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Thailand's Implementation from Entering the Members of United Nations Framework Convention on Climate Change 1992

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Abstract

The purposes of this research were to examine Thailand's legislative and policy frameworks, identify gaps and challenges in the current approaches, and propose actionable recommendations for enhancing climate action strategies. The research findings revealed that Thailand's journey since ratifying the United Nations Framework Convention on Climate Change (UNFCCC) in 1994 reflects a strong and evolving commitment to addressing the global climate crisis. Through participation in key international agreements namely the Kyoto Protocol and the Paris Agreement Thailand has laid a foundation for international collaboration, while also formulating comprehensive national policies such as the Climate Change Master Plan (2015–2050) and its Nationally Determined Contributions (NDCs). These efforts signify the country's dedication to promoting low-carbon development, enhancing resilience, and aligning with Sustainable Development Goals (SDGs). Through interviews with policymakers, analysis of legal documents, and case studies, the article also provides an in-depth evaluation of Thailand's strategies to mitigate and adapt to climate change.

Keywords: Climate Change, Greenhouse Gases, The United Nations Framework Convention.

Introduction

In the contemporary era, environmental issues have become an urgent concern on a global scale, including in Thailand. Excessive human exploitation of natural resources has led to environmental degradation, surpassing the planet's ecological carrying capacity. One of the key drivers of this crisis is the burning of fossil fuels oil, coal, and natural gas for industrial energy production, which reflects a trajectory of economic growth that frequently conflicts with environmental sustainability.

The accumulation of greenhouse gases (GHGs) in the atmosphere has been identified as the primary cause of global warming. As average global temperatures continue to rise, the planet is witnessing significant climatic changes, including melting glaciers, rising sea levels, and more frequent extreme weather events. Sea level rise is attributed to both glacial melt and the thermal expansion of seawater. These environmental shifts have already begun to produce severe regional consequences. For instance, projections indicate that Europe will experience more frequent and intense flooding, particularly in river basins and coastal areas. Coastal zones are increasingly vulnerable to erosion, land subsidence, and inundation. While total precipitation levels may increase in some regions, rainfall patterns are expected to become more erratic, resulting in prolonged dry spells and droughts. Furthermore, extreme weather events such as

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hurricanes, typhoons, and floods are expected to intensify in both frequency and severity, with substantial impacts on agriculture, infrastructure, and human livelihoods.

This constellation of environmental disruptions has given rise to what is now widely recognized as the climate crisis. Despite a growing awareness of its causes and impacts, the global response to climate change has been hindered by political, economic, and social disparities between countries. Developing nations are often viewed as major polluters due to rapid industrialization. However, it is important to acknowledge that developed countries, during their own paths to industrialization, were also significant emitters of GHGs. Moreover, the presence of advanced technologies in developed countries does not exempt them from contributing to current emissions.

Given these complexities, robust international cooperation is essential. Principles such as “common but differentiated responsibilities” (CBDR) have been enshrined in various global agreements, including United Nations Framework Convention on Climate Change 1992 (UNFCCC), the Kyoto Protocol and the Paris Agreement, as a foundation for equitable climate governance (UNFCCC, 2015). These frameworks aim to balance environmental sustainability with socio-economic development by requiring all nations to take action, albeit at levels appropriate to their capabilities and historical responsibilities. In conclusion, addressing the climate crisis necessitates a comprehensive, inclusive, and cooperative global approach. Effective mitigation and adaptation strategies depend on political will, technological innovation, and an equitable distribution of responsibility. Without such cooperation, the world risks further environmental degradation and the loss of vital ecosystems that support human life.

Methodology

This research primarily adopts a qualitative research methodology, with data collection divided into two main types: primary data and secondary data. The core method employed is documentary research, which involves the systematic study of texts and documents related to theories, legal concepts, and the implementation of climate change laws in Thailand and under international legal frameworks. This approach aims to establish a legal knowledge base that can guide the formulation of legal measures addressing climate change in Thailand. The documentary research is categorized into two sections. Primary Data, scientific information concerning the impacts of climate change in Thailand and International legal instruments and domestic laws of Thailand, including documents and resolutions issued by international organizations, as well as relevant judgments from international courts pertaining to the implementation of climate change law. Secondary Data, academic documents such as research reports, theses, legal opinions from government agencies, and scholarly commentary.

