Environmentalism, Environment Conservation, and Indigenous Knowledge (ECOAN535)

Bule Hora University
MA, Ecological Anthropology
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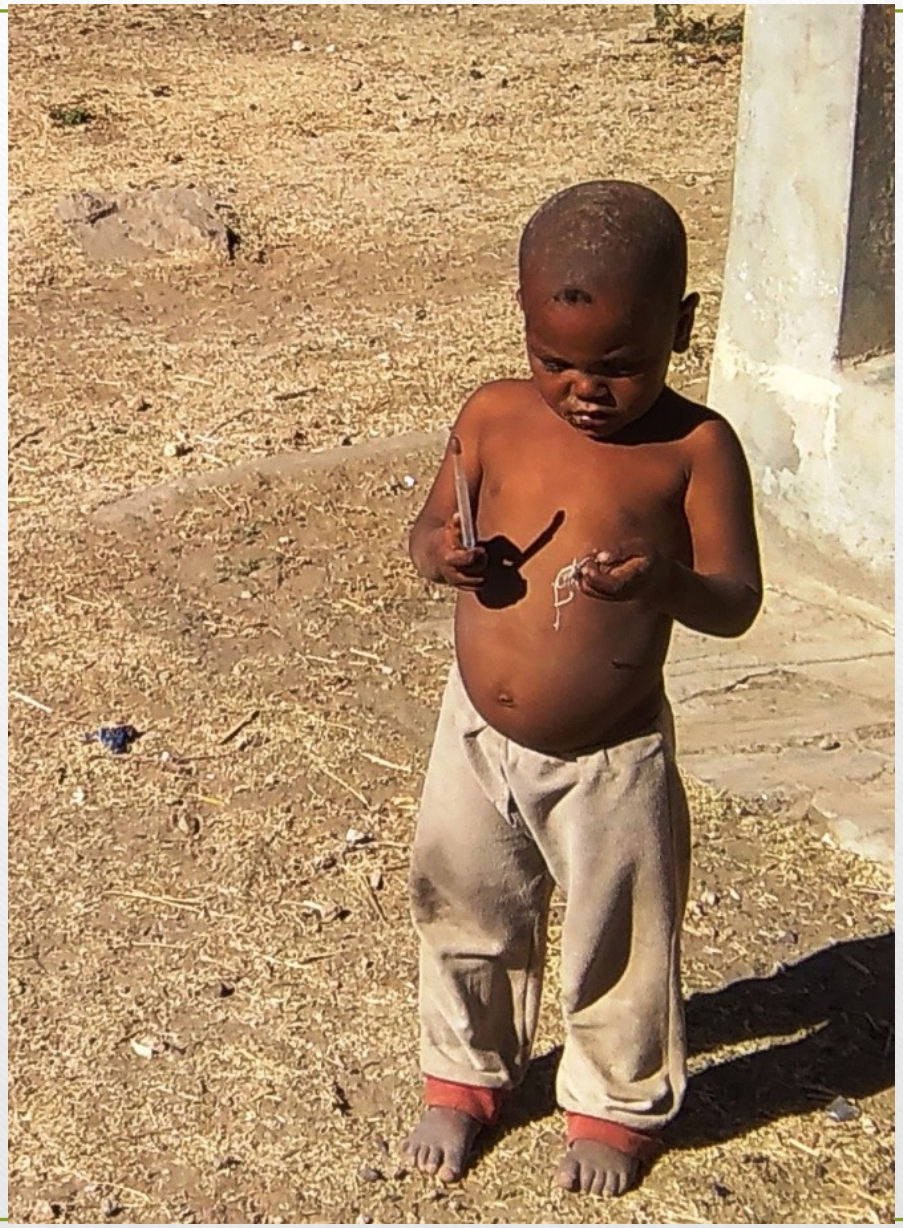
Intro brainstorming issues

- You are given the following photo of a boy in a rural Ethiopian setting
- Make careful observation and critical reflection
- Discuss the following:
  - What important environmentalism, conservation and indigenous knowledge themes can you derive from the photo?



Unit 1 Environmentalism and Human Impacts on Environment and Biodiversity

- Topic outline

1. Why this course is important?
2. Clarifying some key concepts
    1. ‘Humans’
    2. ‘Environment’, ‘Ecosystem’, ‘Nature’, ‘Habitat’, ‘Niche’, etc
    3. ‘Biodiversity’
    4. Cultural diversity
    5. Biocultural diversity
3. Human impacts on environment and biocultural diversity

- 4. Environmentalism
  - 4.1. What is environmentalism?
  - 4.2. Historical contexts of the development of the environmentalism movements
  - 4.3. Various paradigms and schools of thought in environmentalism
  - 4.4. Environmental movements and Anthropology
  - 4.5. Environmentalism movements in Ethiopia? An essay writing project

Unit 1 Environmentalism and Human Impacts on Environment and Biodiversity

- As per the recommended content outline, our first core topic is to deal with the idea of environmentalism
- However, before going to this, we need to ground it in some key issues.
- We will explore the contexts that led to the environmental movements
- Our main focus her will be on the human impacts on environment and biodiversity as well as biocultural diversity.
- Before going any depth, we will clarify key concepts of' Human', 'environment, 'diversity', ' biodiversity' ' cultural diversity', and 'biocultural

Why this course is important?

- MA students in Ecological Anthropology program should be well equipped with the theoretical and practical debates surrounding environmentalism, environment conservation and indigenous knowledge
- The main assumption that should be well considered when this module was selected as part of the MA EA program is the fact the idea of environmentalism as a social, moral, intellectual as well as political movement should be well understood.

Why this course is important?

- Further, the idea of conservation of the environment, why it should be conserved and what global processes have led to this movement must be understood,
- Further still, the role and place of indigenous knowledge and the owners of such knowledge, the indigenous peoples and local communities around the world, including Ethiopia, should be clearly grasped by students in relation to environmentalism and environment conservation.

Why this course is important?

- The readings and careful grasp of key issues in this module will help the future practitioners of ecological anthropology in a sound ground to deal with conceptual and practical matters relating with environmental movements, conservation and the role and impacts on local, traditional knowledge, and the livelihood of local communities.
- Students should be well equipped to make professional commentaries and critiques on matters of environmental movements, conservation and local knowledge in Ethiopian context and beyond.
- They will also be able to advise policy formulation and revision processes as experts on international and national instruments and conventions pertaining to indigenous knowledge vis-à-vis environment conservation.

Clarifying some key concepts

- When we discuss issues of environmentalism, environment conservation and indigenous knowledge, it is important to remind ourselves of understanding the issues in the context of humans' relationship with and impacts on the environment.
- So what doe we mean by 'human'?
- What do we mean by 'environment'?
- Lets see these and the other basic concepts

‘Human’: should be understood as human beings as:

- Individuals
- Groups
- Communities
- Nations
- Global society

- ‘Environment’
  - Micro-spatial scale
  - Meso-spatial scale (Mid-level)
  - Macro-spatial scale
  - Temporal scales (In terms of time periods)
- Possible environment types in the context of this course
  - Natural/physical
  - The built environment
  - Social
- But what is environment? What is ecology?

Environment, ecology and ecosystem

- **Based on a review of some online sources and my own readings:**
- **Ecology is the study of relationships and interactions of living organisms with other living organisms and its surrounding environment.**
- **Thus there are 3 things that we study in ecology-**
  1. **Living organisms**
  2. **Relationship & interactions with other organisms.**
  3. **Relationship & interactions with surrounding environment.**

- **Environment:** Environment (as used in a narrow sense, relating the physical, natural world) refers to the physical surroundings.
- It has 2 components: biotic and abiotic.
  - **Biotic**:- surrounding plant & animal communities and micro-organisms.
  - **Abiotic:** includes- soil, sunlight, topography, water, atmosphere, nutrients etc

- **Ecosystem:** is the community of living organisms and non-living things and dependency of their food web with each other.
  - Ecosystem is a functional unit.
  - It includes env(biotic+ abiotic) and ecology (how living organisms interact with each other and the environment).
  - Thus Ecosystem= Ecology+ Environment
  - Ecosystem can be as big as our Earth or as small as a drop of water(water + micro-organisms).

Nature, habitat, niche

- Nature: In this ecological anthropological context, ‘nature’ is basically an alternative concept often employed to represent the physical (biotic and abiotic environment). A typical dictionary definition of nature:
  - *the phenomena of the physical world collectively, including plants, animals, the landscape, and other features and products of the earth, as opposed to humans or human creations*.
- A Wikipedia source offers similar meaning of nature:
  - Nature, in the broadest sense, is the natural, physical, or material world or universe.
  - "Nature" can refer to the phenomena of the physical world, and also to life in general.
  - The study of nature is a large, if not the only, part of science

- Niche:
  - The concept of ‘niche’ occupies a key place in the ecological sciences.
  - The terms is often raised in connection with ecology: ecological niche.
  - The idea is related to the fact of nature whereby different species of living things have their own niches (a component of the ecosystem/ natural environment to which the species has adapted itself.
  - However, the concept of niche’ does not only refer to the place of a species in ecosystem. It also relates to the natural process whereby a species is assigned with its own ‘natural job’ or ‘role’ the species plays in the natural world (see: https://www.britannica.com)

- Thus a niche is the role played by an organism in the natural world.
- A niche refers to the way in which an organism fits into an ecological community or ecosystem (marinebio.org › oceans › conservation › moyle).
- Animals and plants all play such roles in their communities.
- The niches they fill help keep their habitats healthy (*https://nhpbs.org › natureworks)*
- WHITTAKER et al (1973) provide a seminal definition: distinguish three senses of the word as: (a) the niche as the position or role of a species within a given community-the functional concept of niche; (b) the niche as the distributional relation of a species to a range of environments and communities-the niche as habitat, or the place niche concept; and (c) the niche as an amalgam of both these ideas, and thus defined by both intracommunity and intercommunity factors.

