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Discussion on theories of degrowth

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ABSTRACT

Degrowth is presented as a radical yet increasingly relevant climate policy and advocates of the model defend it as addressing the structural drivers of the environmental crisis, particularly overconsumption and the dependency on continuous economic growth. This article proposes a discussion on different climate policies and their political feasibility compared to the degrowth model. Defenders of the degrowth model explore the finite nature of the planet's natural resources and evaluate degrowth as a potential pathway toward environmental sustainability and social equity. The degrowth model challenges the dominant neoliberal assumptions that equate well-being and progress with GDP growth, proposing instead a shift toward circular economies and more localized, low-impact livelihoods.

However, the paper also investigates critics of degrowth as a climate solution that would foster inequalities in the Global South, where economies are often dependent on export-oriented industries and vulnerable to fluctuations in global demand. While degrowth could alleviate some of the harms caused by globalization and extractive capitalism by promoting local economies, a just transition to degrowth requires strong governmental investment in the welfare system and redistributive policies, especially to protect marginalized communities from job losses and economic disruptions. Ultimately, degrowth prompts a broader reflection on society's capacity to adapt to ecological limits and redefine progress beyond economic accumulation.

Keywords: Climate action, greenhouse gas emissions, degrowth, capitalism, economic growth model, climate mitigation policies, circular economies, local economies, societal change, social justice

1. Introduction

The recent escalation of natural disasters and the record-breaking warmest year on Earth in 2024 underscores the limitations of current climate mitigation efforts in addressing the environmental crisis (World Meteorological Organization, 2025). Contemporary climate action focuses on reducing greenhouse gas (GHG) emissions and transitioning to a more sustainable economic model. However, critics argue that these measures remain deeply embedded in growth-driven capitalist systems, contributing to environmental degradation (Fuentes & al., 2020, p. 8). Degrowth has emerged as a radical yet increasingly discussed alternative to traditional climate policies. Degrowth advocates challenge the notion that economic growth is compatible with environmental sustainability. They argue that degrowth could reduce overconsumption and the extraction of finite natural resources (Kallis et al., 2024, p. 1). Rather than focusing solely on emission reduction, degrowth proposes a broader societal shift toward more sustainable, minimalistic modes of living (Schneider et al., 2010, p. 512). The model addresses environmental harm by promoting reduced consumption and limited economic expansion to decrease GHG emissions (Kronenberg et al., 2024, p. 235) (Khmara & Kronenberg, 2018, p. 722).

This article examines the theories of the degrowth model and its potential effects on the climate crisis and social justice in the context of globalization and capitalism. The paper then uses research on the intersection of degrowth with innovation and development to investigate the neoliberal assumption that well-being, consumerism, and economic growth are inherently interconnected (Schneider et al., 2010, p. 512). Degrowth will undergo a critical examination as a potential alternative to conventional climate policies. The feasibility of degrowth in terms of political viability will be assessed in comparison to alternative market-based climate solutions. Moreover, this article highlights the possible societal consequences of degrowth, particularly for vulnerable populations in the Global South (Savin & Berg, 2022, p. 8). While researchers argue that degrowth may result in socio-economic disruptions, others defend that it could reduce the exploitation of natural resources in these regions (Lang, 2024, p. 928). To prevent the exacerbation of social disparities, a successful transition to degrowth would necessitate substantial governmental intervention and investment in social welfare programs (Büchs & Koch, 2019, p.160).