Literature Review

This article examines Thailand’s implementation of its obligations as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) since its ratification in 1994. It aims to explore the extent to which Thailand has incorporated the principles and legal obligations under the UNFCCC into its domestic legal and policy frameworks. The study is structured into five key areas. The first examines the principles of environmental law applicable to climate change. The second explores international legal instruments concerning climate change. The third reviews Thailand’s climate change policies. The fourth analyzes national legal frameworks on climate change. Finally, the fifth identifies opportunities and challenges in implementing the Convention. This analysis highlights the strengths and gaps in Thailand’s climate governance

and provides recommendations for enhancing its capacity to respond effectively to global climate commitments.

Principles of Environmental Law Relevant to Climate Change

Climate change has emerged as one of the most pressing global challenges of the 21st century, necessitating concerted international legal and policy responses. Environmental law plays a pivotal role in mitigating climate-related impacts and promoting sustainable development. This paper outlines and analyzes the core principles of international environmental law that are widely recognized and directly relevant to climate change mitigation and adaptation. These principles are Human rights, the Polluter Pays Principle, the Precautionary Principle, the Prevention Principle, and the Principle of Sustainable Development serve as foundational legal doctrines that guide states in formulating and implementing effective climate policies.

Human Rights, Climate change today should not be regarded solely as an environmental issue; rather, it represents a significant human rights concern on a global scale. Its impacts directly affect the enjoyment of fundamental human rights, including the right to live safely in the face of natural disasters, the right to access clean water, and the right to secure and adequate housing. The interconnection between human rights and climate change can be outlined as follows: Right to Life and Security: The increasing frequency and intensity of extreme weather events such as heatwaves, storms, floods, and wildfires are direct consequences of climate change. These events endanger human lives, cause extensive damage to property, and displace entire communities. Right to Health: Changing climatic conditions adversely affect public health in numerous ways. The rise in temperature, humidity, and altered ecosystems contributes to the spread of climate sensitive diseases. For instance, disease vectors such as mosquitoes are now appearing in previously unaffected regions. Additionally, air pollution linked to climate change exacerbates respiratory and cardiovascular conditions. Right to Adequate Housing: Sea level rise, coastal erosion, and natural disasters have forced many people to leave their homes. This phenomenon, often referred to as climate-induced displacement, poses a significant threat to the right to safe and adequate housing. Rights of Indigenous Peoples and Vulnerable Communities: Indigenous groups and vulnerable populations often face the greatest impacts of climate change, yet they have the least access to decision-making processes and adaptive resources. This disparity violates the principles of equity and the right to meaningful participation in environmental governance.

The Polluter Pays Principle (PPP), The Polluter Pays Principle is a cornerstone of environmental economics and international environmental law. It asserts that those responsible for generating pollution should bear the costs associated with its management and remediation. This principle addresses the issue of externalized environmental costs where polluters transfer the burden of environmental damage to the broader public by mandating cost internalization within market mechanisms. Operationalizing this principle involves incorporating pollution control costs into the price of goods and services, thereby incentivizing producers to adopt cleaner technologies and more sustainable practices. PPP is also embedded in various multilateral environmental agreements and national legislations, reinforcing accountability for environmental degradation and contributing to the broader goal of climate change mitigation.

The Precautionary Principle, The Precautionary Principle emphasizes preventive action in the face of scientific uncertainty. It holds that the absence of full scientific certainty should not be used as a reason to postpone cost-effective measures to prevent environmental harm, particularly when the potential consequences are irreversible or significant. In the context of climate change,

this principle underlies the requirement for Environmental Impact Assessments (EIA) prior to the approval of activities that may contribute to greenhouse gas emissions or ecosystem disruption. It is explicitly referenced in key international instruments such as the United Nations Framework Convention on Climate Change (UNFCCC), reflecting its critical role in early-warning systems and risk management strategies.