Habitat

- The term ‘habitat’ by common dictionary meaning refers to the natural home or environment of an animal, plant, or other organism.
- A common scientific description of the concept is:
  - *In ecology, a habitat is the type of natural environment in which a particular species of organism lives.*
  - *It is characterized by both physical and biological features.*
  - *A species' habitat is those places where it can find food, shelter, protection and mates for reproduction (https://en.wikipedia.org › wiki › Habitat)*

- A *habitat* is a place where an organism makes its home (*https://www.nationalgeographic.org*).
- Habitat, place where an organism or a community of organisms lives, including all living and nonliving factors or conditions of the surrounding environment (*https://www.britannica.com › science › habitat-biology)*

Human-environmental relationship

- Relationship/ interaction
- The interplay between humans and their environments, including the elements and arrangement by which humans use the environment, and the limitations that the environment puts on human behaviours (Milton, 1996)
  - Elements
  - Arrangements
  - Human use of the environment
  - Limitations environment puts on human behavior

- The idea of **diversity**
  - The term *diversity* suggests “the quality of being diverse or different; difference or variety” **See** (Redford & Brosius, 2006)
  - The Diversity Principle
  - ‘Deep diversity’
- Biodiversity: What is it?
  - The varieties of life forms on the Planet (Naranjo, 1995; Dobson, 1996; Loh & Harmon, 2005)
  - “The rich variety of life that makes up an integral ecosystem, habitat range or other biological whole” (Johnston, 2006: 35)

- The Working / conventional definition from the CBD (1992))
- The Convention on Biological Diversity's (1992) definition of biodiversity is generally accepted and commonly employed
  - "*Biological diversity*" *means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.*
- The sheer diversity in nature is astounding, composed of its immense material, cultural, aesthetic and spiritual diversities (Harrop & Pritchard, 2011)
- Beyond the easily visible and material, the **deeper**

Cultural diversity & biocultural diversity

- Cultural diversity on the other hand is the differences in ways of lives, languages, livelihoods, etc.
  - **Cosmos, corpus, praxis**
- Cultural diversity, in general, entails differences in ways of lives, languages, livelihoods, social institutions, beliefs and knowledge systems across time and space (Maffi, 2005; Redford & Brosieus, 2006; Pretty, et al, 2009; Loh & Harmon, 2014)

- Biocultural diversity is a concept signalling connection between biological and cultural diversity (Brosieus & Redford, 2006).
- It is defined as
  - ...the sum total of the world's differences, no matter what their origin. It includes biological diversity at all its levels, from genes to populations to species to ecosystems; cultural diversity in all its manifestations (including linguistic diversity), ranging from individual ideas to entire cultures; and, importantly, the interactions among all of these... (Loh & Harmon, 2005)
- The (1) beliefs and worldviews, (2) livelihood and practices, (3) knowledge base and language, (4) norms and institutions form the interface between biodiversity and cultural diversity (Pretty, et al, 2009).

The Diversity Principle… the True Web of Life

- The inextricable link between biological and cultural diversity.
- The **geographical convergence** of biological and cultural diversity throughout the world has especially gained attention in the conservation discourse.
- Sponsel (2013) calls this geographical coincidence the Diversity Principle, while Maffi & Woodley (2010) call it the 'true web of life'.
- The densities of ethnic groups and languages spoken in a given area have been shown to correlate with biocultural diversity richness (Pretty et al, 2009) and these are now among key proxy indicators for such diversity

Human Impacts On The Environment And Bio-cultural Diversity

- **Critical summary (from L. Sponsel, 1998)**
- Throughout human prehistory and history, human impacts on biodiversity have reached **progressively** higher **thresholds**.
- The **net cumulative impact** of humanity has been to reduce biodiversity.
- However, at **the population** level, the types, intensity, and frequency of human impacts on biodiversity vary tremendously through **space and over time**, depending on the particular situation.
- **Most societies** have **decreased** local biodiversity, but **many** others have **sustained i**t and **some** even **increased** it.
- Because the direct and indirect impacts of humans on the environment are nearly ubiquitous, almost any biodiversity research and conservation must take the possibilities **of human influence** into consideration.

Fundamental Ideas About Human Impacts

- **"Pristine nature,"** untouched by human influences, does not exist.
  - Scientific assessments of the planet have shown that the effects of human activities are **utterly pervasive** (Sanderson et al. 2002, Halpern et al. 2008).
  - Human modifications of habitats include **deforestation**; the **draining of wetlands**; **urbanization**; **pollution**; **species introductions; climate change**; and the **overharvest** of plants, fish, and other wildlife.
  - Scientists have coined a name for this era, the ***Anthropocene***, to emphasize that we have entered a new geological era in which human influences on land cover, biogeochemical cycling, water quality and availability, and other major features of the world now rival or even surpass those attributable to nonanthropogenic forces (Steffen et al. 2007).

Human Impacts On Bio- Cultural Diversity

- **Impacts On The Natural Environment & Biodiversity**
  - The fact of biodiversity loss is now well established (Ramakrishna, 2001)
  - Such a loss is taking place at an alarming rate (Plotkin, 1992:147);
  - It is "relentless" (Harrop, 2011)
  - Unless effective reversing mechanisms are in place, our Planet will loss a good deal of its species (as high as 20%, according to some estimates) in the near future (as near as **30 years**) (see Maffi, 2010, 2001; IUCN, 2007; Sponsel, 2012).

Human Impacts …

- The world's most **bio-diverse regions** in the Third World are witnessing the most alarming rate of loss (Plotkin, 1992).
- This extinction process is both **natural** and **anthropogenic**, the latter being more responsible (Plotkin, 1992; Harrop and Pritchard, 2011; Sponsel, 2012)
- These processes have differential impacts on fauna and flora, the former being more vulnerable

Human Impacts…

- **Cultural Diversity Loss:**
  - The loss in cultural diversity, leading to loss of biocultural diversity, is currently recognized and it is also taking place at alarming rate (Naranjo, 1995; Smith, 2001)
  - Cultural diversity loss is taking place at alarming rate due mainly to raid acculturation processes, including ethnocide, whether planned or inadvertent (Naranjo, 1995).
  - This is a time of immense loss in such diversity (Smith, 1995)

- The move towards integrating native and local communities into mainstream society and ‘developing’ them has resulted often in alienating them, as the attempts often ignore cultural and social sensitivities of these communities.
- These often result in local communities losing their sustainable methods, ecologies and livelihoods once their systems are disturbed.
- Attempts at modernizing native, local communities have resulted in negative consequences for the people, their

Biocultural Diversity Loss:

- Threats to biocultural may be summed up as occurring due to enculturation into mainstream society, commercialization, religious innovation, modernization, environmental degradation, habitat destruction and various 'development' interventions, (Ossewijer, 2000; Cunningham 2001; Harrop, 2004).
- Human impacts leading to inextricably linked loss in biodiversity and cultural diversity.
- Among the notable dimensions of this loss is in linguistic diversity (Maffi, 2001; Zent & Maffi, 2001; Mishler, 2001; the CBD's Aichi Targets, 2013; Loh & Harmon, 2014).
- 11% of the world's languages being now in a moribund state and 90% of these languages may go extinct (Maffi, 2001; Zent, 2001; Mishler, 2001).
- Thus, eco-linguistic diversity is severely threatened (Muhlhauseler, 2001)

Biocultural Diversity Loss…

- Ethnobotanical and forest-related knowledge loss is another key aspect (Davis et al, 1995; Snape III, 1996; Shiva, 1998; Ford, 2000), triggered by a loss of plants due to deforestation, unsustainable development practices, processes of globalization and climate change, among others (Balick & Cox, 1996; Zent & Maffi, 2001; Latore & Latore, 2012).
- In short, not just plants or forests are endangered, people and their cultures are, too (Nabhan, 2001; Nabhan and Joe, 2002; Anderson, 2002).
- Biocultural diversity loss is thus now understood as an interconnected phenomenon.
- "Biological and cultural diversity rely on one another, and losing one or the other can create conditions for the erosion of both" (Redford & Brosius, 2006: 3).
- One's loss imperils the other (Brush, 1996).

