



Green Growth and Sustainable Development in Nepal: Policy Gaps and Opportunities

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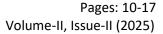
Abstract:

Nepal, endowed with rich natural resources and biodiversity, has the potential to become a leader in green growth and sustainable development. However, despite various governmental initiatives, there are significant policy gaps that hinder the full realization of these goals. This paper explores the current state of green growth in Nepal, focusing on key policy gaps, challenges, and opportunities for sustainable development. Through a comprehensive analysis, the paper highlights the importance of integrated policies, the role of international cooperation, and the need for enhanced local community involvement in achieving a sustainable future. The research concludes with recommendations for overcoming the policy gaps to ensure sustainable economic, social, and environmental progress in Nepal.

Keywords: Green Growth, Sustainable Development, Nepal, Policy Gaps, Environmental Sustainability, Economic Growth, Climate Change, Policy Recommendations.

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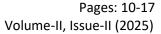




I. Introduction:

Nepal, a country characterized by diverse geographical features, is blessed with vast natural resources, including forests, rivers, and biodiversity. Despite these advantages, Nepal faces significant challenges in ensuring long-term sustainable development [1]. Over the years, various policies have been formulated to promote green growth and environmentally sustainable economic development. However, the implementation and integration of these policies have been inconsistent, leading to inefficiencies in achieving the desired outcomes. This paper examines the gaps in Nepal's policy framework and highlights the critical areas that require improvement to foster green growth and sustainable development. It discusses the country's existing sustainable development policies and evaluates their effectiveness while proposing key opportunities for enhancing environmental sustainability [2].

Nepal, a landlocked country nestled in the Himalayas, has a unique geographical landscape that offers immense potential for green growth and sustainable development. With an area of just over 147,000 square kilometers, Nepal is home to rich biodiversity, vast forests, and an array of natural resources, which are integral to its economy. Agriculture is the primary source of livelihood for a significant portion of the population, contributing to around onethird of the country's GDP and employing over 60% of the workforce. In addition, Nepal's abundant hydropower potential has positioned the country as one of the largest untapped sources of clean energy [3]. However, despite these advantages, Nepal faces considerable challenges in managing its natural resources sustainably, exacerbated by rapid population growth, deforestation, land degradation, and climate change impacts. The country's vulnerability to natural disasters such as floods, landslides, and droughts further intensifies these challenges [4]. Over the years, the Nepalese government has recognized the importance of green growth and has made various attempts to integrate sustainability into its national development plans. Nonetheless, the existing policies have often been fragmented, and their implementation has been hampered by weak governance, political instability, and inadequate resources. As a result, Nepal's progress toward achieving a truly sustainable and green economy remains slow, necessitating a critical review of current policies and the identification of new opportunities for meaningful change [5].





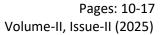
II. Green Growth and Sustainable Development: The Global Perspective

Globally, the concept of green growth has gained momentum as nations strive to balance economic development with environmental sustainability. Green growth refers to fostering economic growth while reducing environmental degradation, increasing resource efficiency, and promoting biodiversity [6]. Sustainable development, on the other hand, involves meeting present needs without compromising the ability of future generations to meet their own needs. Countries such as Sweden, Germany, and Costa Rica have successfully implemented green growth strategies that promote renewable energy, resource efficiency, and low-carbon development. These nations have set valuable examples for Nepal to follow, showcasing how sustainable policies can spur economic growth while safeguarding the environment [7].

In Nepal's case, green growth is more than just an economic strategy—it is a necessity for survival. The country faces various environmental challenges, including deforestation, land degradation, air pollution, and the adverse effects of climate change, such as flooding and landslides. These environmental issues undermine the economic base of Nepal, which heavily relies on agriculture, hydropower, and tourism [8]. Green growth offers an opportunity to address these environmental concerns while simultaneously supporting sustainable economic development. By investing in renewable energy, eco-tourism, and sustainable agriculture, Nepal could create a more resilient economy and ensure a better quality of life for its citizens.

III. Key Policy Gaps in Nepal's Green Growth Agenda

Despite the potential for green growth, Nepal's current policies fall short in addressing several critical areas. One of the key gaps is the lack of a comprehensive national strategy for sustainable development. While Nepal has adopted several environmental and climate change-related policies, these policies are often fragmented and lack coherence. For example, the National Climate Change Policy, the Forest Policy, and the Agricultural Development Strategy all emphasize sustainability, but there is little coordination among them. This





fragmented approach leads to policy incoherence and inefficient use of resources, ultimately slowing down the progress towards green growth [9].

