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The Geostorm in Great Major Power of the United States and NATO: The Impact of Climate Change to Southeast Asia

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ABSTRACT

This paper aims to describe analytically the geopolitical phenomenon defined as "GEOSTORM" among major powers, specifically focusing on the dynamics between the United States and NATO, and its impact on Southeast Asia landscape through climate change and environmental concerns. As global warming and environmental degradation increase, the interplay between military strategy and ecological sustainability is becoming increasingly important, with the US developing a weather control device that could cause panic worldwide. This research aims to explain how strategic decisions made by these powerful entities not only shape International Relations but also significantly affect the environmental and climate resilience policies of developing countries. Using a multidisciplinary approach, this research integrates theories of international relations, security studies, and global governance to analyze the implications of US and NATO actions on Southeast Asia's ecological landscape. The study examines important issues such as the allocation of military resources, the environmental costs of defense operations, and potential cooperation initiatives aimed at addressing climate change. Southeast Asia regions in the broader context of global governance, and this research highlights the challenges and opportunities that arise from its interactions with major powers. Therefore, by analyzing historical precedents and contemporary developments, the research aims to provide actionable insights for Southeast Asia policymakers in navigating the complexities of big-state politics while fostering a commitment to ecological integrity. Ultimately, this research underscores the need for a comprehensive understanding of how geopolitical



maneuvers intersect with environmental interests, advocating for a proactive stance in Southeast Asia foreign policy that aligns with global development of sustainability goals.

INTRODUCTION

People's daily lives are affected by climate change significantly in developed and developing countries. The happening phenomenon already amongst us such decreasing water quality and quantity, threats to flora and fauna habitat, forest sustainability, deteriorating public health, declining fertility of agricultural land, and a real threat to coastal ecosystem (Manurung et al. 2022). The threat of a global climate disaster was raised by the film 'Geostorm' in 2017, which was caused by the failure of a weather control satellite developed by the United States (U.S) government in collaboration with an international alliance. Although fictional, this film reflects concerns about the use of technology for geopolitical domination, raising themes that are in line with North Atlantic Treaty Organization/NATO's real role as an instrument of the U.S strategic global interests (IALANA 2013).

NATO was founded in 1949 under the pretext of confronting the Soviet threat, but internal U.S government documents reveal the fact that it was motivated by economic and geopolitical influence. For example, the Marshall Plan (1947) was designed to open European markets to U.S companies while strengthening its global political influence throughout the world.

After the Cold War, NATO increasingly acted outside the North Atlantic without a UN mandate, as in Kosovo (1999) and Afghanistan (2003). These operations expanded NATO's scope as a tool of US foreign policy worldwide.

Southeast Asia climate change issue has clearly caused increased storm intensity, rising sea levels, and threats to agriculture. In the contemporary international system, the geopolitical landscape is characterized by a complex interplay of power dynamics, particularly among major global players such as the U.S and NATO. The concept of global governance has evolved significantly, reflecting the shifting balance of power and the emergence of new challenges, including climate change. This paper aims to explore these dynamics, particularly focusing on



the phenomenon termed “GEOSTORM”, which encapsulates the multifaceted interactions between military strategies and environmental concerns in Southeast Asia.

Global governance refers to the ways in which global affairs are managed across national boundaries through international cooperation. It encompasses a wide range of issues, including security, economic stability, and environmental sustainability. Therefore, as geopolitical tensions rise exemplified by the increasing rivalry between the U.S and China there is a pressing need for effective governance frameworks that can address both traditional security concerns and emerging global threats such as climate change (Muya, 2024).

NTU study (2024) shows that typhoons in Southeast Asia are now forming closer to the coast, moving slower, and staying on land longer due to ocean warming. For example, Typhoon Yagi (2024) with wind speeds of 203 km/h caused 226 deaths in Vietnam. This is due to sea temperatures rising by 1 to 2°C since 1950, which has triggered greater water evaporation, providing energy for stronger storms. In addition, threats to coastal areas and agriculture also emerge. Rising sea levels and saltwater intrusion threaten Vietnam's rice production, which accounts for 50% of the nation's supply. Even IMF projections show that 70% of Vietnam's population lives in vulnerable areas. Meanwhile, the Philippines and Indonesia each experience an average of 20 typhoons/year in the Philippines, and Indonesia's 54,700 km coastline is also increasingly vulnerable to erosion and tidal flooding. The ASEAN regional institution has targeted 23% renewable energy by 2025, up from 10% (2015). Vietnam and Indonesia also have committed to reducing emissions by 8 to 41% with international support. Although NATO does not directly affect the climate of Southeast Asia, the energy and emissions policies of member states, especially the US, have contributed to the global climate crisis.