The Prevention Principle, the Prevention Principle is grounded in the anticipation and avoidance of known environmental risks. It promotes the adoption of best available technologies and practices to prevent foreseeable damage before it occurs. In practice, this includes the regulation of emissions from industrial processes, land-use changes, and other anthropogenic activities that are known contributors to climate change. The prevention principle is widely applied in environmental regulation and policy-making, serving as a legal basis for emissions standards, pollution control measures, and climate adaptation planning. It aligns closely with the objectives of the Paris Agreement and other international efforts to reduce greenhouse gas concentrations in the atmosphere.

The Principle of Sustainable Development, sustainable development is a unifying concept that seeks to harmonize economic growth, social equity, and environmental protection. As articulated in the Brundtland Report, this principle calls for the responsible use of natural resources to meet present needs without compromising the ability of future generations to meet. In relation to climate change, the Principle of Sustainable Development is reflected in the United Nations Sustainable Development Goals (SDGs), particularly Goal 13: Climate Action. Target 13.3 focuses on enhancing institutional and societal capacity through education, awareness-raising, and early-warning mechanisms to reduce vulnerability and strengthen resilience to climate impacts.

International Legal Instruments Concerning Climate Change

The initial foundation for international cooperation on climate change can be traced back to the First World Climate Conference (WCC) held in 1979, which marked the first international forum where the implications of climate variability and change on humans and the environment were formally discussed. Subsequently, in 1988, the World Meteorological Organization (WMO) and the United Nations Environment Program (UNEP) jointly established the Intergovernmental Panel on Climate Change (IPCC). The IPCC was tasked with collecting, assessing, and disseminating scientific information on climate change to serve as a basis for policy formulation among member states.

In 1990, the IPCC released its first assessment report, which highlighted the urgency of coordinated global action and recommended the establishment of an international legal framework to address the issue. This led the United Nations General Assembly to establish the Intergovernmental Negotiating Committee (INC) to negotiate a convention that would include legally binding commitments, greenhouse gas (GHG) emission reduction targets, financial mechanisms, and technology transfer frameworks. It also sought to define the differentiated responsibilities of developed and developing countries based on the principle of common but differentiated responsibilities (CBDR). In this regard, International law reference is made to the United Nations Framework Convention on Climate Change 1992 (UNFCCC), the Kyoto Protocol, and the Paris Agreement.

The United Nations Framework Convention on Climate Change 1992 (UNFCCC)

The United Nations Framework Convention on Climate Change (UNFCCC) was eventually adopted in 1992 and entered into force on 21 March 1994, following sufficient ratification by member states. As of today, the Convention has 197 parties and one regional economic integration organization. Thailand is a Party under the Non-Annex I category, meaning that it participates in climate policy actions under the CBDR principle but is not subject to binding quantitative emission reduction targets like developed (Annex I) countries.

The UNFCCC has laid the essential legal foundation for international environmental and climate law. It reflects the global community's collective intent to confront the climate crisis. Since its adoption, the Convention has paved the way for more robust legal mechanisms, including the Kyoto Protocol and the Paris Agreement, which serve as continuing instruments to address the climate crisis in the 21st century.

The Kyoto Protocol

The Kyoto Protocol established legally binding commitments for developed countries (Annex I Parties) under the UNFCCC framework to reduce their greenhouse gas (GHG) emissions in accordance with specific quantitative targets. The Protocol identifies six types of GHGs subject to regulation carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These gases are aggregated and measured in terms of carbon dioxide equivalents (CO₂-eq) to ensure a standardized and flexible approach to emissions reductions. To enhance the flexibility and cost-effectiveness of compliance, the Kyoto Protocol introduced three market-based mechanisms to support Annex I Parties in achieving their emission reduction targets.

