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Recommendations for Improvements under the United States Current Environmental Law

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Abstract: As the global climate became more and more unpredictable and devastating in the past few decades, the discussion on the avoidance and remediation of climate-related activities was attracted exclusive attention both in the international and national level. As a result, environmental laws and policies were enacted to urge the public as well as governmental officials to both restrict greenhouse gas emission and reduce exploitation and deforestation. This article focuses on identifying the gaps between the environmental laws in United States and international environmental laws or policies, and propose innovative or alternative solutions that the government could adopt in within a pragmatic scenario. More specifically, this article emphasizes on three approaches: climate funds, insurance, and healthcare. The three approaches altogether examine the potential improvements of U.S. environmental laws in the perspectives of economics as well as social security. Therefore, it is determined that the eventual influence on the entire society, if the nation emended the law, would be considered cross-sectionally beneficial.

Keywords: environmental law, United Nations Framework Convention on Climate Change, United States

1. Introduction

It is undeniably true that the discussion on the topic of climate change has raised public and political awareness in the past few decades. As stated by NASA, climate change refers to the alterations, which in majority emerge as consequences of greenhouse gas (GHG) emissions, in local, regional, or global weather pattern [1]. To combat this situation, more than 190 parties, including the European Union, participated in international conventions initiated by the United Nations Framework Convention on Climate Change (UNFCCC), such as the 1997 Kyoto Protocol and 2016 Paris Agreement, to align emission and temperature goals and provide climate finance to developing countries [2,3].

Serving as a central guidance, the United Nations (UN) was widely reputed for its multiple programs that stimulate the development of comprehensive and effective international environmental policies. According to Young, a researcher from the University of California, Santa Barbara, the growth of international environmental laws or regimes spurted especially in recent decades; these regimes, including the 1987 Montreal Protocol and aforementioned conventions, served the purpose of mobilizing individual nations while generalizing the applications of regulatory activities as they recognize national sovereignty and assert that only consensual epistemic narratives will eventually

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be effective [4]. Therefore, it is unanimously conceived that international environmental laws are taken into account in evaluating conduct rather than being conduct themselves.

Taking the domestic environmental laws of United States, the Constitution was empowered to first delineates general governmental capacities, then the Congress and president together are responsible for enacting statutes for implementation of the aforementioned constitutional authorities while the president also plays the role of steering administrative agencies in the alignments with the political goals, and at last the Courts are authorized for interpreting the Constitution, statutes, and agency regulations [5]. Considering the effect of this hierarchical structure, in which upcoming statutes are frequently enacted while existing ones are frequently amended, the overall legal system forbids efficiency as the process could be slow and contentious.

2. Recommended Solutions

2.1. Potential Strategies

According to the United Nations Framework Convention on Climate Change (UNFCCC), climate finance is local, national, or transnational funding from public, private and alternative sources that seek to support climate change mitigation and adaptation actions [6]. The Climate Fund is one of the United Nations' important programs to tackle climate change, so it should and needs to improve through the implementation process to address the inactivity problem in the United States and increase the efficiency to address the concerns brought by climate change. To create or dedicate funds towards the most vulnerable group, several nations have established or adopted rules to direct monies for combating climate change to the most vulnerable individuals, communities, and groups. Climate funding would be the most effective and direct way to help the vulnerable population. Significant financial expenditures are needed to combat climate change, such as new energy systems and resilient infrastructure. But ignoring the climate costs even more, strict regulation and insistence on climate funds are vital to confront climate inactivity and genuinely assist more people. This would be one of the most efficient ways to assist the most vulnerable population in avoiding and recovering from the harm caused by climate change. Due to enduring gender stereotypes and discrimination, they are frequently disproportionately impacted by the effects of climate change, which exacerbate already existing gender inequities.