4. ENVIRONMENTALISM

- Against the foregoing backdrop of contextual ideas and issues, we should now look into the idea of environmentalism.
- Environmentalism , although has been in existence as a broader movement of ideas from ancient times, its pronounced importance has been heightened following the increasing impact of humans on the environment and biodiversity and the custodians of environment: indigenous peoples and their local/ traditional knowledge in the last, particularly, 300 or so years, following the Industrial Revolution.

- In this sub section, we will review, the idea of environmentalism, its meaning, historical contest and major perspectives that have been developed to shape the movement.
- The following source has mainly been used to prepare this sub section:
  Lorraine Elliott, February 06, 2020, Environmentalism, Encyclopaedia Britannica , Encyclopædia Britannica, inc. https://www.britannica.com/topic/environmentalism

4.1. Conceptual clarifications

- **According to** *Elliott (2020),* **environmentalism refers to**, political and ethical movement that seeks to improve and protect the quality of the natural environment
  1. through changes to environmentally harmful human activities;
  2. through the adoption of forms of political, economic, and social organization that are thought to be necessary for, or at least conducive to, the benign treatment of the environment by humans; and
  3. through a reassessment of humanity's relationship with nature.

Conceptual clarifications

- In various ways, environmentalism claims that living things other than humans, and the natural environment as a whole, are deserving of consideration in reasoning about the morality of political, economic, and social policies.

- Stop here and google about these important names, concepts and institutions in the history of environmentalism movement and resource conservation
- Gifford Pinchot
- John Muir
- Aldo Leopold
- the Sierra Club,
- biocentric approach and biocentric environmentalists.
- preservationist philosophy
- land ethic

4.2. Historical And Intellectual Underpinnings Of Environmentalism

- **History Of The Environmental Movement**
  - Concern for the impact on human life of problems such as air and water pollution dates to at least Roman times.
  - Pollution was associated with the spread of epidemic disease in Europe between the late 14th century and the mid-16th century, and
  - Soil conservation was practiced in China, India, and Peru as early as 2,000 years ago.
  - In general, however, such concerns did not give rise to public activism or environmentalism as a movement

- **History Of The Environmental Movement….**
  - The contemporary environmental movement arose primarily from concerns in the late 19th century about the protection of the countryside in Europe and the wilderness in the United States and the health consequences of pollution during the Industrial Revolution.
  - In opposition to the dominant political philosophy of the time, liberalism—which held that all social problems, including environmental ones, could and should be solved through the free market—most early environmentalists believed that government rather than the market should be charged with protecting the environment and ensuring the conservation of resources.
  - An early philosophy of resource conservation was developed by Gifford Pinchot (1865–1946), the first chief of the U.S. Forest Service, for whom conservation represented the wise and efficient use of resources.

- **History Of The Environmental Movement….**
- Also in the United States at about the same time, a more strongly biocentric approach arose in the preservationist philosophy of John Muir (1838–1914), founder of the Sierra Club, and Aldo Leopold (1887–1948), a professor of wildlife management who was pivotal in the designation of Gila National Forest in New Mexico in 1924 as America's first national wilderness area.
- Leopold introduced the concept of a land ethic, arguing that humans should transform themselves from conquerors of nature into citizens of it; his essays, compiled posthumously in *A Sand County Almanac* (1949), had a significant influence on later biocentric environmentalists.

- **History Of The Environmental Movement….**
- Environmental organizations established from the late 19th to the mid-20th century were primarily middle-class lobbying groups concerned with nature conservation, wildlife protection, and the pollution that arose from industrial development and urbanization.
- There were also scientific organizations concerned with natural history and with biological aspects of conservation efforts.

- **History Of The Environmental Movement….**

- Although the United States led the world in such efforts during this time, other notable conservation developments were also occurring in Europe and Oceania.
- For example, a group of Swiss scientists and conservationists convinced the government to set aside 14,000 hectares of land in the Swiss Alps as Europe's first national park by 1914.
- In New Zealand, the Native Bird Protection Society arose in 1923 in response to the devastation of Kapiti Island by livestock.

- **History Of The Environmental Movement….**

- Beginning in the 1960s, the various philosophical strands of environmentalism were given political expression through the establishment of "green" political movements in the form of activist nongovernmental organizations and environmentalist political parties.
- Despite the diversity of the environmental movement, four pillars provided a unifying theme to the broad goals of political ecology:
  - protection of the environment,
  - grassroots democracy,
  - social justice, and
  - nonviolence.

- **History Of The Environmental Movement….**

- The political goals of the contemporary green movement in the industrialized West focused on changing government policy and promoting environmental social values.

- Examples include the campaigns protests against deforestation in Indonesia and the Amazon basin; and campaigns in several countries to limit the volume of greenhouse gases released through human activities.

- **History Of The Environmental Movement….**

- In the less-industrialized or developing world, environmentalism has been more closely involved in "emancipatory" politics and grassroots activism on issues such as poverty, democratization, and political and human rights, including the rights of women and indigenous peoples.
- Examples include the Chipko movement in India, which linked forest protection with the rights of women, and the Assembly of the Poor in Thailand, a coalition of movements fighting for the right to participate in environmental and development policies.

Contemporary environmental movements

- The early strategies of the contemporary environmental movement were self-consciously **activist** and **unconventional**, involving **direct-protest actions** designed to obstruct and to draw attention to environmentally harmful policies and projects.
- Other strategies included **public-education** and media campaigns, community-directed activities, and conventional lobbying of policy makers and political representatives.
- The movement also attempted to **set public examples** in order to increase awareness of and sensitivity to environmental issues.
- Such projects included recycling, green consumerism etc.

Contemporary environmental movements

- The electoral strategies of the environmental movement included the nomination of environmental candidates and the registration of **green political parties**.
- These parties were conceived of as a new kind of political organization that would bring the influence of the grassroots environmental movement directly to bear on the machinery of government, **make the environment a central concern of public policy,** and render the institutions of the state more democratic, transparent, and accountable.

Contemporary environmental movements

- In developing party policy, **green political parties** attempted to apply the values of environmental philosophy to all issues facing their countries, including foreign policy, defense, and social and economic policies.

Contemporary environmental movements

- By the late 1980s environmentalism had become a global as well as a national political force. Some environmental nongovernmental organizations (e.g., Greenpeace, Friends of the Earth, and the World Wildlife Fund) established a significant international presence, with offices throughout the world and centralized international headquarters to coordinate lobbying campaigns and to serve as campaign centres and information clearinghouses for their national affiliate organizations.

Contemporary environmental movements

- Through its international activism, the environmental movement has influenced the agenda of international politics. Although a small number of bilateral and multilateral international environmental agreements were in force before the 1960s, since the 1972 United Nations Conference on the Human Environment in Stockholm, the variety of multilateral environmental agreements has increased to cover most aspects of environmental protection as well as many practices with environmental consequences, such as the burning of fossil fuels, the trade in endangered species, the management of hazardous waste, especially nuclear waste, and armed conflict.

- The changing nature of public debate on the environment was reflected also in the organization of the 1992 United Nations Conference on Environment and Development (the Earth Summit) in Rio de Janeiro, Brazil, which was attended by some 180 countries and various business groups, nongovernmental organizations, and the media.
- In the 21st century the environmental movement has combined the traditional concerns of conservation, preservation, and pollution with more contemporary concerns with the environmental consequences of economic practices as diverse as tourism, trade, financial investment, and the conduct of war.

- Environmentalists are likely to intensify the trends of the late 20th century, during which some environmental groups increasingly worked in coalition not just with other emancipatory organizations, such as human rights and indigenous-peoples groups, but also with corporations and other businesses.

Major Approaches to Environmentalism

- Environmental thought and the various branches of the environmental movement are often classified into two intellectual camps: those that are considered **anthropocentric**, or "human-centred," in orientation and those considered **biocentric**, or "life-centred."
- This division has been described in other terminology as "shallow" ecology versus "deep" ecology and as "**technocentrism**" versus "**ecocentrism**."

Anthropocentric approaches

- Anthropocentric approaches focus mainly on the **negative effects that environmental degradation has on human beings** and their interests, including their interests in health, recreation, and quality of life.

Anthropocentric approaches

- It is often characterized by a mechanistic approach to nonhuman nature in which individual creatures and species have only an **instrumental value** for humans.
- The defining feature of anthropocentrism is that it considers the moral obligations humans have to the environment to derive from obligations that humans have to each other—and, less crucially, to future generations of humans—rather than from any obligation to **other living**

Anthropocentric approaches

- Critics of anthropocentrism have charged that it amounts to a form of human "chauvinism."
- They argue that anthropocentric approaches presuppose the **historically Western view of nature** as merely a resource to be managed or exploited for human purposes—a view that they claim is responsible for centuries of environmental destruction.

Biocentrism

- In contrast to anthropocentrism, biocentrism claims that nature has an intrinsic moral worth that does not depend on its usefulness to human beings, and it is this intrinsic worth that gives rise directly to obligations to the environment.
- Humans are therefore morally bound to protect the environment, as well as individual creatures and species, for their own sake.
- In this sense, biocentrics view human beings and other elements of the

- The division between anthropocentric and biocentric approaches played a central role in the development of environmental thought in the **late 20th century**.
- Whereas some earlier schools, such as apocalyptic (survivalist) environmentalism and emancipatory environmentalism—as well as its offshoot, human-welfare ecology—were animated primarily by a concern for human well-being, later movements, including **social ecology**, **deep ecology**, the **animal-rights** and **animal-liberation** movements, and **ecofeminism**, were centrally concerned with the moral worth of nonhuman nature.

