

Globalization, Industrialization, and Extractivism: An Alternative to Mass Ecocide

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Abstract

Globalization, industrialization, and extractivism are widely accepted as drivers of modern economic development, yet their long-term ecological consequences are profoundly destructive, contributing to ecocide—the systematic devastation of ecosystems. This paper critiques the anthropocentric value system fueling these processes, characterized by a relentless pursuit of growth and prosperity, and examines their environmental, economic, and social impacts, including climate change, biodiversity loss, and resource depletion. Through case studies, such as Bolivia’s deforestation surge and the 2025 Vistra Power Plant lithium battery fire in California, the study highlights tangible outcomes of these systems. It argues for a paradigm shift toward a biocentric framework, emphasizing degrowth, enoughness, and sufficiency as alternatives to mitigate ecological harm. Policy recommendations and value reorientation are proposed to foster sustainability and equity, offering a path to avert mass ecocide.

1. Introduction

The rapid expansion of globalization, industrialization, and extractivism has transformed economies and societies, often at the expense of ecological integrity. These interconnected processes, driven by a growth-centric ethos, have accelerated environmental degradation, poisoning air, water, and soil while exacerbating climate change. Ecocide, defined as the destruction of ecosystems through human activity, emerges as an inevitable outcome of this trajectory. This study analyzes the roots and consequences of these systems, critiques their underlying anthropocentric values, and explores sustainable alternatives like degrowth and biocentrism to preserve planetary health for future generations.

2. Conceptual Framework and Definitions

This analysis employs a dual lens of anthropocentrism versus biocentrism to evaluate globalization, industrialization, and extractivism:

- Ecocide: The systematic destruction of ecosystems via pollution, deforestation, and resource depletion.
- Globalization: The interconnectedness of economies, cultures, and populations through trade, investment, and technology.
- Industrialization: The transition to an economy dominated by industry and manufacturing.

- **Extractivism:** Mass resource extraction, primarily for export, with minimal local processing and significant ecological harm.
- **Anthropocentrism:** A human-centric worldview prioritizing human needs over nature's intrinsic value.
- **Biocentrism:** A perspective recognizing the inherent worth of all living organisms, advocating ecological balance.

Additional concepts—degrowth, enoughness, and sufficiency—frame the proposed alternatives, challenging the growth-and-prosperity paradigm.

3. Methods

This study synthesizes qualitative data from literature reviews, case studies, and theoretical critiques. Environmental consequences are assessed using documented ecological impacts (e.g., greenhouse gas emissions, biodiversity loss). Case studies—Bolivia's deforestation and the Vistra Power Plant disaster—provide empirical grounding, while degrowth and sustainability frameworks draw from established scholarship (e.g., Hickel, 2020; Kallis, 2018). No primary data collection was conducted; findings rely on secondary sources and author analysis.

4. Findings: Consequences of Globalization, Industrialization, and Extractivism

The unchecked pursuit of economic growth through these processes yields severe ecological and social repercussions:

- **Climate Change:** Industrial activities, particularly fossil fuel extraction, elevate greenhouse gas emissions, intensifying global warming and extreme weather (UNEP, 2021).
- **Biodiversity Loss:** Deforestation and habitat destruction, driven by extractivism, threaten species survival, with global assessments noting unprecedented declines (IPBES, 2019).
- **Soil Degradation:** Industrialized agriculture depletes topsoil, undermining food security (UNDP, 2020).
- **Freshwater Depletion:** Overuse in industrial and extractive processes exacerbates scarcity, especially in arid regions (UNEP, 2021).
- **Overconsumption:** Capitalist models prioritizing profit fuel excessive resource use, waste, and labor exploitation (Jackson, 2017).

Case Studies

1. **Deforestation in Bolivia:** Agroindustrial expansion has driven a 259% increase in deforestation over eight years, devastating biodiversity and releasing stored carbon (Cabezas, 2023).

2. Vistra Power Plant Disaster (2025): A lithium battery fire at this California facility underscores the ecological risks of industrial energy storage, releasing toxic pollutants and highlighting technological overreach (Blumer, 2025).

5. Discussion: The Problem and Alternatives

The root of ecocide lies in an anthropocentric value system equating progress with endless growth and prosperity. Globalization spreads this ethos, industrialization amplifies it through mass production, and extractivism sustains it by depleting finite resources. Short-term economic gains mask long-term ecological collapse, as evidenced by rising emissions, species loss, and events like the Vistra fire.

A biocentric alternative challenges this paradigm:

- Degrowth: Advocates reducing production and consumption to align with ecological limits, prioritizing well-being over wealth (Hickel, 2020; Kallis, 2018). It fosters local economies and renewable energy, countering extractivism's excesses.
- Enoughness: Rejects consumerism, promoting satisfaction with basic needs and non-material fulfillment (Latouche, 2009).
- Sufficiency: Ensures equitable resource access within planetary boundaries, addressing marginalized communities' vulnerabilities (Princen, 2005).

These concepts require a cultural shift—moving from competition to collaboration—and supportive policies that will mitigate ecological destruction. Such policies must focus upon reshaping societal values, reorienting economic incentives, and embedding ecological awareness into governance and daily life. Examples of such policies include:

- Carbon and resource taxes in order to curb excess
- Mandatory energy and water conservation
- Ecosystem rights legislation
- Regulatory frameworks to curb industrial pollution.
- Education to reshape consumerist narratives.

6. Conclusion

Globalization, industrialization, and extractivism, underpinned by anthropocentric growth, drive ecocide through ecological destruction and resource depletion. The Bolivia and Vistra cases exemplify these risks. A biocentric shift toward degrowth, enoughness, and sufficiency offers a sustainable path, redefining progress as ecological health and equity rather than excess. Policymakers, educators, and activists must champion this transition to avert mass ecocide and secure a livable future.

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