Furthermore, Nepal's policy framework does not adequately address the needs of local communities, who are often the most affected by environmental degradation. Rural populations, dependent on agriculture and natural resources, are vulnerable to climate change impacts, but there are limited policies in place to help these communities adapt to the changing environment. Similarly, although there is growing recognition of the importance of renewable energy, the policies supporting clean energy initiatives are not sufficiently strong to attract long-term investment [10]. The country's electricity grid is predominantly dependent on hydropower, which is susceptible to climate change-induced droughts, and there is a pressing need to diversify the energy mix with solar, wind, and biomass energy sources.

Nepal's green growth agenda is built on the recognition that sustainable development is key to the nation's economic resilience, environmental preservation, and social well-being. The government has increasingly emphasized the importance of green growth in the context of climate change, natural resource management, and poverty alleviation. Several strategic documents and policies reflect this commitment, including the Thirteenth Five-Year Plan (2013-2017), the Nationally Determined Contributions (NDCs) under the Paris Agreement, and the Nepal Sustainable Development Goals Framework (SDGs). These frameworks align with global sustainability objectives and highlight Nepal's aspirations to integrate environmental concerns into its economic development plans. At the heart of Nepal's green growth agenda is the concept of low-carbon development. This includes promoting the use of renewable energy sources such as hydropower, solar, and wind, reducing dependence on fossil fuels, and improving energy efficiency. The country has made significant strides in expanding its hydropower capacity, which is seen as a vital tool for both sustainable development and energy security. The government has also focused on ecosystem-based adaptation, aiming to protect biodiversity while mitigating the effects of climate change. The forestry sector is particularly critical, with initiatives to promote community forestry management as a way to reduce deforestation and degradation, while enhancing local livelihoods.



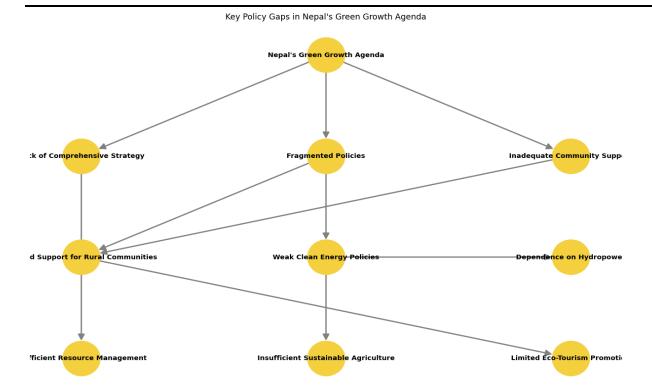
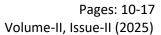


Figure 1: This figure is a conceptual flowchart representing the key policy gaps in Nepal's Green Growth Agenda.

Another pillar of Nepal's green growth agenda is sustainable agriculture. Given that agriculture is the backbone of the economy, a transition to sustainable agricultural practices is vital. The government has been promoting climate-smart agriculture, organic farming, and water-efficient irrigation systems to cope with challenges such as erratic weather patterns, reduced water availability, and declining soil fertility. Alongside this, the promotion of ecotourism and nature-based industries has been explored to provide alternative sources of income, particularly in rural and mountainous regions where agriculture alone is insufficient [11].

IV. Institutional and Governance Challenges in Implementing Green Growth Policies:

Effective policy implementation requires robust institutions and effective governance. In Nepal, the governance structure is often fragmented, with different ministries, agencies, and local governments working in silos. This lack of coordination leads to inefficiencies in the enforcement of environmental regulations and sustainable development goals. For example, while the Ministry of Forests and Environment is responsible for forest conservation, the





Ministry of Energy oversees hydropower development, and local governments manage land use planning. This fragmented approach makes it difficult to align the country's development goals with sustainable practices.

Furthermore, weak enforcement of environmental regulations, coupled with corruption and political instability, undermines efforts to promote green growth. Illegal logging, mining, and land conversion continue to degrade Nepal's natural resources, despite the existence of laws aimed at protecting the environment. To ensure successful implementation of green growth policies, it is essential to strengthen institutions, enhance inter-agency coordination, and promote transparent and accountable governance. Decentralizing decision-making and empowering local governments will also improve the responsiveness to local needs and challenges, particularly in rural areas.