Some Major Schools Of Thought In Detail

- **Anthropocentric schools of thought**

1. Apocalyptic environmentalism

- The vision of the environmental movement of the 1960s and early ’70s was generally **pessimistic**, reflecting a pervasive sense of “civilization malaise” and a conviction that Earth’s long-term prospects were bleak.
- Works such as Rachel Carson’s *Silent Spring* (1962), Garrett Hardin’s “The Tragedy of the Commons” (1968), Paul Ehrlich ’s *The Population Bomb* (1968), Donella H. Meadows’ *The Limits to Growth* (1972), and Edward Goldsmith’s *Blueprint for Survival* (1972) suggested that the planetary ecosystem was reaching the limits of what it could sustain.

1. Apocalyptic environmentalism.....

- This so-called apocalyptic, or **survivalist**, literature encouraged reluctant calls from some environmentalists for increasing the powers of centralized governments over human activities deemed environmentally harmful, a viewpoint expressed most vividly in Robert Heilbroner's *An Inquiry into the Human Prospect* (1974), which argued that human survival ultimately required the sacrifice of human freedom.
- Counterarguments, such as those presented in Julian Simon and Herman Kahn's *The Resourceful Earth* (1984), emphasized humanity's ability to find or to invent substitutes for resources that were scarce

2. Emancipatory environmentalism

- Beginning in the 1970s, many environmentalists attempted to develop strategies for limiting environmental degradation through recycling, the use of alternative energy technologies, the decentralization and democratization of economic and social planning, and, for some, a reorganization of major industrial sectors, including the agriculture and energy industries.
- In contrast to apocalyptic environmentalism, so-called “emancipatory” environmentalism took a more **positive and practical approach,** one aspect of which was the effort to promote an ecological consciousness and an ethic of “stewardship” of the environment.

2. Emancipatory environmentalism….

- One form of emancipatory environmentalism, **human-welfare ecology**—which aims to enhance human life by creating a safe and clean environment—was part of a broader concern with **distributive justice** and reflected the tendency to place more importance on **"quality-of-life"** issues than on traditional economic concerns.
- Emancipatory environmentalism also was distinguished for some of its advocates by an emphasis on **developing small-scale systems of economic production** that would be more closely integrated with the natural processes of surrounding ecosystems.

2. Emancipatory environmentalism….

- This more environmentally holistic approach to economic planning
- The emancipatory approach was evoked through the 1990s in the popular slogan, **“Think globally, act locally.”**
- Its small-scale, decentralized planning and production has been criticized, however, as unrealistic in highly urbanized and industrialized societies

Biocentric Schools Of Thought

1. Social Ecology And Deep Ecology

- An emphasis on small-scale economic structures and the social dimensions of the ecological crisis also is a feature of the school of thought known as social ecology.
- Social ecologists trace the causes of environmental degradation to the existence of unjust, hierarchical relationships in human society, which they see as endemic to the **large-scale social structures of modern capitalist states.**
- Accordingly, they argue, the most environmentally sympathetic form of political and social organization is one based on **decentralized small-scale communities and systems of production.**

1. Social Ecology And Deep Ecology……

- A more radical doctrine, known as deep ecology, builds on **preservationist** themes from the early environmental movement.
- Its main originators, the Norwegian philosopher **Arne Næss**, the American sociologist **Bill Devall**, and the American philosopher **George Sessions**, share with social ecologists a **distrust of capitalism and industrial technology** and favour **decentralized forms of social organization**.
- Deep ecologists also claim that **humans need to regain a "spiritual" relationship with nonhuman nature.**
- By understanding the interconnectedness of all organisms—including humans—in the ecosphere and empathizing with nonhuman nature, they argue, humans would develop an ecological consciousness and a sense of ecological solidarity.

1. Social Ecology And Deep Ecology……

- The biocentric principle of **interconnectedness** was extensively developed by British environmentalist James Lovelock, who postulated in *Gaia: A New Look at Life on Earth* (1979) that the planet is a single living, self-regulating entity capable of reestablishing an ecological equilibrium, even without the existence of human life.
- Despite their emphasis on **spirituality**, some more extreme forms of deep ecology have been strongly criticized as **antihumanist**, on the ground that they entail opposition to famine relief and immigration and acceptance of large-scale losses of life caused by AIDS

2. Animal rights

- The emphasis on intrinsic value and the interconnectedness of nature was fundamental to the development of the animal-rights movement, whose activism was influenced by works such as *Animal Liberation* (1975), by the Australian philosopher Peter Singer, and *The Case for Animal Rights* (1983), by the American philosopher **Tom Regan**.
- Animal rights approaches go beyond a concern with ill-treatment and cruelty to animals, **demanding an end to all forms of animal exploitation**, including the use of animals in scientific and medical experiments and as sources of entertainment and **food**.

3. Ecofeminism

- Oppression, hierarchy, and spiritual relationships with nature have been central concerns of ecofeminism.
- Ecofeminists assert that there is a connection between the destruction of nature by humans and the oppression of women by men that arises from political theories and social practices in which both women and nature are treated as objects to be owned or controlled.
- Ecofeminists aim to establish a central role for women in the pursuit of an environmentally sound and socially just society.

3. Ecofeminism….

- They have been divided, however, over how to conceive of the relationship between nature and women, which they hold is more intimate and more "spiritual" than the relationship between nature and men.
- Whereas **cultural ecofeminists** argue that the relationship is inherent in women's reproductive and nurturing roles, **social ecofeminists,** while acknowledging the relationship's immediacy, claim that it arises from social and cultural hierarchies that confine women primarily to the private sphere.

4.4 Environmental Movements and Anthropology

Human rights and environment

- “The environment is man's first right. Without a safe environment, man cannot exist to claim other rights, be they political, social, or economic.” Ken Saro-Wiwa (1941 - 1995) Nigerian writer and political and human rights activist.
- Microsoft ® Encarta ® 2009. © 1993-2008 Microsoft Corporation. All rights reserved.

- In general, human rights from **anthropological perspective** may address the following:
  - International human rights, development, and the environment;
  - universalism vs. cultural relativism,
  - Western and non-Western perspectives on human rights;
  - individual rights and collective (group) rights;
  - social, economic, and cultural rights;
  - women's rights; indigenous peoples and minority groups' rights;
  - planetary (environmental) rights
  - Rights to food, culture, development, and a

- Ecological anthropologists are interested in, as far as issues of human rights and the environment are concerned:
  - issues relating to **abuse of the environment** (e.g. pollution),
  - environmental **racism**, (*What is it? Can you reflect on it?)*
  - ecocide (the planned and purposeful destruction of the environment)
  - the victimization of those supporting environmental and human rights;(such as environmental journalists, indigenous peoples' leaders, etc)
  - instances of individual rights abuse, especially journalists, scientists and others imprisoned for **publicizing environmental crimes**

Role And Relevance Of Anthropology

- Anthropological knowledge and expertise are used to
  - **document** experiences regarding the abuses of environmental rights of indigenous peoples, local communities and other marginalized groups on the ground
  - **draw linkages** between micro and macro conditions, processes, and consequences
  - with the overarching goal of **asserting an advocacy voice** that
    - **draws attention** to and
    - **seeks remedy** for human environmental rights abuse of marginalized groups, communities and other powerless entities

International Conventions And Role Of Anthropologists

- The planetary right to a healthy environment, and the related notion of sustainability, was a key concept emerging from the **1990 global Earth Day activism** and subsequent **1992 United Nations Earth Summit in Rio de Janeiro.**
- The Earth Summit was attended by representatives of 172 governments and 2,400 NGOs.
- Concerned about the relationship between economic development and environmental degradation, they adopted
  - three major agreements (Agenda 21, the Rio Declaration on Environment and Development, the Statement of Forest Principles), and
  - two legally-binding conventions (the United Nations Framework Convention on Climate Change and the United Nations Convention on Biological Diversity).
- At that Summit, noted anthropologists plYED KEY roles as advocates with and for indigenous peoples

Role Of Anthropology…

- In today's environmental anthropology, we document, assess, and interpret local conditions, and through these efforts seek to understand and improve the human condition.
- Anthropological insight and voices shaping the public understanding of the social context of recent "natural disasters" (Katrina, Sri Lanka, Haiti), drawing public attention to water, public health, and vulnerability in the making of disaster and in the response to disaster.
- Similarly, place-based and comparative anthropological research has led to a widespread engagement in global advocacy and negotiations over climate change, drawing public attention to the inequities in experiencing rising sea levels, contaminated water supply, enduring drought, floods, and violent storms, as well as the various human rights dimensions of climate change response.

