

Learning Unit 5: Biodiversity Loss

GGH2604



Sources to consult

- **Atlas:** Cambodia; Russia; UK; China; Austria; South East Asia
- **Map 5:** Trade routes of ivory
- **Prescribed book:** Chapter 5, "Jungle capitalism and the corporate environment", on pages 81-98 in Whitehead (2014)
- **Case Studies 5.1 and 5.2:** Elephants in the dust: The African Elephant Crisis and Biodiversity hotspots
- **Additional Resources on myUnisa:** YouTube videos and Podcast 5.4

Learning Outcomes

- Discuss how biodiversity loss on a local scale can have regional and global consequences
- Describe the role of globalisation in biodiversity loss
- Explore possible causes and consequences of the illegal exploitation of resources
- Explain how remedial actions can reduce or prevent biodiversity loss

Transforming forests: Reflections on the long Anthropocene

- According to Ruddiman's long Anthropocene hypothesis, the reason that the current inter-glacial period has seen a long-term trend in rising levels of greenhouse gases can only be attributed to the rise of agricultural society.
- The large-scale forest clearances associated with the emergence of agriculture have resulted in a significant reduction in the Earth's natural capacity to absorb and store carbon dioxide. In addition to this, Ruddiman connects the emergence of rice cultivation some 5 000 years ago with rapid increases in global levels of methane.
- The current rate of deforestation, especially in the tropical rainforest biome, is accelerating. Key drivers of deforestation are logging, high demand for timber supplies, agricultural practices such as ranching and palm oil plantations.

Transforming forests: Reflections on the long Anthropocene

- Tropical rainforests absorb over 1 billion tons of carbon from the atmosphere on an annual basis.
- Deforestation contributes to the release of around one fifth of humanly produced carbon dioxide, thereby disturbing the local, regional and global climate.
- The monitoring of the trade patterns of medium-density fibreboard (MDF) in the UK and China has revealed that a growing consumer market for wood products (mostly for household furniture and shelving) is associated with an increase in deforestation rates.

Globalising the forest and multinational forest corporations

- Globalisation is associated with increasing levels of integration and connection between economic activities throughout the world. Globalisation can be seen to increase the field of competition of those making and supplying goods and services to consumers. Moreover, globalisation expands the market place within which successful entrepreneurs can sell their products and services. The flow of investments to successful economic enterprises in diverse geographical locations is streamlined by globalisation, which makes it easier for enterprises to grow.

Globalising the forest and multinational forest corporations

- Joseph Stiglitz contends that while there is potential for globalisation to enhance the lives of people throughout the world, the form it is presently taking is having a detrimental impact on the freedoms and lifestyles of many throughout the world.
- **Listen** to Podcast 5.4 titled “Globalising the forest” on myUnisa.
- **Watch** the YouTube video titled “Illegal logging: The problem” from the link:
<https://www.youtube.com/watch?v=eon7mOH2PTs>

Jungle capitalism: The case of the United Fruit Company

- The United Fruit Company (UFC) was officially established on the 30th of March 1899. By this point, however, it already owned land in Costa Rica, Panama, Columbia, Cuba, Jamaica and the Dominican Republic, which collectively constituted some 50 000 acres.
- Over the course of the twentieth century, UFC would become one of the dominant players in the international fruit trade and almost develop a total monopoly on the production and transportation of bananas.
- Over time, UFC expanded its corporate interests and started to buy up radio-broadcasting companies, postal services and established sugar and palm oil plantations.
- During the middle decades of the twentieth century, UFC was one of the largest employers in the whole of Central America and acquired significant political influence in all the countries within which it operated.

Jungle capitalism: The case of the United Fruit Company

- The term “banana republic” was coined to describe a weak and possibly corrupt state that becomes the servant of corporate interests (MNCs). This term was coined to describe the impacts that the operations of corporations like UFC were having in places like Central America.
- Following the Guatemalan election of President Jacobo Árbenz in 1951, the UFC became concerned about the incoming president’s proposed land reforms. Guatemala’s banana plantations accounted for a quarter of all of UFC landholdings in South America. UFC consequently utilised its connections with the US Central Intelligence Agency (CIA) in order to orchestrate a coup d’état in Guatemala. In 1954 Árbenz was ousted from power and his government replaced with a military junta that was much more sympathetic to the needs of UFC.

