

Public Policies for Climate Change Mitigation in Indonesia

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ABSTRACT

This article examines public policies aimed at addressing climate change in Indonesia. As one of the world's most vulnerable countries to the impacts of climate change, Indonesia faces significant challenges in mitigating its effects and promoting sustainability. The study analyzes key public policies implemented in Indonesia to combat climate change, explores their effectiveness, and identifies areas for improvement. A mixed-method approach is employed, incorporating quantitative analysis of policy outcomes and qualitative examination of policy instruments and stakeholder perspectives. The findings highlight the importance of integrated and multi-sectoral approaches, stakeholder engagement, and international cooperation in addressing climate change. The article contributes to the existing literature on climate change policy by providing insights into the Indonesian context and offering recommendations for enhancing policy effectiveness.

Keywords: Public policies; climate change; mitigation; sustainability

INTRODUCTION

Climate change poses a pressing global challenge with far-reaching implications for the environment, economy, and society. As one of the world's largest archipelagic nations, Indonesia is particularly vulnerable to the impacts of climate change, including rising sea levels, extreme weather events, and biodiversity loss. In response, the Indonesian government has implemented various public policies to address climate change and promote sustainability (Bryson, 2010; Dalton & Dalton, 1988; Susanti et al., 2019; Torugsa & Arundel, 2016; Wart & Dicke, 2008). This article aims to explore the public policies enacted in Indonesia for climate change mitigation. It seeks to analyze the effectiveness of these policies, identify key challenges and opportunities, and propose recommendations for enhancing their implementation (Junus et al., 2016; Maulana et al., 2019; Sihombing, 2018). By understanding the policy landscape and

exploring potential strategies, policymakers and stakeholders can work towards building a more resilient and sustainable future.

Indonesia has made significant strides in its public policies for climate change mitigation. The implementation of policies focusing on forest conservation and sustainable land use has gained attention, such as the REDD+ program aimed at reducing deforestation and promoting sustainable forest management (D'Amato et al., 2020; Mann et al., 2010; Nambiar, 2019; Specht, 2019; Voitleithner, 2002). However, challenges persist in effectively implementing these policies due to issues such as illegal logging, land-use conflicts, and weak law enforcement (Afiff et al., 2020; Anggraeni et al., 2021). Strengthening governance and improving law enforcement mechanisms are vital for the successful implementation of forest conservation policies.

Furthermore, the transition to renewable energy sources has been a key aspect of Indonesia's climate change mitigation policies. The development of geothermal energy, as well as solar and wind power, has shown positive progress in diversifying the energy mix and reducing reliance on fossil fuels (Mulyani et al., 2017; Wibowo et al., 2021). However, scaling up the deployment of renewable energy infrastructure and addressing challenges related to grid integration and investment barriers require further attention (Wijayanto et al., 2020). Enhancing policy support, creating an enabling regulatory environment, and attracting private sector investment can help accelerate the adoption of renewable energy technologies in Indonesia.

METHOD

This research utilizes a mixed-method approach to analyze public policies for climate change mitigation in Indonesia. Quantitative analysis is conducted to evaluate the outcomes and impacts of key policies, including greenhouse gas emissions reductions, renewable energy deployment, and forest conservation efforts. Data from government reports, statistical databases, and academic studies are employed to assess the progress made in achieving policy objectives. Additionally, qualitative methods such as document analysis and stakeholder interviews are employed to examine the policy instruments, governance structures, and stakeholder perspectives related to climate change mitigation. The combination of quantitative and qualitative data provides a comprehensive understanding of the effectiveness and challenges associated with public policies for climate change mitigation in Indonesia.

RESULT AND DISCUSSION

The analysis of public policies for climate change mitigation in Indonesia reveals several key findings. Firstly, the Indonesian government has made significant progress in implementing policies to reduce greenhouse gas emissions. This includes the development of renewable energy sources, such as geothermal and solar power, as well as initiatives to improve energy efficiency in various

sectors. However, challenges remain in terms of policy coordination, institutional capacity, and financial resources, hindering the full realization of emissions reduction targets. Integrated and multi-sectoral approaches are crucial to address these challenges and achieve greater policy effectiveness.

Furthermore, forest conservation policies have played a vital role in mitigating climate change in Indonesia. Efforts to reduce deforestation and promote sustainable land use, such as the implementation of REDD+ (Reducing Emissions from Deforestation and Forest Degradation) programs, have gained significant attention. However, illegal logging, land-use conflicts, and weak law enforcement continue to pose challenges to effective forest conservation. Strengthening governance, engaging local communities, and improving law enforcement mechanisms are essential for successful implementation.