- # 4.5. Environmentalism Movements In Ethiopia? An Essay Writing Project

- **Essay 1: Application of environmentalism ideas and perspectives to Ethiopian context**

- *Try to reflect on and discuss on the above major perspectives in the environmentalist movement and how each on these may have been, if at all, relevant in the Ethiopian empirical context. Try to read some literature on Ethiopia (Google about some empirical research findings). Has there been any form of environmentalist movement in Ethiopia? If so , what form ? Anthropo-centric? Biocentric? How do you reflect on the environment and development policy approaches in the recent past and current governments of Ethiopia? Are there environmentalist oriented political parties in Ethiopia so far/ Which one? Review and reflect on the environmentalist ideologies' of the various NGOs and grassroots organizations in Ethiopia that have may have a form of environmentalist movement*

UNIT 2:

ENVIRONMENT CONSERVATION

Unit 2: Environment Conservation

1. The idea of ‘Conservation’
    1. ‘Environment conservation
    2. Biodiversity conservation
    3. Biocultural diversity conservation
2. Various competing approaches to conservation
3. Anthropology and conservation
4. Essay 2: Environment conservation in Ethiopia: practical application reflection and essay writing project

The idea of ‘Conservation

- The idea of conservation is popularly expressed through global media, environmentalism and ‘green’ movements (Townsend, 2013).
- Conservation is rooted in the key idea of keeping, preserving, ~~maintaining a resource for proper use~~.
- It is “a careful preservation and protection of something; especially : planned management of a natural resource to prevent exploitation, destruction, or neglect” (https://www.merriam-webster.com/dictionary/conservation)
- A Wikipedia source makes a distinction between ‘conservation’ and ‘ preservation’, where the former being used for natural resources and the latter for buildings , ets and cultural heritages.:
- ″**Conservation** and preservation are closely linked and may indeed seem to mean the same thing. Both terms involve a degree of protection, but how that protection is carried out is the key difference. **Conservation** is generally associated with the protection of natural resources, while preservation is associated with the protection of buildings

The idea of ‘Conservation

- In the context of this module, our inter5st is more on the former sense, although preservation of cultural heritages also important.
- In fact, the holistic sense of conservation, as well will see below, in the context of ecological anthropology, should include conservation of not just the environment, natural resources or the biodiversity, but also it should include that of cultural diversity, and more importantly, the combined, interdependent resource of culture and biodiversity or bio cultural diversity

The idea of ‘Conservation

- SO in the context of this module, when we think of ‘ environment conservation’ it should be broadly understood a to encompassed: conservation of the environment, of biodiversity and of biocultural diversity.
- But for the sake of clarity and convenience, we will briefly define the following key concepts:
  1. ‘Environment conservation
  2. Biodiversity conservation
  3. Biocultural diversity conservation

‘Environment conservation’

- According to https://www.reference.com/science/definition,
  - "Environmental conservation" is the broad term for anything that furthers the goal of making life more sustainable for the planet. Ultimately, people want to help the planet survive naturally and with no negative impact from the human race.
  - Helping keep the planet safe and healthy is called "conservation."
  - It is an umbrella term that defines anything we do to protect our planet and conserve its natural resources so that every living thing can have an improved quality of life. (https://www.conserve-energy-future.com)
- In a sense, ‘ environment conservation is inclusive of ‘ biodiversity conservation: conservation all natural resource elements including water, plants, wild life, soli, etc.
- However, Biodiversity conservation can and should also be more specifically be defined ununderstood.

Biodiversity Conservation

- Biodiversity conservation is specifically the conservation of the diversity of life on the plant: here its specifically linked ot conserving living things, notably, plants and animals.
- Refer to the concept of biodiversity covered in the previous chapter. The basic definition of biodiversity as given in the Convention on Biodiversity (CBD- 1993), SO it is the conservation, preservation or protection of all those elements mentioned in CBD. ***Please refer to the CBD document which you can access freely n the Internet***.
- A more technical definition of biodiversity

Biodiversity Conservation

- “Biodiversity conservation is the protection and management of biodiversity to obtain resources for sustainable development. Biodiversity conservation has three main objectives:
  1. To preserve the diversity of species.
  2. Sustainable utilization of species and ecosystem.
  3. To maintain life-supporting systems and essential ecological processes.”

  (Refer to https://byjus.com/biology/biodiversity-conservation)

Biocultural Diversity Conservation

- As noted above, since the 1990s, global attention is now turned dot the combined, inseparable linkage between biodiversity and cultural diversity.
- The two forms of diversity have been mutually existing and shaping each other
- Loss in one endanger the other and protection of one ensure protection of the other
- SO biocultural diversity conservation is the protection and management of biocultural diversity: the inseparably interdependent diversity of life (non- human living species

Biocultural Diversity Conservation

- Biocultural diversity is defined by Luisa Maffi, as "the diversity of life in all its manifestations: biological, cultural, and linguistic — which are interrelated within a complex socio-ecological adaptive system."
- "The diversity of life is made up not only of the diversity of plants and animal species, habitats and ecosystems found on the planet, but also of the diversity of human cultures and languages" (Lusia , 2010).
- As Michael (2015) argues, Biocultural approaches to conservation provide a unique way forward for conservation by drawing lessons from previous work on biocultural diversity and heritage, social–ecological systems theory, and different models of people-centered conservation.

- **Competing approaches to conservation**
  - The manner in which nature, culture and conservation have been conceptualized is biased towards western views of the world (Igoe, 2004; Bhagwat et al, 2011).
  - It has considered nature and culture dichotomous, and antagonized one over the other (Ellen, 1996b; Dove & Carpenter, 2008).
  - The discourse on biodiversity conservation, culture and society has similarly been tilted towards western assumptions being globally legitimized and imposed on local peoples throughout the world.
  - The latter are blamed often for alleged lack of "conservation values", and often were encouraged to emulate western concepts of conservation to the detriment of their own epistemologies, ecologies and livelihoods (Cunningham, 2001; Igoe, 2004; Johnson, 2006) and this has often led to a worsened state of livelihoods, biocultural diversity and community development.

- ***Holistic, integrated conservation and justifications for conserving bio-cultural diversity***
- More recently, attention is drawn to the **link** between the biological and cultural diversity (Pilgrim et al., 2009; Pilgrim & Pretty, 2010; Loh & Harmon, 2014); and addressing the loss of both in **holistic approach** is global society's urgent assignment (Harrop, 2003) and its "ethnoecological" (Zent et al, 1999) and "moral-ethical" (Harmon, 2001) imperative.

This imperative is further supported by the compelling justifications for conserving biocultural diversity:

- Their intrinsic, moral, anthropocentric, scientific and other values of biodiversity (Plotkin, 1993; Harris, 2010);
- The richness of ethnoecological knowledge in areas of rich biodiversity (Mafi, 2001; Sponsel, 2013);
- The conservation knowledge in endangered languages (McNealy, 2001);
- The practical development and livelihood benefits of conserving these; and
- Indigenous peoples' preserving heritages as a matter of basic human rights, cultural survival and compensation for past colonial crimes (Posey, 1996; Johnson, 2006).

Anthropology and Conservation

- Anthropologists have described the increasing importance of the participation of local people in conservation programs, both of local populations in protected area management and of farmers in plant genetic resources.
- Anthropologists have contributed to conservation in varieties of ways and research areas.
- Some of the area include:
  - Protected areas management
  - Genetic resources of plants
  - Forest and marine ecosystems
  - Pastoralism and range management

- They are involved in as
  - researchers on indigenous knowledge management,
  - practitioners in managing conservation programs, and
  - advocates for indigenous peoples and local communities rights

POSITIONS OF AND FOR ANTHROPOLOGISTS Within universities and research institutions, anthropologists continue well-established traditions of scholarly research, especially in two areas: (*a*) documenting local knowledge and practices that influence the selection and maintenance of crop varieties and the conservation of rare and endangered species in protected areas, and (*b*) clarifying the different concerns and definitions of biodiversity held by local populations and international conservationists. In addition, anthropologists operate in other arenas—NGOs, international agencies, social movements—participating in policy debates and acting as advocates and allies of local populations of farmers, indigenous peoples, and other subordinate groups. These multiple roles and forms of engagement are one of the promising features of the involvement of anthropologists with biodiversity and conservation.

- If we just take one area of relevance, anthropology in the context of **protected areas and crop genetic resources**:
  - Anthropological research
    - (a) documents local knowledge and practices that influence the selection and maintenance of crop varieties and the conservation of rare and endangered species in protected areas, and
    - (b) clarifies the different concerns and definitions of biodiversity held by local populations and international conservationists.
    - In addition, anthropologists operate in nongovernmental organizations (NGOs) and international agencies, participating in policy debates and acting as advocates and allies of local populations of farmers and indigenous peoples.