Mechanism	Description	Participants	Key Benefit
Emission Trading (ET)	Allows Annex I countries to buy or sell Assigned Amount Units (AAUs). Countries with surplus AAUs can sell them to countries that exceed targets.	Annex I countries	Provides flexibility and cost-efficiency in meeting targets.
Clean Development Mechanism (CDM)	Permits Annex I countries to implement emission-reduction projects in Non-Annex I developing countries, supporting sustainable development and technology transfer.	Annex I and Non-Annex I countries	Supports global emissions reductions and development.
Joint Implementation (JI)	Enables Annex I countries to carry out joint emission reduction projects with each other. Projects must be approved by all involved countries, and reductions are measured as Emission Reduction Units (ERUs).	Annex I countries	Encourages cooperation and efficient emissions reduction.

Table 1. Greenhouse Gas Emission Reduction Mechanism

As for Non-Annex I Parties, including most developing countries, the Kyoto Protocol does not impose binding emission reduction obligations during its first commitment period. However,

these countries are encouraged to participate voluntarily in addressing climate change according to their capabilities and national circumstances, and they are eligible to engage in CDM projects in partnership with Annex I countries. Thailand is eligible to fully participate in the Clean Development Mechanism (CDM) as a host country, allowing Annex I Parties to invest in greenhouse gas (GHG) reduction projects within Thailand. The emission reductions achieved through these projects can be credited toward the emission reduction commitments of the investing developed countries. Examples of CDM projects implemented in Thailand such as Biogas power generation projects in pig farms, Fuel-switching projects in cement plants, and Methane recovery and reduction projects from landfill sites.

The Paris Agreement

The Paris Agreement represents a global framework for collective action on climate change, emphasizing inclusive participation from all Parties in addressing climate-related challenges. It outlines comprehensive obligations encompassing mitigation of greenhouse gas emissions, adaptation to climate impacts, response to loss and damage, as well as the mobilization of financial, technological, and capacity-building support from developed to developing countries. The Agreement also establishes a transparency framework and requires regular progress reviews every five years, with the goal of demonstrating increasing ambition and national efforts.

As a Party to the Agreement, Thailand is required to submit and regularly update its Nationally Determined Contributions (NDCs), which reflect progressive greenhouse gas reduction targets. The country must also formulate relevant national policies, legal frameworks, and support mechanisms to ensure compliance with its international commitments. These actions are guided by the principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC), which takes into account national context and capacity. Accordingly, Thailand's participation contributes to the global climate response in a manner consistent with sustainable development and equitable burden sharing.

Thailand's Climate Change Policy

Climate change is one of the most critical environmental crises of the 21st century, profoundly impacting the economy, society, and the environment. As a developing country and a party to the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, Thailand has formulated policies and action plans aimed at reducing greenhouse gas emissions and enhancing its capacity to adapt to the continuously changing climate. These efforts align with the Sustainable Development Goals (SDGs). Accordingly, Thailand's Climate Change Policy elaborates on the Thailand Climate Change Master Plan (2015–2050) and the country's national goals and targets, ranging from its Nationally Determined Contributions (NDCs) to the aspiration of achieving carbon neutrality."

Thailand's Climate Change Master Plan (2015–2050)

Thailand has developed a National Climate Change Master Plan with the goal of ensuring the country's resilience to climate change while promoting sustainable low-carbon growth. This plan is structured around three main approaches. (1) Adaptation to Climate Change, Focuses on key sectors such as agriculture, public health, water resources, and settlement planning. (2) Mitigation of Greenhouse Gas Emissions, Targets sectors such as energy, transportation, industry, and waste management. (3) Capacity Building: Encourages research, the development of financial mechanisms, and raising awareness at all levels.

National Goals and Targets: From NDCs to Carbon Neutrality

Thailand has set a Nationally Determined Contribution (NDC) target, aiming to reduce greenhouse gas emissions by 20–25% by 2030 compared to the Business as Usual (BAU) scenario. The long-term goal is to become a carbon-neutral country by 2065 and achieve net-zero emissions by 2050.

Thailand continues to play an active role in the Conference of the Parties (COP) meetings, such as COP26–COP28, where it has presented progress on implementing its NDCs and advocated for climate justice, particularly for vulnerable developing nations affected by global warming. Furthermore, Thailand has developed collaborative projects with international organizations. Thailand not only has a climate change policy but also legal mechanisms that support climate change action, which will be discussed in the following section.