From an economic and humanitarian point of view, a greater proportion of natural disaster risk should be borne by insurance companies, that is, to maximize the spread of risk. Over the past 40 years, the insurance gap has narrowed in industrialized countries, where today half of all losses are covered, up from a quarter in the 1980s. In response to the growing realization that insurance solutions can play a role in adaptation, as suggested in the UNFCCC and the Kyoto Protocol, the Munich Climate Insurance Initiative was initiated by Munich Re in April 2005 [7]. This initiative, formed by insurers, climate change and adaptation experts, NGOs, and policy researchers aims to develop insurance-related solutions to climate change, including identifying future risks and promoting measures, in cooperation with other organizations and initiatives and conducting pilot projects. On average, international assistance will only cover about 9% of the total cost of a disaster. In many cases, individual households have to pay for costs of losses and damages themselves or wait months for government assistance or donor aid [7]. By building on natural players, such as local associations, cooperatives, or savings and credit groups, insurances have access to established delivery mechanisms, ensuring payouts are timely, and well-targeted and will cover more of the damage than traditional donor payments. Quicker payouts reduce the need for households to take out a loan, migrate for work or take a child out of school to get back on their feet.

Indeed, the profound effect of climate change has ultimately undermined the physical well-being of the public. According to the United States Environmental Protection Agency, the present climate-

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related phenomena, including high temperature, bad water, and air quality, extreme weather activity, and food insecurity, have inflicted a variety of health complications, such as vector-borne diseases and mental illnesses [8]. Climate Change has affected a wide range of populations, especially those who are considered a vulnerable group, or populations of concern. These people, including children, older adults, and low-income populations, are not only sensitive and exposed to climate-related activities, but also unable to adapt to these changes. Therefore, to shield the public, particularly the vulnerable group, from catastrophic events caused by climate change, the United States Centers for Disease Control and Prevention (CDC) has developed a framework, entitled Building Resilience Against Climate Effects (BRACE), which will effectively encourage public health agencies to optimize and prioritize medical interventions [8].

2.2. Specified Methods

Climate Funds. For climate funds, these initiatives are supported through the annual State, Foreign Operations, and Related Programs (SFOPS) appropriation and are proposed in the President's budget under the International Affairs function (Function 150) [9]. Numerous initiatives are supported at the level of the agency subaccount, with allocation decisions left up to the agencies with input from Congress. Other federal agencies are funding some more overseas aid. Congress oversees and regulates American federal support for climate change projects in lower-income nations. The House and Senate Committees on Foreign Relations and appropriations, as well as the Committee on Financial Services, have jurisdiction over foreign affairs and appropriations in Congress. Regarding international climate change assistance, Congress engages in several activities, such as authorizing federal agency programs and multilateral fund contributions, allocating funds for those authorizations, advising the agencies on authorized programs and appropriations, and monitoring U.S. interests in the programs. The climate fund for vulnerable populations is mainly focusing on implementing solutions under the “adaptation” category, which aims to assist the vulnerable population in the United States with reducing their vulnerability to climate change impacts and building climate resilience. The funds raised by the climate fund are primarily directed toward and used to address the issues listed below, and the specific actions and functions are indicated.

Repairing and constructing the infrastructure of the community. It emphasizes on the enforcement of risk assessments of the community’s infrastructure after damaging and destroying, reparation of the demolished infrastructure of the vulnerable community to maintain citizens’ human rights and normal life, cooperation with local state institutions and local government, and the design of infrastructure with high durability and safety.

Urban Planning and Warning Systems. This approach incorporates risk evaluations in house design, rural development initiatives, and urban planning with a particular focus on vulnerable areas, sets up the services and infrastructure required to stop extreme weather occurrences from becoming catastrophes, disseminates warning information throughout all communities so that residents can seek safety and implement risk-reduction measures, empowers the urban poor access to "cheap and well-located land to prevent additional unplanned settlement expansions" that increase susceptibility to climate change.

Displacement and Resettlement. Next, this approach emphasizes on conducting risk analyses, offering opportunities for public input, and ensuring that human rights protections are included in all initiatives to manage migration and displacement. It will ensure that those who are momentarily displaced due to climate change-related disasters have access to sufficient resettlement opportunities, that temporary relocation must last only if necessary, and that all displaced persons should have the right to return to their homes without discrimination, eventually following the Guiding Principles on Internal Displacement, which lay out how human rights concerns ought to be included in governmental initiatives to stop and manage internal displacement.

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Access to Food. This is the emphasis on food scarcities and price spikes that are brought on by or made worse by climate-related occurrences. It aims to create social safety nets to guarantee access to food for people negatively impacted by climate change (such as through eviction or loss of livelihoods).