Key Issues And Interests In Anthropology And Conservation , Development

- 1. Participation of the local communities in (or against) conservation became an important subject of anthropological inquiry (Trusty 2011).
- Participation is nowhere more hotly debated than in the areas of conservation and development, where the requirements of ecological sustainability often collide with the demands of indigenous people seeking to control their own natural resources
- 2. How the representatives of donors, states, and non-governmental organizations (NGOs) **create and assert moral narratives**, and what **strategies** they use to negotiate competing moral narratives (e.g., Orlove and Brush 1996; Zerner 2003; West 2006; Shoreman-Quimet and Kopnina 2011).
- Conservation/development in the work of applied anthropologists outlines a number of counter currents of grassroots efforts to achieve conservation with **social justice**

Key issues and interests in Anthropology and conservation …

- 3. The connection between moral narratives and implementing activities.
  - The moral engagement of anthropologists is often associated with the position of the local people, indigenous communities, and minority or marginalized groups in opposition to the political and corporate elites funding development projects (Lewis 2005; Mosse 2005).
  - Since these projects are designed and/or funded by outsiders, the donors, the state agencies, and the NGOs, anthropologists often pointed out that the extent of authority ‘‘handed over’’ to the people who are targeted by these projects is limited (e.g., Blaser et al. 2004; Haenn 2011; Trusty 2011)

Key issues …Anthropology and conservation

- 4. the local communities affected by conservation and development governance and the ways in which they may challenge such governance or may participate in and reproduce its processes (e.g., Ellen 1993; Brosius 1997; McElroy 2013).
  - This line of inquiry aims to analyze the instances of extensive dialogue between project designers and local people, including grassroots initiatives.
  - This line of inquiry includes the politics of conservation (e.g., Gururani 1995, 2000; Chernela 2001; Ellen 2008), livelihood strategies and local perceptions (e.g., Parkes 2000; Lowe 2005), indigenous knowledge and biodiversity (e.g., Gadgil 1993; Muller-Bo¨ker 2000; Posey and Balick 2006), and conflicting ontologies of biodiversity conservation and resource management (e.g., Novellino 2009; West 2005; Trusty 2011).
- 5. A final line of inquiry reflects upon the moral positionality and responsibility of anthropologists (e.g., Mead 1977; Lewis 2005; Horowitz 2010).

Principles For Conservation: Social-Science- Anthropological Insights

- Practical statements of what conservation should do in order to succeed:

1. Conservation must occur within human-altered landscapes.
    - The strategy of moving people off of their land has sometimes backfired for conservation, because human activities such as setting fires, grazing livestock, or hunting were responsible for maintaining the conservation value of the landscape (Martinez 2003).

2. Conservation will be a durable success only if people support conservation goals

- conservationists should pay greater attention to human psychology and the impact of their messages on people.
- One strategy to increase support for conservation would be focused on children and reconnecting them with nature.
- Another strategy is to broaden the concerns of conservation beyond biodiversity and also to pay attention to economic development, jobs, poverty, and environmental justice.
- However, conservationists often reject activities aimed at poverty reduction and economic development as mission drift (Salafsky 2011).
- poverty alleviation should be regarded as a

- **3. Conservationists must work with corporations.**
  - A small number of global corporations have a huge impact on land conversion, mining, energy extraction, and consumer choices. In essence, corporations are the "keystone species" of global ecosystems.
  - Obviously, corporate practices, just like the actions of individuals, governments, and even religions, can be damaging to the environment, but there is a simple reality that must be faced:
  - Through the resources that they use and the wastes that they produce, corporations drive much of what happens to our lands and waters.
  - part of the solution is to work with corporations to improve their practices.

- 4. *Only by seeking to jointly maximize conservation and economic objectives is conservation likely to succeed.*
  - ~~Win–win outcomes~~ for ~~people and nature~~ are possible, and discovering their preconditions should be a focus of research (Kareiva et al. 2008).
  - In other cases, there may be trade-offs between conservation and economic development, but actively seeking to optimize both conservation and economic goals can minimize those trade-offs Kareiva 2012).

- ***5. Conservation must not infringe on human rights and must embrace the principles of fairness and gender equity.***
  - The people who have been pushed off their lands and hunting grounds in the name of conservation overwhelmingly tend to be poor and politically marginalized.
  - This is, quite simply, unacceptable
  - People deserve a voice in their own fates as well as in the fates of the lands and waters they rely on.
  - Not only is this arguably the right thing to do from an ethical perspective, it will probably improve conservation outcomes.
  - When communities self-organize to manage their local resources, their efforts are more effective than top-down approaches (Ostrom and Nagendra 2006).

4. Environment Conservation In Ethiopia: Practical Application Reflection And Essay Writing Project

- **This is essay number 2 which has value of 20%**
- Reflect the key concepts , approaches and anthropology’ss role in conservation taking practical examples from Ethiopia in general and your own communities. Write an essay of not more than 3-5 pages base don the following questions:

1. How is conservation as a concept understood in Ethiopian context? What is the meaning in your own local communities? Does the concept of conservation as understood among local communities in Ethiopia (e.g. Your own community) encompass the connection between life forms, non life forms , humans and their cultures in holistic way? Explain.
2. As understood in existing national and regional policies of Ethiopia, how is the idea of conservation dominantly understood? Hwy do you thin this is so?
3. How is Ethiopia’s conservation conception and practice been affected/ influenced by western modes of thought? Hwy?
4. What is the role of anthropology and anthropologist in environment and conservation in Ethiopian context? What role would you play in the future as an ecological anthropology expert?

UNIT 3

Indigenous Knowledge Environment & Conservation

Note

- This Unit is mainly base don my own PhD Dissertation. You are encouraged to access it and read it. It is available online.
- Read also my other relevant published articles which I have uploaded. Google using ‘ Zerihun Doda’ or ‘ Zerihun Doda Doffana’ and you will find many articles to my name that deal with issues of conservation, environment, sacred sites, traditional region, etc

1. Doda, Z. (2018). Indigenous Religions, Identity and Biodiversity in Southwest Ethiopia. *ITYOPIS: Northeast African Journal of Social Sciences and Humanities*, *III*(Extra), 111–127.
2. Doda, Z. (2019). The conservation of African yellowwood tree (Afrocarpus falcatus) in Sidama sacred sites, Ethiopia. *Cogent Social Sciences*, *5*(1), 1–17. https://doi.org/10.1080/23311886.2019.1565073
3. Doffana, Z. D. (2015). “Dagucho (Podocarpus falcatus) is abbo!”: Wonsho sacred sites, Sidama, Ethiopia: Origins, maintenance motives, consequences and conservation threats [University of Kent]. http://oatd.org/oatd/record?record=oai%5C%3Aethos.bl.uk%5C%3A646935
4. Doffana, Z. D. (2017). Sacred natural sites, herbal medicine, medicinal plants and their conservation in Sidama, Ethiopia. Cogent Food & Agriculture, 3(1), 1365399. https://doi.org/10.1080/23311932.2017.1365399
5. Doffana, Z. D. (2018). The Role of Sacred Natural Sites in Conflict Resolution: Lessons from the Wonsho Sacred Forests of Sidama, Ethiopia. In The SAGE Handbook of Nature: Three Volume Set (Vol. 1–3, pp. 938–967). SAGE Publications Ltd. https://doi.org/10.4135/9781473983007
6. Doffana, Z. D. (2019). Sacred sites and ancestor veneration

1. Indigenous Knowledge (IK) definition and characteristics: a revision
2. Indigenous Peoples and local communities: main characteristics
3. The role of IK and IPS in environment and biodiversity conservation
4. Cases studies from Sidama, Ethiopia
5. Impacts of global environmental change process and impacts on Iks and IPs and local communities
6. Review of national protection instruments to protect environment, and Iks: review essays by students

1. **The Concepts “Indigenous”, “Indigenous People” and “Indigenous Knowledge”**

The Concepts “Indigenous”,….

- There are debates about the concept of “indigenous”, what constitutes “indigenous knowledge”, and how a group of people are designated as “indigenous people.”
- Defining the term “indigenous” is difficult; what complicates the issue further is the criterion of identification applied by individual states and the indigenous people themselves.
- The use of the term ‘indigenous’ is loaded with moral and political connotations.
- More so, the question of who the indigenous people are (and who are not) and how to distinguish them in a given national territory has been more sensitive and problematic (Bicker et al., 2000; Parkes, Ellen, & Bicker, 2000).

The Concepts “Indigenous”,....

- The development of the concept of indigenous is an important aspect in the relations between local communities and dominant majority in a given nation-state (Child and Delgado, 1999).
- The specific empirical sense of the term “indigenous,” according to Purcell (1998), entails group of people defined by ancestral territory and common culture.
- Cleveland and Murray (1997: 479) define the term “indigenous people” as those people with long temporal continuity predating invasion of their territory by outsiders.

The Concepts "Indigenous"

- Hirtz (2003: 10), argues, a group may also be defined as indigenous group if it fulfils any one of the following criteria: "They are descendants of a people which lived in the region prior to the arrival of settlers coming in from the outside; settlers who have since become the dominant populations; they have maintained a culture which is different in significant respects from that of the dominant aspects; they are, as a group, in an inferior positions in the country concerned in political and economic aspects."
- Some have attempted to give a working definition of indigenous people.

The Concepts "Indigenous"...

- The idea of indigenous knowledge (IK) is also debatable.
- It is argued that indigenous knowledge as a self-sustaining epistemological entity exists, often dubbed as non-western, non-scientific, local, folk, informal, traditional knowledge.
- It has been used, misused, caricatured, redefined, combined and incorporated into official knowledge in the ever-transforming development approaches and discourses (Ellen, Parkes and Bicker, 2000: xi).
- There have been competing conceptions of IK in the context of contemporary theory and practice in development and conservation.