2. Understanding degrowth

2.1 A societal model downscaling production and consumption

Degrowth is a climate policy that challenges the traditional reliance on economic growth as an indicator of prosperity and social progress. Advocates of degrowth define it as "an equitable downscaling of production and consumption that increases human well-being" while aiming to "enhance ecological conditions at the local and global level" (Schneider et al., 2010, p. 512). This perspective suggests that social development and human progress can occur independently of economic growth. Supporters of degrowth argue that it could address the "triple environmental, social, and economic crisis" by promoting a shift away from a growth-driven model (Schneider et al., 2010, p. 511). Degrowth advocates for a paradigm shift in societal structures, proposing a transition from excessive resource extraction and perpetual economic expansion towards a more sustainable and equitable model (Whitehead, 2013, p. 142). This approach involves restricting and reducing production as an incentive to restrain consumerism and material consumption (Schneider et al., 2010, p. 512). Some researchers argue that addressing the climate crisis requires a substantial reduction in overall consumption, accompanied by a corresponding decrease in economic activity (Khmara & Kronenberg, 2018, p. 722). They support their argument by asserting that the continuous rise in production and consumption is incompatible with environmental sustainability and social justice (Lux et al., 2023, p. 2). However, critics of the degrowth model argue that a reduction in economic activity could diminish individuals' well-being (Savin & Berg, 2022, p. 6). They advocate for alternative climate solutions that do not jeopardize economic growth. Alternative climate policies, such as green growth, are perceived as more politically feasible than the degrowth model (Savin & Berg, 2022, p. 6).

2.2 Degrowth and finite natural resources

Degrowth theorists argue that the current economic trajectory, characterized by rapid expansion and increasing resource consumption, is unsustainable due to the finite nature of natural resources. Scientific reports demonstrate the "Planetary Boundaries" that human beings have breached with the "acceleration of the human enterprise since the 1950s" (Rockström & al., 2009, p. 21). The "exponential growth" of consumption, innovation, and extraction of natural resources threatens the biophysical systems. Potentially triggering "abrupt or irreversible environmental changes" with severe consequences for human societies (Rockström & al., 2009, p. 3). In Western societies, economic prosperity and rising income levels are often associated with improved well-being and quality of life. Scholars argue that the "expansion of the economy is the sine qua non of a happy and affluent society" (Whitehead, 2013, p. 141). However, others debate whether economic growth is inherently linked to subjective well-being (Büchs & Koch, 2019, p.162). Some research found that beyond a certain threshold, GDP growth does not necessarily correlate with increased happiness or life satisfaction (Sacks et al., 2010, p. 1). Nevertheless, critics of degrowth argue that reducing economic activity could lead to social and economic instability because it would sacrifice considerable welfare, particularly in regions depending on growth for poverty alleviation and public welfare (Savin & Berg, 2022, p. 6) (Whitehead, 2013, p. 141).

Therefore, degrowth advocates for a fundamental shift in societal consumerism to address the challenges of preserving finite natural resources and mitigating environmental degradation. This paradigm deviates from the capitalist model, which prioritizes human well-being through the pursuit of consumerism. However, some research advocates that degrowth would decrease social welfare and, therefore, lead to an increase in social instability.

2.3 Degrowth and innovation

The current economic system, rooted in capitalism, centers around maximizing growth. In this consumer-driven society, the "ideology of neoliberalism and infinite growth" plays a major role, with neoliberalists arguing that degrowth impedes progress (Brown & Vergragt, 2016, p. 1). From a neoliberal perspective, implementing degrowth might result in a reduction of the national Gross Domestic Product (GDP) (Khmara & Kronenberg, 2018, p. 722). Economic progress is often associated with Gross Domestic Product (GDP) growth, which is closely linked to consumerism and technological advancement (Kotz, 2002, p. 1). Consequently, a question arises for degrowth theorists: How can society thrive and modernize while adopting a more restrained and simplistic way of life? Supporters of degrowth, such as Schneider, argue that innovation need not be hindered but rather redirected toward more sustainable and meaningful outcomes (Schneider et al., 2010, p. 513). Concepts like the circular economy exemplify this shift, as they necessitate rethinking current production and consumption systems. In their article "Crisis or Opportunity? Economic Degrowth for Social Equity and Ecological Sustainability," Schneider et al. (2010) assert that degrowth does not hinder progress but challenges it to be "redirected from more to better" (p. 512). The circular economy promotes innovation by making waste recovery economically viable (Savini, 2023, p. 3).