Insurance. In the transition to a green economy, the insurance industry can play a critical role in helping stakeholders manage risk. The Munich Climate Insurance Initiative MCII was established in 2005 by insurers, then the Climate Research Organization, and the relevant United Nations agencies. The insurance pillar has two levels.: firstly, the climate insurance pool covers extreme events and is financed by developed countries; the second is the climate insurance assistance facility, which mainly encourages the private sector to provide public or private insurance for moderate and low levels of clustering risk. Furthermore, relevant institutions should put more effort into the development of meteorological catastrophe models and integrate extreme weather events into disaster models to address the physical risks posed by climate change.

One characteristic of climate insurance here is to give individuals helps and include those population who spontaneously sign up for the insurance to be protected. When a real disaster comes over, funds are used to protect those who have been hurt the most, however, funds are limited to take care of all vulnerabilities and that is why insurance can play a role in it--- buying potential victims' insurance does have contributions for those who are affected and omitted by public funds. Furthermore, as this initiative is mainly charitable, it is expected that certain groups of people can receive the insurance in superior according to climate assessment, identified as those who may be suffering in the next 5 years. Before explaining detailed plans of the insurance industry on vulnerabilities in the policy strategy part, there are some issues that should be noticed.

Financing. First of all, to help more people in different countries to afford insurance that will safeguard their livelihood when disaster strikes, finance would be a crucial approach. In recent decades, the commitment component of the fund has not yet been fully raised, and the relationship partnerships insurers have with these governments, which are critical to finding demand-oriented insurance solutions for low-income countries, have not yet been fully developed. Therefore, Congress may have to reach commitments with the U.S. government's financial support and monitor its contribution to the climate insurance industry, moreover, and increase cooperation and exchanges with insurance companies.

Motivations. There are some objectives for government and other counterparts coincide with insurance institution: support vulnerabilities and use resources in an organized way by cooperating with professional institutions, motivate individuals and establish personal identification and self-awareness towards disasters, in which they hope to seek out public acknowledgment to satisfy a psychological or emotional need, make a positive impact on the lives of others by contributing to a specific organization’s outcomes. People are more inclined to give for public benefit when they are convinced that they will make a lasting and tangible change because of their contribution, forecast and avoid huge workforce loss and homeless people’s existence, make society work systematically and well-balanced.

Social Awareness. While considering insurance holders and complying with the principle that promotes the development and implementation of educational and public awareness programs on climate change and its effects, public access to information on climate change and its effects. US should strengthen public education on climate change and aims to focus on transmitting the uncertainty and catastrophic consequences of short-term physical climate risks to understand the risk protection role of climate insurance. At the same time, it is suggested that the government should gradually shift its focus to pre-disaster risk management to increase public willingness.

Monitoring. It is suggested that the congress should play a role by monitoring. Subsidiary body for scientific and technological advice is hereby established to provide the Conference of the Parties

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and, as appropriate, its other subsidiary bodies with timely information and advice on scientific and technological matters relating to the convention. Monitor the Insurance products which mainly need a breakthrough and sustainable development to help vulnerable groups under climate warming, to enable capital turnover in the most emergency.

Healthcare. To suggest a potential solution for the situation of healthcare for climate-related stresses in the United States, we can abide by BRACE, which was initiated by CDC. According to Marinucci and colleagues, CDC has been one of the leading entities that support public health agencies in the adaptation of climate change, which gives us the credibility of the organization. Emphasizing BRACE, it was developed under a strategic core: adaptive management, which indicates that the manager and stakeholders acknowledge the shortcomings and adjust regularly, based on new updates in information gathering [10]. In addition to the mechanism that BRACE has adopted, the framework also applies vulnerability assessment, which reassures us of its practicability in assisting the population of concern.

Anticipating Climate Impacts and Assessing Vulnerabilities. Step 1 is a combination of two tasks: elaborating on the variety of health outcomes caused by specific climate-related activity and proposing a solution for the vulnerable group. The first task produces a climate and health profile report (CHPR) that comprehensively records the diversity of health outcomes and their climate exposure pathways for a particular jurisdiction. The second task urges public health agencies to conduct vulnerability assessment in either qualitative (e.g.individual household) or quantitative (e.g. magnitude on population) measurements.

