Balance Nature and Culture: Key to Ease Tensions Between Indigenous Peoples and Protected Areas

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Abstract: Indigenous peoples have long-standing connections to their lands, however, the establishment of protected areas has often led to their exclusion and marginalization. This review examines the complicated relationship between Indigenous peoples and protected areas, highlighting the thresholds during historical conflicts that intensified tensions. As the number of protected areas has increased globally, wildlife biodiversity remains at risk. The article argues that participatory efforts involving Indigenous peoples often play a crucial role in maintaining biodiversity. It explores the challenges Indigenous peoples are confronted with - that their opinions are inadequately considered and economic profits are often prioritized over their rights - under the existing policy framework and market-oriented activities. The article advocates for a collaborative methodology that integrates indigenous knowledge and rights into protected area management, emphasizing the benefits of joint efforts. It calls for a reevaluation of current approaches to managing protected areas and a broader recognition of the importance of seeking for a balance between nature and culture, fostering a sustainable future for both biodiversity and indigenous communities.

Keywords: Indigenous peoples, protected areas, conflicts, balance.

1. Introduction

The International Union for Conservation of Nature (IUCN) officially defines a protected area as "a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values". As the Earth entered the Anthropocene epoch, the accelerated pace of biodiversity loss has raised concerns among the general public. Protected areas, where humans put significant efforts, have long played a crucial role in maintaining wildlife biodiversity and the well-being of ecosystems. According to Martínez Cobo, whose work significantly influences the understanding of Indigenous peoples, these Indigenous peoples are distinct social and cultural groups that have a historical continuity with pre-colonial societies and possess unique and ancestral connections to the lands and natural resources where they have long inhabited[1]. The indigenous lifestyles are recognized to be beneficial to biodiversity according to recent studies. The territories of Indigenous peoples often overlap with areas that are rich in biodiversity. Before the prevalent acknowledgement of the positive roles that Indigenous peoples play in conservation efforts, the establishment of protected areas conducted exclusionary methodology, forcibly evicting indigenous

communities from their ancestral lands and disregarding their rights and dignity. Conflicts have deepened over the past hundreds of years. Although some approaches aim to ease tensions, limitations and challenges remain in balancing nature and culture. This article attempts to discuss the complex relationship and multifaceted reasons that ignite conflicts between Indigenous peoples and protected areas, as both of them are indispensable in the Anthropocene. The review declares that a detailed and holistic methodology should be figured out to ease these tensions with the expectations of promoting a sustainable future.

2. Expenses of Nature Protection

With the introduction of the concept of the Anthropocene and a deeper understanding of the challenges presented by this new epoch, there has been a widespread recognition of the importance of mitigating human impacts on ecosystems and preserving biodiversity. This heightened awareness has contributed to a significant increase in the number of Protected Areas (PAs). Currently, there are over 303,000 protected areas worldwide, including national parks, wildlife reserves, marine protected areas, and various other designations aimed at conserving nature and biodiversity. Collectively, these areas cover approximately 16% of the Earth's land and 8% of its oceans[2,3].

There are an estimated 476 million self-identified Indigenous peoples (IPs) worldwide, comprising 6% of the world's population and more than one tenth of the world's poor[4,5]. Indigenous peoples manage at least 38 million square kilometers of land across 87 countries or politically distinct regions on all inhabited continents, overlapping with all the biodiverse regions of the world[6]. About 20.7% of Indigenous peoples' lands are within protected areas, encompassing at least 40% of the global protected area[7].

Studies conducted over the past several decades demonstrate that conflicts between Indigenous peoples (IPs) and Protected Areas (PAs) have originated from the initial establishment of these protected areas and have persisted to the present day.

The historical process of the conflicts between the establishment and management of protected areas and Indigenous peoples is multifaceted and complicated, which involves a range of events. The creation of Yellowstone National Park in 1872 marked a significant threshold, initiating enduring tensions between conservation goals and indigenous rights. Prior to Yellowstone's designation as the first national park in the world, Indigenous peoples had inhabited the region for thousands of years, utilizing its resources for hunting, fishing, and gathering without harming the ecosystem. However, circumstances changed when the U.S. government outreached their hands into the management and began to forcibly removing Indigenous peoples from the Yellowstone. Ceaselessly, they imposed increasing restrictions on indigenous communities, increased military presence, enforcing eviction. As indigenous populations were excluded from their homeland, the establishment of the park led to further marginalization of them, who were even depicted as obstacles to conservation efforts[8].

The 1964 Wilderness Act defined "wilderness" as "an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain." This legislation officially made the displacement of Indigenous communities from their ancestral territories as a conservation model. By the time the act was passed, this exclusionary model had already been adopted by major national parks in the United States and has since evolved into a global trend, effectively rendering Indigenous peoples as conservation refugees[9,10].

