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Providing an Analytical Framework for Assessing the Impact of Biodiversity Objectives at the Strategic and Project Levels

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Abstract

Human evolution puts a strain on biodiversity, which is why the Convention on Biological Diversity, among other international policies, protects it. Impact assessment (IA) instruments are regarded as a valuable tool for assisting in the protection of biodiversity at various levels of decision making, but they are argued to work independently at the policy and plan levels (Strategic Environmental Assessment, SEA) as opposed to the project level (Environmental Impact Assessment, EIA), creating inefficiencies in knowledge transfer that endangers biodiversity protection. The purpose of this paper is to compare biodiversity coverage in SEA and EIA literature in order to better understand the potential for transferring biodiversity knowledge from SEA to EIA (known as tiring).

Keywords: Biodiversity; Project; Ecology

Introduction

Global biodiversity threats necessitate an immediate response from policymakers and scientists. International biodiversity treaties and policies can be viewed as a solid foundation for stimulating actions leading to biodiversity protection, as evidenced by avoided species extinctions. However, there are numerous international or multilateral agreements that do not all achieve their goal of ensuring biodiversity protection. This includes failing to meet any of the Aichi Biodiversity targets established in 2010 by parties to the Convention on Biological Diversity (CBD) by 2020. The CBD is widely acknowledged as the primary international legal instrument for "the conservation of biological diversity." [1,2].

Methods

Building the analytical framework

We conducted exploratory research, which was supported by systematic literature and documentary review analysis, in order to propose the analytical framework. Our model is based on identifying patterns derived from international biodiversity policy drivers [3,4]. This is used to construct a feasible analytical framework in accordance with some guidelines for conducting socio-environmental scientific research discussed by Lune and Berg (2017) and Roudgarmi (2017). The sustainable use of its components, as well as the fair and equitable distribution of benefits resulting from the use of genetic resources," which had been ratified by 196 nations at the time of writing (CBD, 2022). Since the CBD agreement, biodiversity has been recognised as one of the major international challenges, [5, 7].

Biodiversity

Impact assessment (IA) instruments have taken a special place for protecting biodiversity since the CBD was signed, through to the most recent Post-2020 Global Biodiversity Framework (GBF) published in 2021 and agreed as the Kunming-Montreal GBF at the 15th Conference of the Parties (COP 15 - held in December 2022).. Although "impact assessment alone cannot resolve global challenges of biodiversity loss and deterioration of ecosystem services that underpin human wellbeing; these issues must be dealt with at a strategic political level", the main IA instruments have been identified as critical for achieving international biodiversity goals [6].

Biodiversity mainstreaming, defined as "the process of embedding biodiversity considerations into policies, strategies, and practises of key public and private actors that impact or rely on biodiversity, so that biodiversity is conserved and sustainably used, both locally and globally," can be facilitated by SEA and EIA,. This is consistent with the claim made by Xu et al. (2021) that biodiversity needs to be studied with science-policy interfaces at all levels to support decision-making.

Discussion

Our proposed analytical framework with 18 distilled biodiversity objectives is a contribution to the literature in its own right, and it has proven to be a robust and feasible way to assess whether the main themes of international biodiversity policies are taken into account in IA practise. Our proposal adds to the urgent need to propose integrated actions to reverse the global biodiversity loss trend. [8, 9, 10].

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Conflict of Interest Statement

The author affirm that they have no known financial or interpersonal conflicts that would have appeared to have an impact on the research presented in this study.

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