



Transformative change and its relation with environment protection

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Abstract. In this article we discuss about “transformative change” as a new concept and the links it has with environmental protection. Transformative change signifies a deep and often disruptive shift that alters the underlying structure, dynamics, or essence of the subject in question. Embracing or managing transformative change can be challenging because it often requires adapting to the unknown and letting go of established practices or beliefs. However, it can also present opportunities for innovation, growth, and the creation of more sustainable and resilient systems. Transformative change is related to environment protection. Transformative change in environmental protection is about reimagining and redesigning human interactions with the environment in a way that ensures its health, resilience, and sustainability for current and future generations. It requires a holistic and systemic approach that addresses the underlying drivers of environmental degradation.

Key words: dynamics, ecosystems protection, new concept, transformative change.

Introduction. In this article we will discuss about “transformative change” as a new concept and the links it has with environmental protection.

Transformative change. “Transformative change” refers to a significant and fundamental shift or alteration in a particular system, process, organization, or even society as a whole. It represents a profound and often irreversible change that has a far-reaching impact, leading to a new state or condition that is substantially different from the previous one. Transformative change can occur in various domains, as we will present below.

Individual growth. This can refer to personal development and self-improvement, where a person undergoes substantial internal shifts in beliefs, values, behaviors, or perspectives.

Organizational change. In a business or institutional context, it involves a complete overhaul of practices, structures, and strategies. This can involve changes in leadership, culture, processes, and even the core mission or purpose of the organization.

Societal change. At a broader level, transformative change can occur within societies, often driven by significant events, technological advancements, cultural shifts, or changes in political systems (Avelino et al 2019; Ledwith & Springett 2022). This might include shifts in attitudes towards issues like civil rights, environmental sustainability, or economic systems.

Technological advancements. The introduction of groundbreaking technologies can lead to transformative change (Avelino et al 2019; Saarikko et al 2020). For example, the

internet and smartphones have fundamentally altered the way we communicate, work, and access information (Firth et al 2019).

Environmental transformation. This involves substantial changes in the environment or ecosystems, often as a result of natural processes or human activities (Díaz et al 2019). Climate change is an example of a transformative environmental issue (Fedele et al 2019).

Policy and governance. Transformative change in governance can involve the implementation of new laws, regulations, or policies that significantly impact how a society or organization functions (Visseren-Hamakers et al 2021).

Cultural evolution. Changes in cultural norms, values, and traditions over time can lead to transformative shifts in societies.

The relation between transformative change and environment protection. Transformative change is highly relevant to environmental protection. It refers to fundamental shifts in the way societies interact with and manage their environment. We will present further several ways in which transformative change relates to environmental protection.

Paradigm shift in environmental awareness. Transformative change in environmental protection often starts with a shift in societal awareness and values regarding the natural world. This can lead to a fundamental reevaluation of human relationships with the environment.

Transition to sustainable practices. Transformative change involves moving away from unsustainable practices that harm the environment (e.g., deforestation, pollution, overfishing) towards more sustainable and regenerative approaches.

Transition to a green economy. This entails moving towards an economic model that prioritizes environmental sustainability. It involves innovations in renewable energy, circular economy practices, and sustainable agriculture.

Policy and regulatory changes. Transformative change in environmental protection often requires the implementation of new and far-reaching policies and regulations. These may include emission reduction targets, conservation measures, and pollution control standards.

Technological advancements and innovation. Transformative change in environmental protection often relies on the development and adoption of innovative technologies. This might include renewable energy sources, carbon capture and storage, and eco-friendly materials.

Behavioral and lifestyle changes. Achieving environmental protection often requires changes in individual and collective behavior, such as reducing energy consumption, adopting sustainable transportation methods, and minimizing waste.

Global cooperation and governance. Given that many environmental issues are global in nature (e.g., climate change, biodiversity loss), transformative change often necessitates international collaboration, agreements, and frameworks.

Cultural and educational shifts. Transformative change in environmental protection may involve shifts in cultural norms, values, and educational systems towards a greater emphasis on environmental stewardship and sustainability.

Resilience and adaptation strategies. In the face of ongoing environmental challenges, transformative change can involve the development of strategies to enhance resilience and adaptability to changing environmental conditions.

Promotion of biodiversity and ecosystem health. Transformative change often includes efforts to protect and restore biodiversity, as well as to maintain the health and functioning of ecosystems.

Conclusions. Transformative change is not incremental or superficial. It signifies a deep and often disruptive shift that alters the underlying structure, dynamics, or essence of the subject in question. Embracing or managing transformative change can be challenging because it often requires adapting to the unknown and letting go of established practices or beliefs. However, it can also present opportunities for innovation, growth, and the creation of more sustainable and resilient systems.

Transformative change is related to environment protection. Transformative change in environmental protection is about reimagining and redesigning human interactions with the environment in a way that ensures its health, resilience, and sustainability for current and future generations. It requires a holistic and systemic approach that addresses the underlying drivers of environmental degradation.

Conflict of interest. The authors declare that there is no conflict of interest.

References

- Avelino F., Wittmayer J. M., Pel B., Weaver P., Dumitru A., Haxeltine A., et al, 2019 Transformative social innovation and (dis)empowerment. *Technological Forecasting and Social Change* 145:195-206.
- Díaz S., Settele J., Brondízio E. S., Ngo H. T., Agard J., Arneth A., et al, 2019 Pervasive human-driven decline of life on Earth points to the need for transformative change. *Science* 366(6471):eaax3100.
- Fedele G., Donatti C. I., Harvey C. A., Hannah L., Hole D. G., 2019 Transformative adaptation to climate change for sustainable social-ecological systems. *Environmental Science and Policy* 101:116-125.
- Firth J., Torous J., Stubbs B., Firth J. A., Steiner G. Z., Smith L., et al, 2019 The “online brain”: how the Internet may be changing our cognition. *World Psychiatry* 18(2): 119-129.
- Ledwith M., Springett J., 2022 *Participatory practice: community-based action for transformative change*. 2nd edition. Policy Press, 312 pp.
- Saarikko T., Westergren U. H., Blomquist T., 2020 Digital transformation: five recommendations for the digitally conscious firm. *Business Horizons* 63(6):825-839.
- Visseren-Hamakers I. J., Razzaque J., McElwee P., Turnhout E., Kelemen E., Rusch G. M., et al, 2021 Transformative governance of biodiversity: insights for sustainable development. *Current Opinion in Environmental Sustainability* 53:20-28.

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