Projecting the Disease Burden. Step 2 can be divided into four individual stages: identify climate-sensitive diseases, determine population exposure scenarios, apply general circulation model (GCM) to project health outcomes, and apply geographic information system (GIS) to map the estimated disease burden while accounting for demographic shifts.

Assessing Public Health Interventions. Essentially, step 3 is the stage in which the efficacy of medical interventions is discussed to schedule into implementation. Proposed by a myriad of researchers, the evidence-based public health (EBPH) approach has gained influence. The cost-effectiveness and suitability in a wide range of settings were reassured during the examination of the approach, thus reassuring the potential of EBPH medical interventions.

Developing and Implementing a Climate and Health Adaptation Plan. Step 4 is a crucial part as it aims to develop a unified and elaborated adaptation plan, one that articulates the specific actions, including newly updated or enhanced programs that public health agencies should follow. Public health agencies are also encouraged to collaborate with other public agencies, including housing, transportation, and water quality, to yield a comprehensive and information-sufficient plan. The adaptation plan should be prepared and organized under the consideration of surveillance, feasibility (aiming to be multisectoral), and timespan.

Evaluating Impact and Improving Quality of Activities. Step 5 makes emphasis evaluating previous processes and results (of confronting and resolving climate-related risks in terms of health complications). It is important to note that although evaluation is an indispensable process as it is not only conducted constantly throughout the whole framework but also underscored as the “central tenet” of the adaptive management that is adopted by the framework, step 5 serves as a central discussion in the evaluation system. The reason behind the imperativeness of evaluation is that it validates the methods, determines stakeholders’ engagement, identifies outcomes (improved capacity, stronger partnerships, and additional needs for surveillance), and assesses the impact of implementing BRACE.

3 Conclusion

One of the main issues addressed by the climate fund is that both mitigation and adaptation need significant financial resources to achieve and that the funds invested by investors or given by other

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countries are always capped and fall short of the UN target. Technology development and information exchange will aid in the fight against climate change. Additionally, it will aid in preserving the fund, improving more populations, and aiding more people. If the security council's permanent members work together, the program will raise more money, grow more quickly, and be more successful in resolving the issue caused by climate change. From a different perspective, the Climate Fund presents an excellent chance to encourage cordial interactions between members, foster the sharing and exchange of technologies, increase economic interactions, and make contributions to the globe and human civilization all at once.

The traditional climate change models used by insurance companies and the financial industry, which make heavy use of scarce and inefficient historical data, further underestimate the ongoing evolution of climate change. For insurers and re-insurers, the increasing frequency and intensity of reserve requirements have further increased. Investors and regulators also need to further strengthen the insurance market's industry standards and its management. Solutions are always tailored to local needs and conditions, both in terms of the types of climatic risks a region or community might face, a s well as to the needs and economic abilities of potential clients. For the United States, the western cities should be attached with higher importance due to severe drought. To make insurance affordable, the product can be partially subsidized by governments or other donors. Regional risk pools can also protect the poorest and most vulnerable in case of payment plans need to be tailored to meet the personal and economic circumstances of the client. Those who still struggle to afford a premium might pay for climate risk cover through an insurance for assets (IFA) scheme. Here, they will be awarded a premium in exchange for taking part in disaster risk reduction activities, such as building flood defenses in their own communities. Moreover, Successful climate risk insurance is based on the inclusive and accountable involvement of beneficiaries and other local stakeholders: A transparent insurance that involves communities in the design and implementation is one that generates trust.

Taking the stance of healthcare under climate change, the magnitude of health-related effects has been contentiously debated as these effects intensified not only in a sense of individual severity but also the universal impact on public well-being. Decades before, due to the scarcity of clinical and pathological experiences, it was impossible to yield a comprehensive yet effective report on confronting health-related challenges posed by climate change. However, now we have acquired a framework that is not only elaborated in detail but also prospective in its viability in our society. As noted in BRACE and its methods of adaptive management, constant evaluation of previous progress with accordingly updates should be incorporated in every current or future solution.

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