The film Geostorm has reminded us of the risks of misusing technology for geopolitical interests, while the reality of climate change still requires inclusive transnational collaboration among all stakeholders. The concept of a Geostorm, popularized by the film Geostorm, refers to a catastrophic, large-scale disruption in the Earth's weather system, often imagined as being likely to be triggered or manipulated by advanced technology. While this scenario is fictional, it draws on real-world concerns about how human intervention and global warming can exacerbate extreme weather events. The connection between the concept of a Geostorm and the



impacts of climate change in Southeast Asia is also found in the region's increased vulnerability to extreme climate events, which is exacerbated by anthropogenic climate change.

THE RISE OF GEOPOLITICAL FRAGMENTATION

Geopolitical fragmentation refers to the division of global power among various state and non- state actors, leading to a decline in effective international cooperation. This fragmentation is evident in the rising tensions between major powers, including the U.S., China, and Russia, which have complicated diplomatic negotiations and international agreements (Muya, 2024). The increasing politicization of economic relations has blurred the lines between normal economic exchanges and those deemed politically problematic, reshaping the global economic landscape (Oxford Academic, 2024). The implications of this fragmentation are profound for developing countries. As major powers engage in strategic maneuvering, nations like Indonesia should navigate a complex web of alliances and rivalries that impact their sovereignty and economic stability. The challenges posed by geopolitical fragmentation necessitate a re- evaluation of how these countries engage with larger powers while striving to maintain their interests.

CLIMATE CHANGE: GEOPOLITICAL ISSUE

Climate change has emerged as a critical factor influencing global governance. The interconnectedness of environmental issues with national security has led to a reevaluation of defense strategies among major powers. The United States, in particular, has begun to integrate climate considerations into its defense diplomacy, recognizing that environmental degradation can exacerbate conflicts and destabilize regions (Gual Soler, 2024). This shift highlights the necessity for a comprehensive approach that aligns military objectives with ecological sustainability.

In this context, defense diplomacy becomes relevant. It involves leveraging military relationships to address non-traditional security threats, such as climate change. Thereafter, by fostering cooperation on environmental issues, Southeast Asian nations can enhance their resilience against both ecological degradation and geopolitical pressures.

GEOSTORM: GEOPOLITICAL TENSION



The term "GEOSTORM" signifies the potential for geopolitical tensions to escalate into broader conflicts influenced by climate-related issues. The major powers like the U.S. develop advanced technologies such as weather control systems. Also, there are significant implications for international relations and regional stability (Muya, 2024). Southeast Asia region, with its vulnerability to climate impacts and geopolitical rivalries, serves as a critical case study for understanding these phenomenal dynamics.

GLOBAL GOVERNANCE: ROLE OF MAJOR POWERS

The actions of major powers significantly shape global governance structures. The U.S. has historically played a dominant role in international institutions; however, its recent withdrawal from various agreements has weakened these frameworks (Muya, 2024). This decline in U.S. leadership coincides with the rise of emerging powers like China and India, which are increasingly asserting their influence in global governance discussions. The BRICS coalition exemplifies this shift, as it seeks to promote a multipolar world order that challenges Western dominance (Muya, 2024).

As these emerging economies gain prominence, they advocate for reforms in institutions like the International Monetary Fund (IMF) to better reflect their growing economic power. This rebalancing of power dynamics underscores the need for Southeast Asian nations to engage proactively with both established and emerging powers.

IMPACT ON SOUTHEAST ASIA

Southeast Asia is particularly susceptible to the ramifications of both climate change and geopolitical maneuvering. Countries like Indonesia face unique challenges as they navigate their foreign policies amidst pressures from major powers. The allocation of military resources towards climate resilience initiatives can serve dual purposes: enhancing national security while also promoting environmental sustainability (Igan, 2021).

1. Environmental Costs of Defense Operations

The environmental costs associated with defense operations cannot be overlooked. Military activities often result in significant ecological degradation, contributing to climate change rather than mitigating it. This paradox poses a challenge for policymakers who must balance defense needs with ecological integrity (Mason, 2021).



2. Cooperation Initiatives

In response to these challenges, there is potential for cooperation initiatives aimed at addressing climate change within the context of defense diplomacy. Suppose, the collaborative efforts among Southeast Asian nations can lead to shared resources and knowledge aimed at enhancing resilience against climate impacts while reducing military tensions (Lissovolik, 2020).