The Concepts "Indigenous",....

- Anthropology for long has focused on these non–western knowledge systems(Kottak, 2010), and the idea of indigenous knowledge has been given central importance in the discipline.
- It is associated with indigenous and local peoples and is considered as important aspects of resource system (Toledo, 2013a) and indispensable in any attempts at sustainable development and natural resource management processes.
- Some have argued that *any aspect of culture that functions toward the long-term survival of a group may theoretically be treated as indigenous knowledge*.

- The definition of indigenous people is limited by the criterion of “ancestral territory;” while that of indigenous knowledge is not.
- Though there was the tendency to link it with native communities of non-western world, it is now common to include all folk-knowledge systems as IK (Ellen, 2006).
- Parkes et al., (2000) aptly summarize the salient features of IK, including its being local; orally transmitted; a result of practical engagement in everyday life; tending to be empirical knowledge rather than theoretical; repetitious; holistic; etc.

The Concepts “Indigenous”, ….

- This ancient and yet practically modern form of knowledge has been subjected to shifting moods and treatments from the scientific establishment.
- However, since the recent decades, indigenous and local knowledge systems are gaining increasing recognition across the scientific establishment and the development, conservation and environment discourses (Hunn, 2002).
- Some argue that indigenous knowledge should not be romanticized, warning against some extremist views in both negative and positive dimensions: as some often resist it and equate it with non-science while others often paint a picture of perfection about the IK.
- Indigenous or local knowledge should not be conceptualized in a static sense as something that is homogenous and monolithic (Nazarea, 1999).

IK and Biodiversity Conservation: Some Principles

- Debates on the role of indigenous ecological knowledge and natural resource management have occupied central attention of scholars.
- The importance of IK in biodiversity conservation is now well recognized.
- Anthropologists, environmental activists and indigenous peoples' rights movements have all accounted the role of ethnoecologies in biodiversity conservation (Alexiades, 2009; Blount, 1999) the worth of knowledge about nature and the fauna and flora world encoded in the IK of indigenous people (Fincke & Oviedo, 2008) .

IK and Biodiversity Conservation: Some Principles…

- Much of the literature in this debate often regard traditional communities as the "custodians" or "stewards" of nature and biodiversity, arguing that 80% of the world's remaining biodiversity is located in indigenous territories (Johnston, 2006:25).
- It is also often argued that the nature-culture divide of the Judeo-Christian world is a false one and traditional societies have a different cosmovision and this has helped the conservation of nature(Toledo, 2013b).
- In relation to this, the effect of westernization, colonization, industrialization, etc are regarded as the key forces that disturbed the native systems(Biró, Babai, Bódis, & Molnár, 2014).

IK and Biodiversity Conservation: Some Principles…

- Some have tried to delineate the “proven” principles and practices of conservation of such societies: the spirit of interactive relations with the natural resources; the principle of stewardship and custodianship; ethical regard for nature; and commitment for community life and the future generation and ancestral ties (cultural heritages) (Durning, 1995; Nelson, 1998).

IK and Biodiversity Conservation: Some Principles…

- Some criticize such argument is an exaggeration and warn against the "romanticization" of indigenous knowledge and natural resource management systems (Reuter, 2002).
- Literature in this area underscores that indigenous knowledge and management of natural resources have been too often overestimated and the promoters of the IK were accused of presenting a rosy and romantic picture.
- Some question the validity of the idea of indigenous knowledge (Ellen and Harris, 2000).
- They argue that there are cases where local people's behaviors and practices were inimical to the biodiversity, arguing that indigenous communities may after all be more programmatic and manipulative of nature than we think (Bicker et al., 2000; Cunningham, 2001a).
- There is, thus, no settled agreement among scholars that indigenous people and their ecological knowledge are wholly sustainable and necessarily contribute to biodiversity conservation.

4. Indigenous Peoples/Local Communities And Environment: Impacts

- **Impacts** on the rights, lives, cultures and environments of indigenous peoples and local communities:
  - Back to the concepts of ecocide, genocide and ethnocide: throughout the history of the contacts between indigenous peoples and local communities with the historically dominant western world, genocide, ethnocide and ecocide have happened to the local communities and indigenous peoples of the world.
  - The idea of environmental racism, discussed above in the foregoing section here is relevant in relation to the discussion of indigenous peoples and environment.

Key principles, issues and facts

- The positive roles of indigenous peoples and local communities in creating and maintaining environmental –friendly worldviews, knowledge systems and practices
  - Competing approaches regarding the roles of IPs & LCs in relation to the environment and NRM
    - Romanticizing approaches
    - Incriminating approaches
    - Realistic approaches

IPs & LCs And Their Roles In Environment

- Indigenous peoples and their traditional knowledge have an important role to play in responding to the environment and climate change
- Indigenous peoples form approximately **5%** of the world's population: There are 370 million indigenous peoples living in more than 90 countries.
- They manage 11% of the world's forest lands and customarily own, occupy or use somewhere between 22 and 65% of the world's land surface
- It has been estimated that indigenous lands and other protected areas created to safeguard land rights, indigenous livelihoods, biodiversity and other values contain more than 312 billion tons of carbon
- Recent analyses reveal that indigenous territories in the Amazon Basin, the Mesoamerican region, the Democratic Republic of Congo and Indonesia alone contain more than 20% of the carbon stored above ground across the whole planet (AMPB et al. 2015).

IPs, LCs And Climate Change Impacts On Their Environments, Cultures And Livelihoods

- Despite having contributed the least to global warming by traditionally leading ***'low carbon' ways of life***, Indigenous peoples and local communities are *disproportionately vulnerable to climate change* because:
  - 1. They often live in ecosystems particularly prone to the effects of climate change (polar regions, small islands, mountain regions, humid tropics, coastal regions, deserts);
  - 2. They are heavily dependent on lands and resources for basic needs and livelihoods (food, medicine, shelter, fuel, etc.); and
  - 3. They are among the poorest and most marginalized people globally.

IPS, LCs and Environment and Development: Areas of Support

- The 2007 UN Declaration on the Rights of Indigenous Peoples, founded on the principle of equity, justice and non-discrimination.
- The UN Declaration recognizes that respect for indigenous knowledge, cultures and traditional practices, contributes to sustainable and equitable development and proper management of the environment
- EQUITY: A human rights - based approach to development should be implemented, taking into account issues of equity and sustainability, and endorsing the fundamental concept of development with culture and identity.
- Principles of participation, accountability, non-discrimination, equity and linkages to international legal standards including the UN Declaration on the Rights of Indigenous Peoples, should guide policies and actions in this regard
- SUSTAINABLE DEVELOPMENT AND ENVIRONMENT: Indigenous peoples' collective rights, in particular the right to land, territories and natural resources, should be recognized , protected and strengthened including through the application of free, prior and informed consent in all matters affecting them.
- .

5. REVIEW OF EMPIRICAL STUDIES IN ETHIOPIA

IK and Its Role in Development in Ethiopia: A Review

- In a country where diverse ethnic groups live in varying agroecological zones and geo-diversities with multiple subsistence systems, it can be assumed that there are many time-honored traditional knowledge systems and practices relating to the environment.
- The wealth of the country's diverse livelihood, cultural and religious groups and their broadly biodiversity-friendly beliefs, practices and institutions are generally recognized in various national policy documents (EBI, 2014; FDRE-the CRGE Initiative, 2011).
- In addition, the Federal Rural Development Policy and Strategy Document (FDRE MoARD, 2002), makes references to the accumulated repertoire of traditional concepts and practices pertaining to natural resource conservation, agronomical practices, ethno-veterinary medicine, livestock handling, terracing and irrigation asserting that such indigenous knowledge is not to be lightly regarded.

REVIEW OF EMPIRICAL STUDIES IN ETHIOPIA…

- Diverse religious worldviews and practices of peoples of Ethiopia , grounded in indigenous knowledge systems, are important assets and instruments for biodiversity conservation and environmental protection.
- Some of the country's UNESCO World Heritage Sites, which are known to harbor numerous endangered faunal and floral species, are linked to, directly or indirectly, these traditional knowledge systems.
- Ancestral religions as the core of indigenous knowledge systems have led to the creation and preservation of sacred natural sites, estimated at tens of thousands that also serve as biocultural diversity hotspots.
- These places and systems are governed by indigenous concepts of nature, biodiversity, environment and conservation (The Christensen Fund, 2014).

- **LESSONS FROM THE SIDAMA STUDY**
- **IK: Sidama Conceptions of the Values of Tree Biodiversity and Forests**
- The Sidama have a range of aphorisms for how local people value sacred sites and woody trees.
- Trees, notably native ones, are regarded as 'life' itself: "***Haqqu heshote'e****!*"
- The term '*heesho*' is literally rendered as 'life', so this is truly a powerful analogy for the way trees are valued.
- Related to the idea of 'trees as life' is the notion that considers native trees as wealth. "***Haqqu jirote'e!***" is used to signify this, a model of natural and social capital that coheres in trees. In conversations on natural resources and wealth, forests are at the forefront.
- A key parameter in household and community wealth ranking is ownership of trees.

