

Outputs: inter-related promises, values and arguments, decisions, evaluations

Spectrum of EVS:



(a) ECOCENTRISM – a nature centered EVS

- Integrates social, spiritual and environmental dimensions into a holistic ideal.
- Ecology and nature are central to humanity
- Emphasises a less materialistic approach to life with greater self-sufficiency of societies.
- prioritises biorights (a matter of morals)
- Emphasises importance of education is key
- Encourages self-restraint

Limitations:

- Might not always be sustainable
- Not realistic
- Small effect overall
- Requires huge change to our lifestyle

(b) ANTHROPOCENTRISM – a people centered EVS

- Humans must sustainably manage the global system.
- Might use taxes, environmental regulation and legislation
- Debate encouraged to reach a consensus
- Pragmatic approach to solving environmental problems

Limitations:

- Does not stop the problem
- Need to consider social / economic factors as well as environmental
- Relies on good ethical management

(c) TECHNOCENTRISM – a technology centered EVS

- Technology developments can provide solutions to environmental problems.
- Largely optimistic view of the role humans can play in improving the lot of humanity
- Scientific research is encouraged in order to form policies and to understand how systems can be controlled, manipulated or changed to solve resource depletion
- A pro-growth agenda is deemed necessary for society's improvement

Limitations:

- Expensive
- Not available to all
- Too optimistic
- Technology might have negative effects

1.1.3 Intrinsic Value

- What is intrinsic value?

One that has an inherent worth (no monetary value), is irrespective of economic considerations, for example the view that all life on earth has the right to survive. It opens up to the possibility that nature has value even if it does not directly or indirectly affect humans. It is viewed from an ecocentric standpoint.

Questions to consider:

- How can you attach value to the biosphere?
- Which EVSs attribute intrinsic value?
- Can you attach intrinsic value to something but act contrary to this value?
- Would this be cognitive dissonance?

Examples: Mount Fuji, Japan → national identity value

Uluru, Australia → spiritual value

1.1.4 Examples of Worldviews:

Communist / Capitalist Germany

- Communism is supposed to be for the workers, people and land
- But level of population was higher and rubbish collection was poor
- However good protection for farmers for example factories were not allowed on in spring when crops are growing

Native American

- Land is not owned but shared
- Small populations
- No money, just trading goods
- Spiritual connection with land

Cristian / Muslim religion

- Land is not owned but shared
- God made Earth to make dominion over
- Quran – Earth is a gift, animals are equal

Buddhist

- Land is not owned but shared
- All living things are equal and are dependent on each other