Consequently, theorists of degrowth present it as an alternative economic paradigm that encourages technological progress and innovation, such as through circular or locally based economies, which require substantial investment and creative solutions. However, perceived it as a threat to modernization and prosperity, fundamentally challenging our neoliberal societal framework (Brown & Vergragt, 2016, p. 1). The question remains: Can people and the economy adapt to such a shift? It is crucial to consider the broader context of wealth and development. To adapt to the constantly evolving world, society must progress accordingly and address pressing issues. Are modernization and development creating a framework for coexistence between nature, humans, and the climate? Are current climate policies addressing the root causes of the climate emergency, or are they merely providing temporary solutions? Climate change remains a significant challenge, and it is essential to adjust approaches to mitigate its devastating consequences on both human well-being and nature. The second part of the article will compare the effectiveness of several climate policies, including degrowth, in addressing the underlying causes of climate change.

3. Discussion on climate policies

3.1 Market-driven climate policies

Alternative climate policies, such as trade sanctions, are also discussed as solutions to address the climate crisis. Trade sanctions, also referred to as trade penalties, are implemented in various forms, such as through uniform tariffs on imports and exports aimed at stabilizing a climate coalition (Hagen & Scheider, 2021, p. 2). By imposing penalties on nonparticipants, trade sanctions incentivize countries to reduce their GHG emissions (Nordhaus, 2020, p. 17). They can be organized by climate clubs, which are groups of countries with "similar climate policies" that work together to implement "harmonized emissions reductions" and "set an international carbon price." States that choose not to join the "climate clubs" may face trade restrictions (Hufbauer et al., 2022, p. 18). An alternative to trade sanctions involves different carbon pricing mechanisms, such as the European Commission's proposal for the Carbon Border Adjustment Mechanism (CBAM). This procedure imposes a price on imports based on the "verified emissions of the imported goods" (Grubb et al., 2022, p. 770). Consequently, the different solutions on trade sanctions and carbon pricing compel states to reconsider their energy source technologies towards greener and renewable energies to reduce emissions and avoid potential sanctions (Lin, 2019, p. 538) (Grubb et al., 2022, p. 762). While these policies aim to reduce environmental impact while still prioritizing economic growth, degrowth advocates argue that true sustainability necessitates transitioning away from growth-oriented strategies (Schneider et al., 2010, p. 512). Therefore, the degrowth model challenges the underlying framework of capitalism, which is central to policies such as trade sanctions and carbon pricing. However, trade penalties, being embedded within a capitalist framework, are perceived as less disruptive than the degrowth model (Fuentes & al., 2020, p. 8). From this viewpoint, market-driven policies may be considered more feasible, as they do not challenge consumerism or economic growth but rather seek to enhance the sustainability of existing systems.

3.2 Green-tech innovations

While market-driven policies, such as trade sanctions and carbon pricing compel states to adopt innovative strategies for reducing their emissions, they do not directly address consumption patterns. These strategies uphold the belief that "an alliance between nature and technology will save us" (Sandrin, 2024, p. 177). Although industries may be required to emit fewer greenhouse gases, these measures do not necessarily promote reduced resource use or behavioral changes among consumers. Instead, they reinforce the narrative that economic growth can be pursued "without facing catastrophic consequences" (Sandrin, 2024, p. 177).

Green transportation

Technological advancements such as electric vehicles and green shipping are often celebrated as climate solutions. However, these innovations will continue to "consume energy" and "transport more goods further" (Schneider et al., 2010, p. 516). Green innovations do not necessarily reduce consumerism. Research suggests that "eco-efficient technologies" may even stimulate higher consumption, as they offer more profitable alternatives rather than fundamentally reducing demand (Schneider et al., 2010, p. 516). Researchers argue that a shift to "non-energy-intensive sustainable products" could be used as a "justification for increased consumption" (Seebeauer & al., 2019, p. 7). Consequently, the environmental benefits are debatable because of the risk of a rebound effect, where increased efficiency results in more total consumption, thus undermining sustainability goals (Seebeauer & al., 2019, p. 2).