LESSONS FROM THE SIDAMA STUDY

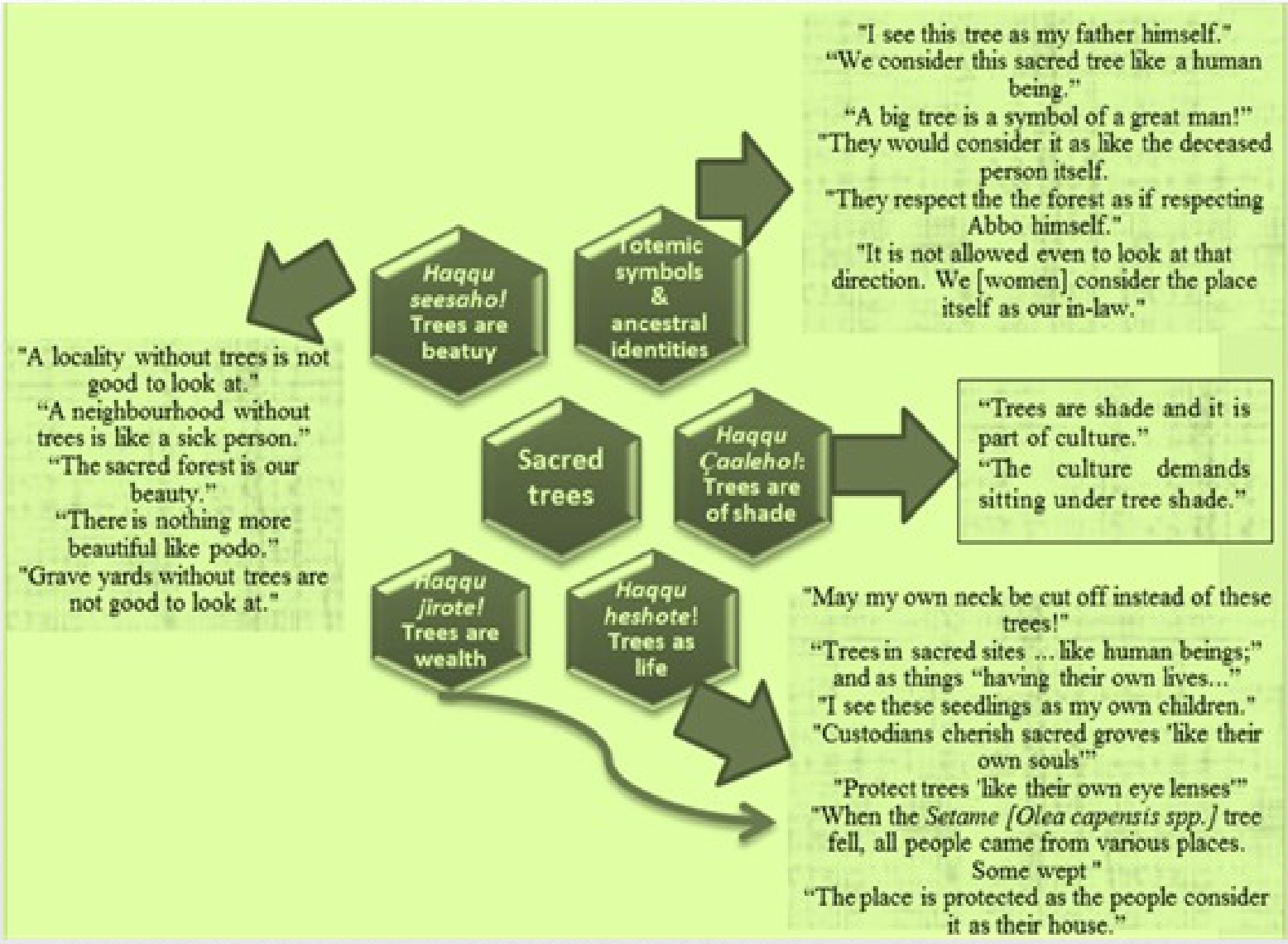
- These values and beliefs are translated in tangible attitude and practices vis-à-vis trees among some groups of people. An older informant recounted how an elderly man wept bitterly when some intruders felled trees from a sacred forest.
- A young man who manages an inherited sacred African yellowwood tree (*Podocarpus falcatus*), reportedly, of about nine generations old, which at the time of fieldwork faced the risk of being affected by local road construction, noted how he preferred the tree and emphasized he would not trade it for “even a hundred thousand Birrs ,” saying “This sacred tree is a symbol by which we commemorate our ancestors”.

LESSONS FROM THE SIDAMA STUDY

- An old man who shared custodial responsibility for this same endangered tree noted how, he “would like his own home be bulldozed instead of this tree.” Practitioners of ancestral religion value native trees as if they are ‘humans’; trees planted or grown in sacred sites are considered as things “having their own lives”, and “they see trees like their own children.”
- Custodians cherish sacred forests, “like their own souls”; and protect trees “like their own eye lenses”; some custodians “prefer their own death instead of cutting down a tree from sacred forests.”

LESSONS FROM THE SIDAMA STUDY

- The Sidama value holy forest sites as “residues of the local history” and home front-yard shade trees as “a symbol of a great man.”
- Clearly, trees of sacred places are not simply physical entities.
- They are carriers of past traditions, current values and future hopes; they are symbols of past generations of men.
- The trees of burial sites are “considered like the deceased person himself.”
- An owner of a group of sacred native trees said: “I see it as if it is my father himself.”


"I see this tree as my father himself."
"We consider this sacred tree like a human being."
"A big tree is a symbol of a great man!"
"They would consider it as like the deceased person itself.
"They respect the the forest as if respecting Abbo himself."
"It is not allowed even to look at that direction. We [women] consider the place itself as our in-law."
Haqqu seesaho! Trees are beatuy
Totemic symbols & ancestral identities
"A locality without trees is not good to look at."
"A neighbourhood without trees is like a sick person."
"The sacred forest is our beauty."
"There is nothing more beautiful like podo."
"Grave yards without trees are not good to look at."
Sacred trees
Haqqu Çaalehol: Trees are of shade
"Trees are shade and it is part of culture."
"The culture demands sitting under tree shade."
Haqqu jirote! Trees are wealth
Haqqu heshote! Trees as life
"May my own neck be cut off instead of these trees!"
"Trees in sacred sites ... like human beings;" and as things "having their own lives..."
"I see these seedlings as my own children."
"Custodians cherish sacred groves 'like their own souls'"
"Protect trees 'like their own eye lenses'"
"When the Setame [Olea capensis spp.] tree fell, all people came from various places. Some wept "
"The place is protected as the people consider it as their house."

•Conservation of Trees Through Sacred Forests as The IK Instruments

•Sidama land, as our observations during the fieldwork attests, teemed with a range of otherwise and elsewhere endangered native tree species of Ethiopia.

•During our series of field visits, particularly the PhD fieldwork, we had an opportunity to do inventories and informal surveys of culture-protected forest areas as well as other informally and community protected tree spaces in Sidama.

•Our case study villages in Wonsho district, particularly yielded very important insights on how Sidama indigenous knowledge system, proxied through ancestral religion, helped conserve important trees and wildlife.

Conservation of Trees….

- We identified 48 culture protected tree patches (whose sizes ranging from a site of a single tree to a 90.6 ha and ages from 28 to ca 375 years) in seven localities.
- The Sidama ancestral religion, a core of the indigenous knowledge system informing the foundational worldviews, was the force behind the protection of tree biodiversity.
- We counted 22 culture protected tree patches maintained by followers of ancestral religion while 4 were managed by households who left traditional religion for Protestant Christianity.
- The rest of culture protected tree areas were either completely transformed in to other land use s or on the verge of being lost.

Conservation of Trees….

- 154 floral and 33 faunal species were documented for their reported and observed past and present existence in 26 of the 48 culture protected areas in Wonsho and other informal protection areas.
- **Twenty-two** locally reported endangered native trees were found in these areas, of which **ten** were reportedly found nowhere.
- **Eighteen** major woody species were identified as extractively conserved in various informal protection areas, notably agroforests.

(a) (b) (c)

6. Review of National Protection Instruments to Protect Environment, and IKS: Review Essays by Students

- **Essay number 3: 20%**

- Based on the discussions and notes presented above, try to reflect on the situation of indigenous knowledge, indigenous peoples and local communities in Ethiopia relating to environment and biodiversity conservation.
- The Sidama case is given above form my own PhD research. Try to look for a similar case from local communities, including your own, in Ethiopia.
  1. *Discuss how indigenous knowledge is relevant in environment conservation in such local contexts.*
  2. *Reflect also on the adverse impacts happening to indigenous environment conservation knowledge and local communities in Ethiopia.*
  3. *Reflect how you as the future professionals in Ecological Anthropology might be able to contribute to documenting the positive roles of IK in environment conservation and the impacts they face in Ethiopia.*