The Legal Framework Governing Climate Change in Thailand

Climate change is an urgent issue that affects the global economy, environment, and human well-being. As a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, Thailand has international obligations to reduce greenhouse gas emissions and to enhance its capacity for adaptation to climate impacts. In this regard, the legal framework governing climate change in Thailand comprises the Constitution of the Kingdom of Thailand B.E. 2560 (2017) and the Draft Climate Change Act B.E. ...

The Constitution of the Kingdom of Thailand B.E. 2560 (2017)

The Constitution of the Kingdom of Thailand B.E. 2560 (2017) does not explicitly provide for legal provisions concerning climate change. However, it lays down fundamental principles that may serve as mechanisms to support the implementation of environmental measures and the reduction of greenhouse gas emissions. These provisions are intended to align with the principles of climate justice and Thailand's international obligations under the Paris Agreement (2015). Although there is no specific reference to climate change, certain general environmental provisions may be interpreted as encompassing issues related to climate change, as outlined below.

Section	Key Constitutional Provision	Interpretation in Climate Change Context	Potential to Support Climate Policies
57	The State shall conserve, restore, and manage natural resources and the environment sustainably, with public participation.	Establishes the fundamental principle of <i>sustainable development</i> , which underpins climate change mitigation and adaptation strategies.	Supports the development of policies for greenhouse gas reduction and climate resilience.
58	The State must assess the impact on environmental quality and public health before approving major projects.	Provides a legal mechanism for evaluating the environmental impact of high-emission projects (e.g., power plants); can evolve into a Climate Impact Assessment (CIA) system.	Promotes climate screening of development projects to ensure consistency with carbon neutrality goals.

63	The State shall promote public awareness and consciousness in conserving energy and using clean energy.	Encourages behavioral and technological changes toward decarbonization through renewable energy and energy efficiency.	Serves as a tool for promoting clean technologies and behavioral shifts in public and private sectors.
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Table 2. Constitutional Provisions of Thailand B.E. 2560 (2017) Related to Climate Change.

While the Constitution of the Kingdom of Thailand B.E. 2560 (2017) does not contain any explicit provisions referring to “climate change,” its general environmental clauses can nonetheless be construed as offering a constitutional foundation for climate-related governance. This reflects a broader constitutional trend wherein environmental stewardship is recognized as an obligation of the state and a participatory right of citizens, even in the absence of specific references to climate phenomena.

Thailand’s Constitution outlines several duties of the state with regard to the sustainable management of natural resources, the assessment of environmental impacts, and the promotion of clean energy. These obligations enshrined in section 57, section 58, and section 63 are consistent with international environmental law principles such as the precautionary principle, intergenerational equity, and sustainable development. While they do not expressly mandate climate mitigation or adaptation, they provide a normative basis for integrating climate justice into domestic legal and policy frameworks.

In light of Thailand’s ratification of the Paris Agreement (2015), these constitutional duties may also serve as interpretive tools for harmonizing national action with international climate commitments. For instance, Section 58 on environmental impact assessment may be expanded to include a Climate Impact Assessment (CIA) requirement for high-emission development projects. Similarly, Section 63 can support the state’s promotion of low-carbon technologies and renewable energy as part of its nationally determined contributions (NDCs).

Nonetheless, the absence of a clear constitutional mandate specific to climate change reveals a normative gap. Unlike some jurisdictions that have explicitly enshrined the right to a stable climate or imposed direct climate obligations upon the state, Thailand relies primarily on broad environmental clauses that are open to judicial and policy-based interpretation. As such, a constitutional amendment or legislative supplementation may be necessary to elevate climate governance from the level of interpretation to that of constitutional obligation.

In sum, while the current Thai Constitution provides an indirect yet significant legal foundation for climate action, bridging the gap between environmental protection and climate-specific constitutional rights remains an urgent task for legal reform particularly as the climate crisis continues to intensify.

Thailand's Draft Climate Change Act B.E. ...