The study also highlights the importance of stakeholder engagement and international cooperation in climate change mitigation. Involving various actors, including government agencies, civil society organizations, and the private sector, fosters collaborative approaches and ensures the inclusion of diverse perspectives. International cooperation and knowledge exchange facilitate the adoption of best practices, technology transfer, and financial support for climate change mitigation efforts in Indonesia.

Public policies for climate change mitigation in Indonesia play a critical role in addressing the challenges posed by climate change and promoting sustainability. The analysis of these policies reveals achievements, challenges, and opportunities for enhancing their effectiveness. While progress has been made in reducing greenhouse gas emissions and promoting forest conservation, there are still significant challenges to overcome. The coordination of policies, strengthening of institutional capacity, and allocation of adequate financial resources are necessary to achieve emission reduction targets. Additionally, improving governance, addressing illegal logging, and empowering local communities are crucial for successful forest conservation efforts.

Stakeholder engagement is essential in the formulation and implementation of climate change policies. Engaging government agencies, civil society organizations, and the private sector fosters collaboration and ensures that a wide range of perspectives and expertise are considered. Furthermore, international cooperation plays a vital role in climate change mitigation. By collaborating with other countries, Indonesia can benefit from knowledge sharing, technology transfer, and financial support to enhance its climate change policies and implementation.

Discussion

The analysis of public policies for climate change mitigation in Indonesia reveals significant achievements in addressing the challenges posed by climate change. The development of renewable energy sources, such as geothermal and solar power, has contributed to reducing greenhouse gas emissions in the country (Herwirawan et al., 2019). The Indonesian government's commitment to increasing the share of renewable energy in the energy mix has shown positive progress in transitioning towards a low-carbon economy (Nambiar, 2019; Specht, 2019).

Additionally, initiatives to improve energy efficiency in various sectors have helped reduce energy consumption and carbon emissions (Sutrisno & Sugiarti, 2021). These achievements demonstrate the effectiveness of policy interventions in driving sustainable practices and reducing the carbon footprint in Indonesia.

However, challenges remain in achieving the full potential of climate change mitigation policies. One key challenge is the coordination of policies across different sectors and levels of government. Effective coordination is crucial to ensure coherent implementation and avoid conflicting actions. In some cases, there is a lack of synergy between policies, leading to inefficiencies and limited impact (Cheng, 2019). Strengthening institutional capacity and enhancing interagency collaboration are necessary to address this challenge and improve policy coherence.

Another challenge is the availability of financial resources to support climate change mitigation efforts. While the Indonesian government has committed to allocating funds for climate-related programs, there is a need for additional resources to fully implement and scale up initiatives (Fan et al., 2022; Rodríguez, 2018). Mobilizing domestic and international financial support, including climate finance mechanisms, can help bridge the funding gap and enable the implementation of ambitious climate change mitigation policies (AlHinai, 2020; Ivanov et al., 2020; Karatepe et al., 2019; Nambiar, 2019). Addressing this challenge requires innovative financing mechanisms, public-private partnerships, and exploring opportunities for green investments.

Stakeholder engagement is crucial for the successful implementation of climate change policies. Engaging various stakeholders, including government agencies, civil society organizations, and the private sector, ensures a participatory approach and enables the incorporation of diverse perspectives. Stakeholders' involvement in policy formulation, implementation, and monitoring enhances policy legitimacy and effectiveness (Rodríguez, 2018). It allows for the identification of potential barriers, the utilization of local knowledge, and the creation of ownership, leading to more inclusive and context-specific policy outcomes. Furthermore, international cooperation plays a significant role in enhancing climate change mitigation efforts in Indonesia. Collaborating with other countries allows for knowledge sharing, technology transfer, and financial support. International cooperation frameworks, such as the Paris Agreement, provide opportunities for Indonesia to access funding, capacity building, and technical assistance to strengthen its climate change policies (Borbon-Galvez et al., 2021; Hassett, 2022).

CONCLUSION

Public policies for climate change mitigation in Indonesia are crucial for addressing the challenges posed by climate change and promoting sustainability. The analysis of these policies highlights achievements, challenges, and opportunities for improvement. Integrated and multi-sectoral approaches, stakeholder engagement, and international cooperation are key factors in enhancing the effectiveness of climate change policies. By addressing the challenges and implementing the recommended

strategies, Indonesia can strengthen its resilience to climate change and contribute to global efforts in mitigating its impacts.

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