Indigenous populations have since experienced significant hardships as a result of these conservation initiatives, leading to the dispossession of their ancestral lands, challenges in sustaining their livelihoods, a decrease in population numbers, and an increased threat to the preservation of their cultural heritage[11]. Furthermore, the global expansion of protected areas, often without considering the rights of Indigenous peoples, has not succeeded in salvaging nature. Instead, it has led to a decline in biodiversity and an escalating extinction rate for certain species, prompting alarm

among conservationists and the broader public. This situation underscores the urgent need for transformative approaches to the management of protected areas.

3. Recognize the Crucial Roles Indigenous Peoples Play

Research indicates that participatory protected areas, which incorporate the involvement of Indigenous peoples, are likely to achieve greater success in the conservation of wildlife and natural ecosystems[12]. Conservationists and policy makers must examine protected areas as a way of balancing the nature and culture, allowing both to thrive.

Indigenous peoples, along with their alliance and related organizations, actively and consistently engage in political processes and public advocacy to raise awareness about their rights and relevant issues, ensuring their voices are heard and perspectives are considered during the policy-making process. Their hard work and dedication have led to significant achievements over the past several decades. Globally, international regulations and agreements, including the 2007 United Nations Declaration on the Rights of Indigenous peoples (UNDRIP), Convention on Biological Diversity (CBD), and International Labour Organization (ILO) Convention No.169, subsequently emphasize the rights of the Indigenous peoples and the necessity of their involvement and consultation in biodiversity conservation. Nationally, many countries successively launch different laws and policies to incorporate Indigenous peoples into the management of protected areas, encouraging consideration of indigenous experience in decision-making.

The significance of Indigenous peoples in the maintenance of sustainability and biodiversity has been increasingly recognized and acknowledged as a result of the collaborative efforts.

An ethnoecological perspective is put forward to be used to recognize the indispensability of Indigenous peoples in relation to the conservation of biodiversity. Ethnoecology focuses in the kosmos (the belief system or cosmovision), the corpus (the whole repertory of knowledge or cognitive systems) and the praxis (the set of practices) to gain an insight into the process of human appropriation of nature[13].

In contrast to the idea that humankind is apart from nature which seems to be deeply rooted in western civilization[14], many Indigenous peoples adhere to 'animistic' belief systems, which demonstrate that non-human entities, including animals, plants, rivers, and other inanimate objects, possess a spiritual soul, thereby perceiving the natural world as alive and interconnected. Some of the indigenous communities do not even have a word for "wild" or "conservation", but they integrate the essence of the terms into their way of life[15].

Indigenous peoples form a deep and holistic understanding of local ecosystems, cultivated over generations. To ensure their livelihoods, they possess detailed information based on daily observation. Moreover, they develop a framework of local environment, recognizing the importance of ecological feedback in maintaining the sustainability and longevity of their natural resources. As a consequence, they not only have detailed knowledge about specific components of nature, such as animals, plants, fungi and microorganisms, but also can understand the interrelationship and logical connection between these natural elements and use them. Therefore, they have constructed a comprehensive, interrelated and multidimensional knowledge system, which is similar to the concept of point-line-surface that is often discussed and considered in many practical disciplines[16-17].

Generally speaking, there are strong reasons for believing that indigenous communities have developed ways of life that is relatively benign. Crucially, they hold a view that their long-term survival depends on their consideration for future generations. Indigenous practices are inherently sustainable, rooted in ecological interactions with the natural environment rather than in economic transactions with markets, emphasizing balance and respect for nature. Their accumulated knowledge reflecting their cultures, spirituality and identity thus intertwined with the conservation of certain species and habitats.

4. Limitations of Existing Practical, Political, and Financial Initiatives

4.1. Profit-oriented Activities

Conservationists are increasingly aware of the limitations of the exclusionary conservation management model and are advocating for a collaborative management method. In the partnership between conservation efforts and Indigenous peoples in protected areas, ecotourism has emerged as one of the fastest-growing industries in the world. Conservationists have hoped to ease the tension with Indigenous peoples by sharing the profits. However, this process has proven to be more demanding than might have been expected[18-19].

The United Nations declared 2002 as the International Year of Ecotourism[20]. Tourists are increasingly drawn to these protected areas, generating significant income. However, a limited fraction of this income reaches the indigenous communities, while they face increased ecological pressures, such as a shortage of potable water. Additionally, the treatment of Indigenous peoples is frequently overlooked in the assessments performed by rating agencies concerning ecotourism enterprises.

Indigenous peoples often participate in ecotourism as tour guides, porters, trackers, or guards, while tourism operators may include visits to indigenous communities within their offerings, thereby highlighting indigenous traditions for the benefit of tourists. Such involvements, often decided by non-Indigenous peoples, can yield financial advantages and provide supplementary income that supports the livelihoods of Indigenous peoples. Nevertheless, entrepreneurs frequently prioritize economic benefits over the rights of Indigenous peoples to maintain their traditional lifestyles, such as livestock farming, rather than solely relying on modern economic opportunities. This tendency reflects a certain arrogance of modern civilization towards indigenous cultures. Additionally, there is a risk that indigenous cultures may be misrepresented to cater to tourist expectations, which can compromise the authenticity of their traditions that they treasure[21].