Thailand currently lacks a comprehensive primary legislation specifically governing this matter. At present, the country only has a draft Climate Change Act under consideration. This Draft Climate Change Act of Thailand is of critical importance for long-term responses to the climate crisis. It serves as a legal mechanism to strengthen public policy on environmental protection and sustainable development. Therefore, the draft law represents a significant advancement in national climate policy.

The essential provisions of the draft legislation are as follows. First, it establishes a national framework for climate governance at both national and local levels. Second, it provides for the development of a carbon accounting and trading system. Third, it mandates the creation of a national greenhouse gas inventory and information system. Fourth, it establishes a Climate Change Fund to support mitigation and adaptation efforts. Finally, it emphasizes transparency and inclusive participation from all sectors of society.

Sections	Title	Summary	Significance
Section 6	Establishment of the National Climate Change Policy Committee	Mandates the formation of a national committee chaired by the Prime Minister to set policy, strategy, and oversee implementation.	High-level governance mechanism linking national policy with operational implementation.
Section 11	National Climate Change Strategic Plan	Requires the formulation of a national strategic plan every five years, including GHG reduction targets, adaptation measures, and resource mobilization.	Aligns with international commitments under the Paris Agreement (NDCs).
Sections 15–17	Greenhouse Gas Measurement, Reporting and Verification (MRV) System	Requires agencies to implement MRV systems and mandates annual reporting by high-emitting entities.	Supports transparency and standardized data collection aligned with global MRV norms.
Sections 22–25	Establishment of Carbon Market Mechanisms	Provides a legal basis for setting up emissions trading systems and voluntary carbon markets.	Encourages emissions reduction and links Thailand to global carbon markets.
Section 30	Establishment of the Climate Change Fund	Creates a dedicated fund to support mitigation, adaptation, and clean technology initiatives.	Boosts implementation capacity of both public and private sectors.
Sections 35–38	Penalties and Enforcement Measures	Specifies penalties, including fines, for failure to report emissions or violation of control measures.	Ensures compliance through legal accountability and deterrence.

Table 3. The key sections in Thailand's draft Climate Change Act B.E. ...

Thailand's Draft Climate Change Act represents a pivotal milestone in elevating environmental public policy into a binding legal framework. Its key provisions reflect a comprehensive effort

to establish an integrated structure encompassing policy formulation, regulatory oversight, and inclusive participation from all sectors of society. The enactment of this draft legislation in the near future would mark a significant step forward in Thailand's commitment to sustainable climate action.

Analysis

Climate change poses a critical global challenge, prompting the establishment of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992. Thailand became a Party to the UNFCCC in 1994 and has continued to demonstrate its commitment by ratifying the Kyoto Protocol and the Paris Agreement. While international climate obligations can be demanding, they also present unique opportunities for developing countries like Thailand, particularly in gaining access to financial support, technology transfer, and capacity-building measures that foster sustainable development and effective climate governance.

Opportunities in Thailand's Implementation from Entering the Members of UNFCCC

The opportunities arising from Thailand's implementation of its obligations as a Party to the United Nations Framework Convention on Climate Change (UNFCCC), adopted in 1992, are as follows:

1. Participation in International Agreements, Thailand has ratified the UNFCCC, the Kyoto Protocol, and the Paris Agreement, which allows the country to access financial and technological support mechanisms from the international community. Notable examples include: The Clean Development Mechanism (CDM), This mechanism enables Thailand to implement greenhouse gas (GHG) emission reduction projects supported by developed countries through carbon credit trading. The Green Climate Fund (GCF), a financial mechanism under the UNFCCC aimed at assisting developing countries in reducing GHG emissions and enhancing their adaptive capacity to climate change impacts. These opportunities enable Thailand to access funding sources, modern technology, and contemporary knowledge for more effective environmental management.
2. National Policy and Action Frameworks, Thailand has developed the Climate Change Master Plan (2015–2050), a key document outlining strategies for GHG mitigation, adaptation, and the promotion of a low-carbon economy. This plan integrates international targets through the submission of Nationally Determined Contributions (NDCs), which align with the Sustainable Development Goals (SDGs) and the principle of Common but Differentiated Responsibilities (CBDR). Additionally, the Thai government has developed implementation mechanisms consistent with the UNFCCC and regularly reports its progress to the Conference of the Parties (COP).
3. Constitutional Support under the 2017 Constitution of Thailand, Constitution does not explicitly mention climate change, several provisions support environmental protection. Section 57 ensures public access to environmental information, Section 58 promotes public participation in resource management, and Section 63 obliges the state to promote clean and renewable energy (Office of the Council of State, 2017). These provisions provide a foundation for climate legislation. Thailand may consider constitutional amendments similar to countries like France and Colombia that recognize climate change explicitly in their constitutions.