SECURITIZATION OF ENVIRONMENTAL ISSUES

To understand the implications of U.S and NATO actions on Southeast Asia's ecological landscape effectively, it is essential to integrate various theoretical frameworks from international relations and security studies. This multidisciplinary approach allows for a nuanced analysis of how military strategies intersect with environmental policies.

Further, Realist theories emphasize the anarchic nature of international relations where states prioritize their survival and power. In this context, Southeast Asian countries may feel compelled to enhance their military capabilities in response to perceived threats from major powers (Muya, 2024).

This drive for military enhancement can lead to an arms race, where nations continuously increase their defense budgets allocation and capabilities in a bid to outdo one another. Such dynamics create a security dilemma, as each state's efforts to secure itself may inadvertently threaten its neighbors, leading to increased tensions and potential conflict (Shiddiqy, 2019).

Moreover, the focus on military spending often diverts critical resources away from essential areas such as education, healthcare, and sustainable development, ultimately undermining long-term national security.

Constructivist theories focus on how ideas and norms shape state behavior. The growing recognition of climate change as a security issue reflects a shift in international norms that could foster cooperation among states (Igan, 2021). By framing environmental sustainability as integral to national security, Southeast Asian nations can advocate for policies that align military strategies with ecological goals. This approach not only enhances regional cooperation but also encourages the development of shared norms around climate action and security.



Furthermore, by engaging in climate diplomacy, these nations can leverage their collective voice on the global stage, influencing broader international policies and commitments related to climate change.

Liberal theories highlight the importance of international institutions and cooperation in achieving common goals. Regional organizations such as ASEAN can play a pivotal role in facilitating dialogue among member states on defense diplomacy related to climate change (Lissovolik, 2020). Through multilateral frameworks, Southeast Asian countries can collectively address shared vulnerabilities while strengthening regional stability. Additionally, such cooperation can lead to the establishment of joint initiatives that promote sustainable practices within military operations, thus aligning defense strategies with environmental objectives. By fostering a culture of collaboration rather than competition, liberalism offers a pathway for Southeast Asian nations to navigate the complexities of security in an increasingly interconnected world.

In analyzing historical precedents, the writers provide valuable insights into contemporary challenges faced by Southeast Asia in navigating big-state politics amidst environmental concerns. Previous conflicts driven by resource scarcity underscore the need for proactive measures that prioritize ecological integrity alongside national security interests.

Historical instances where water scarcity has led to conflict illustrate how environmental factors can exacerbate geopolitical tensions. For example, disputes over water resources in transboundary river basins have often escalated into broader conflicts involving military posturing (Gual Soler, 2024). These lessons emphasize the importance of cooperative management of shared resources as a means to prevent conflict.

PROPOSING SOLUTION FOR SOUTHEAST ASIA

Southeast Asia stands at a crossroads in this evolving geopolitical landscape. The region's strategic location makes it a focal point for major power competition, particularly concerning maritime security and trade routes. Therefore, climate change exacerbates vulnerabilities such as food security and natural disasters. Southeast Asian nations must prioritize ecological integrity within their foreign policies. Strategic recommendations for policymakers:



1. Strengthening Regional Cooperation

Southeast Asian countries should enhance collaboration through regional organizations like ASEAN to address shared challenges related to climate change and security.

2. Engaging with Major Powers

Developing strategic partnerships with both Western and Eastern powers can provide leverage in negotiations over environmental issues and security concerns.

3. Promoting Sustainable Practices

Policymakers should advocate for sustainable defense practices that minimize environmental impacts while addressing national security needs.

CONCLUSION

In conclusion, understanding the intersection of geopolitics and environmental sustainability is crucial for Southeast Asian policymakers. The major powers' engagement in strategic maneuvers is also influenced by climate change concerns. Meanwhile, it is imperative for smaller nations to implement foreign policies that align with global sustainability goals while safeguarding their national interests.

The intersection of geopolitics and climate change presents challenges and opportunities for Southeast Asia. As major powers navigate an increasingly fragmented global landscape, and is imperative for regional actors to adopt proactive strategies that align with global sustainability goals. Therefore, by fostering cooperation on defence diplomacy and environmental resilience, Southeast Asian nations can navigate the complexities of big-state politics while promoting ecological sustainability.

By fostering cooperation initiatives that address both defense needs and ecological integrity, Southeast Asian countries can navigate the complexities of big-state politics effectively. Ultimately, this research underscores the necessity for a comprehensive understanding of how geopolitical maneuvers intersect with environmental interests a vital consideration for future policy development in defense diplomacy.

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