Although Indigenous peoples have been fortunate to be free from eviction from the protected areas, the existing approach of collaboration, especially in the realm of ecotourism, has inevitably sparked significant controversy. Their ancestral territories are not only increasingly occupied by infrastructure equipped to support the development of tourism, but are also forced to give space for accommodating wild animals, leading to the loss of their land traditionally used for pastures, agriculture, and other subsistence production activities. Consequently, this situation may ignite new and unwanted conflicts between Indigenous peoples and wildlife, undermining the harmonious relationships that once existed[22].

4.2. Existing Policy Framework

When indigenous communities tend to express grievance, the inherent shortcomings of the existing policy framework for protected areas exacerbate the challenges they face. The administration of these protected areas typically follows a top-down approach, encouraging technocratic planning process that centralizes authority within state agencies and private enterprises[23]. The trend of viewing environmental issues as global problems encourages international interventions, enabling conservation organizations to allocate substantial financial resources to implement and manage protected area projects in third world countries, which consequently diminishes the effectiveness of local governance structures and results in decisions that do not adequately reflect the needs or rights of local communities. Nonetheless, Indigenous peoples face the most severe consequences when abrupt and radical policy changes are implemented [24], as these changes may frequently overlook the internal differences and diversities present among various protected areas and indigenous communities[25].

4.3. Allocation of Fiscal Budgets

Increased fiscal budgets are being allocated to conservation areas, reflecting the growing attention being paid to conservation-related issues. A growing number of sponsors and commercial partners are getting involved in the process, thereby transforming conservation efforts into a market-driven business. The involvement of substantial financial resources can create conflicts of profits, where economic gains are prioritized over ecological and social justice, thusly generating the risk of corruption.

5. Balancing Nature and Culture is A Futuristic Trend

The narratives of Indigenous peoples are inseparable from the discourse surrounding conservation efforts. The current situation faced by Indigenous peoples in their struggle against the management of protected areas is complex and fraught with challenges. Only by collaboratively figuring out an agreeable direction for the further development of Indigenous peoples, solving the presented problems, and solidifying existing successful outcomes, can people pave the way for a more just and sustainable future in this anthropogenic epoch.

It is ineffective for modern people to utilize contemporary problem-solving methods when attempting to address issues involving conventional civilization. Similar to the land management practices of Indigenous peoples, it is essential to adopt comprehensive and holistic yet detailed approaches in order to attain the objectives. Detailed strategies necessitate localized observation that acknowledges and respects the ancestral inhabitants of the land, rather than idealizing a nature without the presence of human. This approach advocates for an indigenous perspective, promoting an adaptable methodology aimed at alleviating tensions. Holistically, it is necessary to construct an effective framework that guarantees each issue has a specific channel to deliver effective feedbacks, while also ensuring the connectivity is strong and the processes are transparent.

Holistically, it is essential to construct an effective framework that ensures every problem has a designated avenue for providing constructive feedback, while also ensuring that connectivity is strong and the processes are transparent.

6. Conclusion

As this review attempts to clarify, the conflicts between Indigenous peoples and protected areas generate from the inappropriate management of these areas. The evolution of the concepts of wilderness and conservation has often developed without adequate consideration of vulnerable human communities, leading to severe eviction and marginalization of Indigenous peoples. As a consequence, it affects not only indigenous communities but also undermines conservation efforts aimed at preserving biodiversity. Furthermore, it poses a threat to cultural diversity. History tells that it is unwise to conduct exclusionary approach when managing protected areas. Although the start point of the establishment of protected areas is good, the methodologies employed require to be changed considering the shortages of existing initiatives conducted in practical, political, and financial areas. Facts suggest that protected areas might not be the best way regarding conservation of biodiversity and ecosystems. It is evaluated that some of the registered protected areas may be unnecessary or even detrimental to wildlife protection, while others can actually erode cultural biodiversity and harm vulnerable groups. The necessity of the deculturation process to achieve the aims of protecting wildlife biodiversity should be questioned. This review does not mean to compare or rank the importance of the two - culture and nature - but rather aims to urge the general public and authoritative departments to recognize the need for a balance between nature and culture. In the past several decades, critical research focused on conservation has blossomed. Evidence indicates that the involvement of Indigenous peoples in conservation efforts positively impacts both biodiversity and

cultural heritage. The importance of integrating indigenous rights into conservation calls for a reevaluation of current initiatives and advocates for more sustainable and respectful, detailed yet holistic approaches for protection in the future.

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