Notably, several countries such as France, Colombia, and the Philippines have either explicitly enshrined climate change in their constitutions or have interpreted constitutional rights in line

with international obligations under the UNFCCC and Paris Agreement. Thailand could consider the following constitutional amendments: Stipulating state duties to reduce GHG emissions in accordance with international obligations. Recognizing the right to live in a safe environment free from climate change impacts. Incorporating the principle of climate justice into constitutional law. Thailand may draw valuable lessons from international constitutional practices that formally recognize climate change, thereby enhancing its domestic legal and institutional frameworks to better align with global environmental commitments.

4. Draft Climate Change Act, the drafting of the Climate Change Act represents a significant development in establishing a clear legal structure to enhance implementation effectiveness. Key features of the draft include: Establishing the National Climate Change Policy Committee: To set national policy and oversee overall climate governance. Implementing an MRV system (Measurement, Reporting and Verification): To ensure effective and transparent monitoring of climate actions. Developing a carbon market mechanism: To create economic incentives for emissions reduction through market-based instruments. This law will elevate Thailand's climate governance to a tangible and internationally comparable level. Prompt enactment of the draft Climate Change Act is necessary to establish a legal framework for sustainable climate governance.

5. Expanding the Interpretation of the Right to Life and Bodily Integrity through Climate Change, Climate change is not merely an environmental or economic issue, but also a human rights issue with profound implications for fundamental rights especially the right to life and bodily integrity as protected by both constitutional and international law. Legal interpretation in the contemporary era has gradually expanded the scope of these rights to include protection from the impacts of climate change.

One landmark case is: European Court of Human Rights (ECHR) – *KlimaSeniorinnen v. Switzerland*: In April 2024, the ECHR issued a judgment in a case brought by a group of elderly Swiss women (*KlimaSeniorinnen Schweiz*) against the Swiss government for failing to take sufficient action on climate change. The Court ruled that the government's inadequate climate policies violated the applicants' human rights. This case affirms that insufficient state action on climate issues can amount to a violation of the right to life and health under the European Convention on Human Rights. This jurisprudence reflects a growing recognition that states have positive obligations to protect citizens from the foreseeable impacts of climate change. In Thailand, this evolving interpretation could support the expansion of constitutional and legislative protections for the right to a healthy and safe environment, in line with international human right, and Thailand stands at a pivotal juncture in its journey toward sustainable and climate-resilient development. As a committed Party to the UNFCCC, it has leveraged international agreements, national policy frameworks, constitutional provisions, and emerging legal instruments such as the draft Climate Change Act to align with global climate goals. These efforts not only enhance Thailand's capacity to reduce greenhouse gas emissions and adapt to climate change but also enable the country to access vital financial, technological, and knowledge-based support.

Moreover, the evolving global recognition of climate change as a human rights issue presents an opportunity for Thailand to deepen its legal and constitutional engagement with environmental rights. Integrating principles such as the right to a healthy environment and climate justice into domestic law can strengthen both climate governance and the protection of fundamental human rights.

Ultimately, Thailand's proactive implementation of the UNFCCC and related instruments will be essential not only for meeting its international obligations but also for ensuring the well-being of current and future generations in the face of a changing climate and law.