V. Policy Recommendations for Enhancing Green Growth in Nepal:

To unlock the full potential of green growth, Nepal must address several key policy gaps. First, the government should formulate a comprehensive national strategy for sustainable development that integrates green growth principles into all sectors of the economy. This strategy should focus on the promotion of renewable energy, sustainable agriculture, and green infrastructure development. Second, the government should strengthen environmental governance by improving policy coordination, increasing transparency, and enhancing the capacity of local governments to manage natural resources sustainably. Strengthening enforcement of environmental laws and encouraging public participation in decision-making processes will also be crucial in ensuring that green growth policies are effectively implemented [12].

Third, Nepal should prioritize the development of a green financing framework that encourages private sector investment in sustainable projects. This includes offering incentives for green businesses, establishing green bonds, and facilitating access to climate finance. Lastly, there is a need for greater focus on education and awareness-raising to engage the public and local communities in green growth initiatives. By empowering citizens with the knowledge and tools to adopt sustainable practices, Nepal can foster a culture of environmental stewardship and collective responsibility.

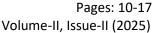


VI. Conclusion:

Green growth and sustainable development are critical for Nepal's future, offering opportunities to address environmental challenges while fostering economic growth. However, the country faces significant policy gaps that hinder the full realization of these opportunities. By addressing these gaps through coordinated and comprehensive policy frameworks, strengthening governance structures, and leveraging international support, Nepal can pave the way for a greener, more sustainable future. The recommendations provided in this paper offer a roadmap for the country to transform its green growth potential into tangible outcomes, ensuring that the benefits of sustainable development are realized for future generations.

REFERENCES:

- [1] R. Thapa-Parajuli and R. C. Paudel, "Tourism sector employment elasticity in Nepal: an analysis," *Economic Journal of Nepal*, vol. 41, no. 3-4, pp. 1-11, 2018.
- [2] T. R. Poudel, P. C. Aryal, R. Thapa-Parajuli, A. Thapa, S. K. Yadav, and M. Prakash, "Depredation loss drives human—wildlife conflict perception in the Trans-Himalayas," *Journal of Environmental Management*, vol. 311, p. 114763, 2022.
- [3] R. Thapa-Parajuli, S. Aryal, M. Alharthi, and R. Paudel, "Energy consumption, export performance and economic growth in a landlocked developing country: The case of Nepal. AIMS Energy, 9 (3), 516–533," ed, 2021.
- [4] R. Parajuli, "Consumed but not Invested: An Inquiry into 'Remittance-Growth' Nexus in Nepal," *Pandey, NN & Delinic, T.(eds),* pp. 135-150, 2013.
- [5] U. Khatri, R. Thapa-Parajuli, and U. Paudel, "Willingness to pay for Water Hyacinth control in Nepal," *American Journal of Environmental Sciences*, vol. 14, no. 5, pp. 226-233, 2018.
- [6] B. Adhikari, G. W. Prescott, D. Urbach, N. Chettri, and M. Fischer, "Nature's contributions to people and the Sustainable Development Goals in Nepal," *Environmental Research Letters*, vol. 17, no. 9, p. 093007, 2022.
- [7] R. Paudel, R. Thapa-Parajuli, and M. Alharthi, "Electricity consumption and export performance: Evidence from Nepal," *International Journal of Energy Economics and Policy*, vol. 10, no. 6, pp. 529-535, 2020.
- [8] B. Baniya, "Linking climate policy across economic sectors: A case for green growth in Nepal," in *Natural Resources Forum*, 2023, vol. 47, no. 3: Wiley Online Library, pp. 553-577.
- [9] U. Bhattarai, T. Maraseni, L. P. Devkota, and A. Apan, "Evaluating four decades of energy policy evolution for sustainable development of a South Asian country—Nepal: A comprehensive review," *Sustainable Development*, vol. 32, no. 6, pp. 6703-6731, 2024.





[10] S. P. Lohani, P. Gurung, B. Gautam, U. Kafle, D. Fulford, and M. Jeuland, "Current status, prospects, and implications of renewable energy for achieving sustainable development goals in Nepal," *Sustainable Development*, vol. 31, no. 1, pp. 572-585, 2023.

- [11] G. Melles, S. Gautam, and R. Shrestha, "Circular Economy for Nepal's Sustainable Development Ambitions," *Challenges*, vol. 16, no. 1, p. 8, 2025.
- [12] K. Mishra and P. Aithal, "An imperative on green financing in the perspective of Nepal," International Journal of Applied Engineering and Management Letters (IJAEML), vol. 6, no. 2, pp. 242-253, 2022.