Jungle capitalism: The case of the United Fruit Company

- UFC was able to use its unchallenged power to acquire large parts of Central America's rainforests. These forests were either cleared to make way for large banana or sugar plantations, or simply left unused.
- UFC would often take ownership of large tracts of land, which it had no intention of using in order to prevent its competitors from acquiring productive land. This meant that communities who had previously relied on forests to secure precious food and resources had to move elsewhere.
- The emphasis that UFC placed on high-yielding agricultural output resulted in it concentrating most of its plantation activities on the growing of one particular type of banana: the Gros Michel, or Big Mike. In concentrating its efforts on the growth of the Big Mike, UFC created a monoculture plantation system throughout Central America. Subsequently, Panama disease swept through UFC plantations and decimated its banana harvest.

Jungle capitalism: The case of the United Fruit Company

- Given its unchallenged power in Central America, and its access to large swathes of forested land, UFC's solution to the problem was to move its activities around. UFC's response when the disease had taken hold was to move on to new land, to a new country if needed, and to carve out another part of Central America's "infinite" jungle.
- **Vote** in Poll 5.5 on myUnisa. The poll question is:
 - Revisit the Malthusian, Cornucopian and Marxist theories discussed in Learning Unit 2. In your opinion, which of these theories can best describe UFC's response to the outbreak of Panama disease in their banana plantations?

Big box retail and the global timber supply chain

- Through the combination of low prices and marketing, big box retailers are clearly contributing to the escalating demands that are placed on the world's forests to supply timber to the market.
- It has been observed that manufacturers and timber producers find creative – and sometimes illegal – ways to lower prices for big buyers, for instance lowering employee wages and health-and-safety measures, purchasing more illegal timber, and adopting destructive forest practices.
- The UK Environmental Investigation Agency found that the baby cribs sold by Walmart were made from wood that was sourced in areas of Russia that had very high rates of illegal logging, which is often carried out during the tiger breeding season.

Big box retail and the global timber supply chain

- While big box retailers may be oblivious to the presence of illegal timber within their products, it is clear that economic practices and associated global supply chains create the incentives and opportunities that lead to the exploitation of forests.
- Following media coverage of such controversial sourcing practices, many retailers are trying to take greater responsibility for precisely where their wood is coming from. In order to support such corporate greening activities, there are now official forest certification processes.
- These initiatives are often led by environmental non-governmental organisations (NGOs) such as the Forest Stewardship Council, and provide an official labelling system for timber products that have been produced in socially and environmentally just ways.

Illegal exploitation of resources: A case study on elephant populations

- **Read** Case Study 5.1: Elephants in the dust: The African Elephant Crisis.
- **Watch** the YouTube video titled “A brief history of the ivory trade” from the link:

<https://www.youtube.com/watch?v=93rRwxSsDPQ>

- **Participate** in the Discussion Forum Topic 5 on myUnisa:
 - Consider how the term ‘banana republic’ was associated with UFC’s activities in Central America. In your opinion, should the following countries be regarded as ‘ivory republics’ due to their involvement in the illegal trafficking of ivory: Cameroon, Congo, the Democratic Republic of Congo (DRC), Egypt, Ethiopia, Gabon, Kenya Mozambique, Nigeria, South Africa, Tanzania and Uganda?

Biodiversity Hotspots

- **Read** Case Study 5.2: Biodiversity hotspots
- **Vote** in Poll 5.8 on myUnisa. The poll question is:
 - Consider the threats to biodiversity in Africa's biodiversity hotspots. In your opinion, would planting indigenous vegetation in gardens and botanical parks assist with the preservation of species such as those from the genus *Conophytum* (endemic to Namibia and South Africa)?
- **Watch** the YouTube video titled "A conservation story: Maputaland-Pondoland-Albany biodiversity hotspot" from the link:

<https://www.youtube.com/watch?v=8rIXFlr0McM>

Thank you

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