Challenges in Thailand's Implementation from Entering the Members of UNFCCC

The Challenges arising from Thailand's implementation of its obligations as a Party to the United Nations Framework Convention on Climate Change (UNFCCC), adopted in 1992, are as follows:

1. The most pressing challenge lies in the absence of binding national legislation. While Thailand has adopted strategic plans such as the Climate Change Master Plan (2015–2050) and set clear Nationally Determined Contributions (NDCs), these remain policy instruments without legal enforceability. The lack of a formal Climate Change Act with legal force undermines the state's ability to enforce measures and allocate resources effectively in accordance with its international obligations under the Paris Agreement.
2. The fragmentation in climate governance presents a major institutional obstacle. Multiple governmental agencies are responsible for climate-related issues, often with overlapping mandates and limited coordination. This leads to inefficiencies in data collection and weakens the development of a robust Measurement, Reporting and Verification (MRV) system—an essential component under the Paris Agreement's transparency framework.
3. Thailand is highly vulnerable to climate-induced impacts, including rising temperatures, extreme weather events, and sea level rise. Coastal communities, agricultural sectors, and marginalized populations such as small-scale farmers and indigenous groups are particularly at risk. These groups often lack the financial and institutional capacity to adapt, resulting in heightened inequality and long-term socio-economic challenges.
4. The Constitution of the Kingdom of Thailand B.E. 2560 (2017) includes general provisions on environmental protection such as sustainable resource management (Section 57), environmental impact assessment (Section 58), and promotion of clean energy (Section 63) there is no explicit recognition of the right to a stable climate. This contrasts with other jurisdictions that have enshrined climate rights in their constitutions, empowering citizens to claim legal remedies for environmental harm.

Climate change poses profound impacts on the economy, society, and environment globally. As a developing country, Thailand has been a Party to the United Nations Framework Convention on Climate Change (UNFCCC) since 1994. Since then, the country has taken several measures to fulfill its international obligations, including the formulation of national policies, strategic planning, and development of domestic legal frameworks. However, despite these efforts, Thailand faces numerous challenges in effectively implementing the Convention, particularly in terms of legal structures, institutional coordination, and societal vulnerabilities. In conclusion, despite its clear political will and active participation in international climate agreements, Thailand's implementation efforts under the UNFCCC remain constrained by legal and institutional limitations, capacity gaps, and socio-economic vulnerabilities. To overcome these challenges, the country must accelerate the enactment of a Climate Change Act, strengthen inter-agency coordination, and integrate the right to climate stability into its legal framework. Such measures will be critical to enhancing Thailand's resilience and credibility as a leader in global climate action.

Conclusion

Thailand's journey since ratifying the United Nations Framework Convention on Climate Change (UNFCCC) in 1994 reflects a strong and evolving commitment to addressing the global climate crisis. Through participation in key international agreements namely the Kyoto Protocol and the Paris Agreement Thailand has laid a foundation for international collaboration, while also formulating comprehensive national policies such as the Climate Change Master Plan (2015–2050) and its Nationally Determined Contributions (NDCs). These efforts signify the country's dedication to promoting low-carbon development, enhancing resilience, and aligning with Sustainable Development Goals (SDGs).

Despite these advancements, Thailand faces persistent challenges in transforming policy into legally enforceable action. The absence of binding national legislation, institutional fragmentation, and socio-economic vulnerabilities particularly among marginalized groups continue to hinder the effectiveness of climate governance. Moreover, the lack of explicit constitutional recognition of climate rights underscores a critical gap in environmental jurisprudence. The Draft Climate Change Act offers a promising pathway toward legally codifying climate action. If enacted, it will establish a robust legal framework to support transparent governance, emissions reduction, and the development of market-based mechanisms, thus aligning domestic law with global standards. Additionally, expanding the interpretation of constitutional rights to encompass climate-related harms, as emerging jurisprudence from international courts has demonstrated, can further reinforce legal protections in the face of environmental degradation.

To fully realize its potential as a regional leader in sustainable climate governance, Thailand must accelerate the enactment of climate-specific legislation, strengthen inter-agency coordination, and embed climate justice into its constitutional and legal frameworks. Such measures are not only vital for fulfilling international obligations under the UNFCCC and the Paris Agreement but are also essential for safeguarding the rights and well-being of present and future generations in an increasingly climate-vulnerable world.

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