Hydrogen production

Hydrogen fuel is frequently promoted as a green solution, but some researchers state that the disparity between policy rhetoric and actual emissions contributes to "greenwashing" (Greiss, 2023, p. 9). Several methods exist

for producing hydrogen, with electrolysis being the only method that does not emit greenhouse gas emissions (Carbon Brief, 2020). Produced via electrolysis, green hydrogen is a low-emissions alternative, but it currently only represents 2% of global hydrogen production (IEA, 2019, p. 37) (Sandrin, 2024, p. 178). The other types of hydrogen, grey hydrogen, and blue hydrogen are derived from fossil fuels: 76% originating from natural gas and 23% from coal. Sandrin argue that even though green hydrogen is a potential clean energy solution, it is far from representing most of the overall hydrogen production (Sandrin, 2024, p. 180). Researchers debate whether technological solutions alone are insufficient to address the climate crisis (Schneider et al., 2010, p. 516). In contrast, advocates of degrowth position climate action as a matter of moral responsibility. They argue that the implementation of technologies often assumes that humans are incapable of adapting to lower levels of consumption. By doing so, they challenge the assumption that capitalism can transition seamlessly into a carbon-free economy (Tornel, 2019, p. 71).

3.3 Degrowth compared to green growth

The degrowth model is defended as offering an alternative solution to rapidly decrease greenhouse gas emissions by targeting the systemic drivers of environmental degradation. The degrowth model posits that "the process of reducing production and consumption" is the most effective strategy for mitigating emissions (Khmara & Kronenberg, 2018, p. 722). A research scenario estimates that degrowth could lead to an 88% reduction in emissions by 2035 compared to the "business as usual" scenario (Victor, 2012, p. 212). Furthermore, it argues that the implementation of smaller and circular economies promotes the reuse of materials, decreasing both pollution and reliance on non-renewable resources (Charonis, 2012, p. 3). However, trade sanctions and carbon pricing are defended as more politically feasible because they are market-based and, therefore, align with existing capitalist frameworks (Fuentes & al., 2020, p. 8). These approaches encourage emissions reductions without challenging prevailing economic paradigms (Fuentes & al., 2020, p. 8).

Consequently, states are incentivized to invest in renewable technologies to avoid economic penalties and enhance energy efficiency. However, these mechanisms don't explicitly promote reduced consumption or behavioral changes. Degrowth, in contrast, aims to address the root cause of climate change by redefining societal values and reducing reliance on consumption-driven growth (Schneider et al., 2010, p. 512). The COVID-19 pandemic showed that rapid behavioral and production changes are possible under the right conditions (Ray & al., 2022, p. 13). However, a long-term shift towards degrowth would require deliberate planning, societal support, and institutional frameworks (Büchs & Koch, 2019, p.160).

4. COVID-19 and climate adaptation

Research on "the impact of COVID-19 pandemic on global carbon emissions" discusses GHG emissions reduction following the implementation of strong regulatory measures (Ray et al., 2022, p. 13). The study further shows that it is politically feasible to encourage behavioral changes at "city, nation, continent, and global levels" to reduce consumerist habits in response to a collective threat to human health (Ray et al., 2022, p. 13). Although there was initial resistance to public health policies, a societal consensus gradually emerged in favor of these measures for the collective good. In several countries, lockdowns emerged as the sole viable solution to safeguard the population and curb the virus's rapid spread. Despite the inconveniences and disruptions they caused, populations demonstrated remarkable adaptability by wearing masks and adhering to the imposed restrictions (Fuentes et al., 2020, p. 10). This experience raises the question of whether similar collective responsibility and behavioral adaptations can be mobilized to address the climate crisis. However, the reduction in greenhouse gas emissions during the COVID-19 pandemic alone would not have been sufficient to meet the Paris Agreement goals. Therefore, researchers propose a more profound social transformation, complemented by green innovations, for achieving long-term sustainability (Fuentes et al., 2020, p. 9).

Consequently, market-based solutions appear more politically feasible to mitigate climate change compared to degrowth, as it represent an economic threat. Despite the pandemic's revelation that global collaboration can lead to transformative changes in response to existential threats, addressing climate change necessitates the integration of both social and innovative green solutions (Fuentes & al., 2020, p. 8). The next section will examine researchers's statements that degrowth can decrease social justice through support for smaller, localized economies.

5. Societal impact of degrowth

5.1 Global South and Global North dependency

Degrowth theorists conceptualize the degrowth model as a series of alternatives that transcend the principles of development and growth (Krähmer, 2025, p. 3). In this concluding section, degrowth is discussed as a potential strategy to address the social injustices that globalization imposes on marginalized communities with "unfair exploitation" of the Global South by the Global North

(Fields-Hirschler, 2023, p. 59). Globalization has created a dependency in the Global North on the Global South due to "appropriated resources with high-embodied material, labor" from low-income countries (Kreinin, H., & Aigner, E. 2022, p. 290). This exploitation exposes the extent to which capitalist systems and Western consumerism rely on the labor and resources in the Global South (Fields-Hirschler, 2023, p. 59). It also underscores how economies in the Global South depend on the Global North to "maintain employment and service debts" (Kallis, 2024, p. 73). This mutual dependency presents a complex challenge for implementing degrowth policies globally, particularly in the Global South (Savin & Berg, 2022, p. 8). To address these structural imbalances and facilitate a just transition to degrowth, substantial public investment and international cooperation are argued to be indispensable by degrowth theorists. Such investment must prioritize the development of local economies in the Global South, alleviate debt burdens, and promote sustainable livelihoods that are not contingent upon extractive or export-oriented growth models (Büchs & Koch, 2019, p.160).

5.2 Degrowth and the Global South's natural resources

Advocates of degrowth argue that this alternative model could limit the extractive practices of the Global North in the Global South by promoting local economies (Krähmer, 2025, p. 11). Many communities and local markets have collapsed under the pressure of globalization, while natural resource extraction has degraded ecosystems and threatened livelihoods (Fields-Hirschler, 2023, p. 60). The "Rises in foreign direct investments have been historically also tied to land grabbing" which participated in the "destruction of local sustainable community livelihoods" (Kreinin, H., & Aigner, E. (2022, p. 290). In numerous instances, this has resulted in the theft of economic opportunities (Schneider et al., 2010, p. 516). Degrowth researchers advocate for degrowth as a model that would transition towards smaller-scale, more self-sufficient local economies (Schneider et al., 2010) (Khmara, & Kronenberg, 2018, p. 723). And that would consequently limit international trade (Krähmer, 2025, p. 2). A shift to amplify local economies may offer opportunities for impoverished communities, particularly those impacted by foreign and large-scale production, to rebuild local forms of livelihood (Krähmer, 2025, p. 11). Consequently, degrowth defenders argue that it could contribute to mitigating some of the adverse social consequences of globalization by diminishing the "unfair appropriation of resources" (Kallis, 2024, p. 73). This approach may empower communities to regain control over local commerce and reduce dependency on foreign markets. Climate change has intensified social inequalities and worsened vulnerability in many Global South communities (Fields-Hirschler, 2023, p. 60). Thus, degrowth's emphasis on local economies may represent a pathway for community resilience and greater autonomy over local resources (Lang, 2024, p. 928). However, such a transition would require coordinated policy efforts, substantial government support, and long-term investment in equitable capacity-building.

5.3 Transition to degrowth requires governmental investment

The implementation of degrowth must be accompanied by substantial government investment in social welfare initiatives to facilitate a just and sustainable transition for the most vulnerable communities (Büchs & Koch, 2019, p.160). Transitioning to degrowth "could have damaging effects (...) in the absence of policy interventions" on the Global South population (Kallis, 2024, p. 73). Indeed, degrowth, which prioritizes local economies, may pose significant risks to the Global South by limiting economic development, therefore, disrupting economies heavily reliant on extractive and export-oriented industries such as mining and agriculture (Suzer, 2022, p. 5). Degrowth advocates state that public services and social welfare will require redistributive mechanisms to address the population's needs (Büchs & Koch, 2019, p.158). Marginalized groups would likely be the first affected, as their livelihoods often depend on global trade and wage labor in export sectors (Savin & Berg, 2022, p. 8). Therefore, targeted investments are crucial to avoid deepening poverty levels and to ensure that vulnerable populations are protected during this transition (Büchs & Koch, 2019, p.163). As Kallis (2024, p. 68) suggests, "good social outcomes are possible when the right policies are implemented." Research has demonstrated that the implementation of degrowth does not compromise well-being when combined with "technology, policy-driven investment strategies, and redistribution" (Kallis, 2024, p. 68). Theorists argue that degrowth emerges as a potential climate policy that, if paired with strong welfare systems and equitable redistribution, could promote social justice for the Global South.

6. Conclusion

The degrowth model advocates for a reduction in consumerism, often described as one of the root causes of climate change. This article explores convergent researchers' opinion on degrowth. Some are presenting it as a climate solution that addresses resource scarcity by downscaling production and consumption. They argue that the model challenges the capitalist notion that well-being, consumerism, and economic growth are inherently linked

(Schneider et al., 2010, p. 512). In response to neoliberal criticism regarding the GDP decline and perceived stagnation, degrowth theorists defend degrowth as an alternative economic model that can still foster transformation within a circular economy framework (Schneider et al., 2010, 512). They hope to prompt the reader to reflect on definitions of progress and innovation. This raises a crucial question: Should modern societies adapt their consumption patterns to nature's constraints and the growing ecological backlash against globalization and capitalism? This article uses alternative climate policies, such as trade sanctions and carbon clubs to compare theories of climate mitigation efficiency. The paper characterized them as more politically viable because of their integration into existing capitalist systems. However, green innovations, such as electric cars or the production of green hydrogen, must be adjusted to address the environmental crisis and its urgency. Their current design is insufficient. Although green hydrogen presents a promising solution to mitigate greenhouse gas emissions, its production capacity currently falls short compared to other hydrogen production methods (IEA, 2019, p. 37). In the context of green trucks, research suggests that the rebound effect could potentially encourage consumption, potentially outweighing the advantages associated with their environmentally friendly nature. In contrast, degrowth seeks to directly reduce consumption levels, offering a more immediate pathway to address the urgency of the climate crisis. A comparison with the adaptation to the COVID-19 pandemic invites the reader to consider whether a similar level of collective commitment and behavioral change could be mobilized in the face of ecological collapse. Lastly, the interdependence of the Global South and the Global North with the extraction of natural resources in the Global South and the unequal economic prosperity in the Global North is discussed as incompatible with the degrowth model. On the one hand, research demonstrates that degrowth would potentially have positive social impacts on the Global South. By fostering local economies, communities that have lost their livelihoods due to globalized production may have the opportunity to rebuild the localized economy. Degrowth advocates state that with reduced consumption, the alternative societal model could also alleviate the human consequences of globalization and resource extraction. On the other hand, critics of degrowth assert that the potential implementation of such policies could adversely impact the economic well-being of vulnerable communities in the Global South, particularly those heavily reliant on export-oriented industries. Consequently, degrowth researchers assert that a welfare state is indispensable for the implementation of degrowth in order to mitigate negative economic repercussions on impoverished communities.

Debates on adequate climate solutions are highly controversial among various researchers. This paper aims to invite the reader to critically discuss degrowth as a potential solution to mitigate climate change. The degrowth movement challenges current policy frameworks by suggesting that they underestimate the capacity of human societies to adapt in favor of environmental survival. Therefore, it raises critical concerns regarding the extent to which climate policies are prepared to embrace truly transformative change.

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